

UNIVERSITY OF DELAWARE

MAGAZINE

Volume 29 • Number 2

FIGHTIN' SPIRIT

DRIVE AFTER DRIVE,
JOE FLACCO
KEEPS PUSHING



SHINING *through the* RAIN

Photo of Commencement by Kathy F. Atkinson



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WILLIAM K. CLARK

RAIN, SHMAIN: GRADUATION IS A GO

Above the tasseled caps of the alumni-to-be, gray clouds squatted stubbornly over Delaware Stadium. But pomp and circumstance (and pride) prevailed. With six ceremonies, including a doctoral hooding, four Class of 2021 events, and a much-anticipated-and-belated Class of 2020 celebration, the University hosted its first in-person, large-scale events in over a year. "The world is changing rapidly, and you've shown that you can change with it," President Dennis Assanis told recent graduates. "Our society needs new ways of thinking, and you possess an innovative spirit. We need to take care of each other – something you have demonstrated throughout your time at UD."

Pictured above:

Julie Clark, AS21, becomes the eighth member of her family to graduate from UD

Cover photo: AP Images

5 THINGS TO LEARN FROM THIS ISSUE

The unlikely link between an art professor and Robert DeNiro ... **P. 15** | The (highly) loose Blue Hen connection to a cult classic ... **P. 19** | How educators adapted and prevailed in a pandemic year ... **P. 26** | How a handful of Blue Hens saved UD's soggy library collection almost a century ago ... **P. 40** | What a 200-year-old love triangle can reveal about women's rights and roles ... **P. 48** |

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FROM OUR

PRESIDENT

NEW ACADEMIC YEAR BRINGS FRESH START

Every summer, I eagerly look forward to the start of a new academic year and a new class of students at the University of Delaware campus. The air buzzes with hope and enthusiasm ... anticipating new friends and connections, gaining new knowledge and opening ourselves to new ideas that will lead to a brighter future. As a lifelong educator, I find UD's vibrant and energizing community of scholars truly inspiring.

And this year is particularly special. The COVID-19 pandemic denied us all so many precious moments with the people we treasure and the places we value. Still, we persevered to continue learning, exploring and succeeding. Now that we are beginning to restore many of our normal daily rhythms, the classic excitement of another academic year takes on a new meaning. Our community is hopeful, and our culture is reinvigorated.

This fall, we expect to welcome one of our largest and most diverse classes of new Blue Hens, at both the undergraduate and graduate levels. That means more students bringing a variety of perspectives, principles and cultures to UD. Not only am I thrilled to be with all of you on this journey of education,

but I am also truly grateful to be among a community of extraordinary individuals who are forever connected by both purpose and possibility at the University of Delaware.

Diversity of thought is a hallmark of the University and one of our greatest strengths. It opens our minds, promotes authentic learning, advances new ideas and ensures that we continually re-evaluate our own behaviors and beliefs. By embracing this broad diversity, we hone the critical skills of communication, collaboration and creativity — skills that we use every day and that are essential to building a better society.

Eleni and I look forward to welcoming you back to campus this fall. Walking along The Green, our campus will feel more alive than ever before. The energy, hope and inspiration that typically accompany a new academic year will be amplified by a renewed appreciation for how special it all is.

Dennis Assanis, President

ON THE GREEN

NEWS
FROM CAMPUS
AND BEYOND



BACK ON CAMPUS

At long last, campus should feel like campus again.

This fall, the great majority of classes will be in person; residence halls, dining halls and other campus facilities will be fully open; and athletics has a full season of competition planned.

“In spite of all the pandemic challenges that our community has faced over the past year, we have effectively united to ‘Protect the Flock,’” President Dennis Assanis wrote to the campus community earlier this summer. “We want to be sure this continues as we work together to reinvigorate a college experience that enriches our culture and connects our community.”

In an effort to prioritize public health and safety, UD also joined the COVID-19 College Vaccination Challenge

and required full immunization against COVID-19 for all students—undergraduate, graduate, professional—who will be on campus this fall.

Masks and distancing will still be necessary in some settings, especially indoors among people who aren’t vaccinated. Additionally, everyone will complete a daily health screening for each day that they’re on campus.

The promise of “normal” comes after more than a year-and-a-half of pandemic-induced adjustments. After the first COVID-19 case was identified in March 2020, UD made the swift and almost overnight switch to remote learning and working. That spring semester saw fewer than 400 students on campus.

By fall 2020, residence halls opened

with limited occupancy to nearly 1,300 students, as fewer than 10% of classes were taught in person. Spring 2021 saw even more campus life, with nearly 3,900 students in residence halls and more than 18% of classes held in person.

While the plans for this fall are the boldest and most hopeful yet, the University is also focused on the opportunities that emerged during the pandemic. “More innovative courses, more experiential learning, more opportunities to do research with people doing work remotely,” Assanis told the Board of Trustees in May. “And let’s not forget that while yes, we can work remotely, no matter where we are, we need to always instill in our people the sense of belonging to the amazing UD.” 🐦



EVAN KRAPE

HELPING MORE TO ‘FINISH IN FOUR’

When you’re doing a good job, it’s time to do even more.

That’s the ethos behind an institution-wide initiative to push UD’s already-high graduation rate even higher. Known as “Finish in Four,” the effort is fueled by innovative pipeline programs, robust advising, faculty mentoring, student-focused academic policies and generous financial support.

“Taken together, these efforts give today’s college students an unprecedented array of tools for finishing college on time and within their budgets,” says President Dennis Assanis, whose strategic pillar of Ensuring Students’ Success drives the effort.

At UD, 73% of students earn their

bachelor’s degrees within four years, one of the highest on-time graduation rates among public universities nationwide. Assanis has set UD’s goal as reaching 75% in four years, then 80% or more, emphasizing groups of students who typically have lower rates.

The latest initiative, launched in fall 2020, is the Early College Credit Program, which lets aspiring Blue Hens earn up to a full semester of college credits—free of charge—while they are high school juniors and seniors. It’s the first free statewide program in the nation, and UD plans to double its size and scope this fall.

About 67% of first-year bachelor’s degree students completed at least 30 credits last year, up from 58% three

years earlier. That’s a few hundred more students each year who are on path to graduate on time.

Throughout students’ time at UD, academic advisers can check their performance via the Blue Hen Success platform, which helps identify students who might need an adviser’s support and intervention, often before students realize it themselves. It’s particularly helpful with first-generation and underrepresented students.

“I’m someone who likes to plan,” says operations management and marketing major Grace Fritz, BE24. “So, it was cool that my adviser helped me see everything I needed to do to graduate in four years.” 🐔

ASSANIS SETS SIGHTS ON NEXT 5 YEARS

UD President Dennis Assanis has a new 5-year contract to continue lifting the University’s status and impact.

Lauded by the Board of Trustees for his handling of the COVID-19 pandemic, and for “igniting a shared vision among the UD community for the future of the University,” the 28th president has prioritized student success, community outreach, research capabilities and inclusive policies since arriving in 2016.

Now, he is working to enhance UD’s infrastructure, resources and facilities.

During his tenure, UD has seen progress in key areas, including:

- Applications and enrollments, which hit record levels, and scholarship aid, which increased 43%.
- New facilities have been built to support student health, student-athletes and collaborative research, along with two new residence halls.

- Some 350 faculty have been hired.
- UD has established its first ever Graduate College.
- Sponsored research funding increased by 23%, and multiple public-private partnerships were launched.
- The Delaware First fundraising campaign reached its original goal of \$750 million six months ahead of schedule. 🐔

BUILDING TOMORROW'S UD

Campus has surely been quiet for the past year and a half. But listen closely, and you will hear the sounds of progress and potential. For students, the ongoing construction boom at UD will soon mean more opportunities and an even brighter future, made possible by Blue Hen donors.

Here's a look at some of the new places and spaces, some of which are already up and running:

AMMON PINIZZOTTO BIOPHARMACEUTICAL INNOVATION CENTER 1

One of the gleaming new structures inside UD's Science, Technology and Advanced Research (STAR) Campus, this 228,000-square-foot building houses UD's expertise in biomedical engineering, pharmaceutical discovery and molecular and medical sciences. It was made possible through a \$25 million cornerstone gift from Board of Trustees member Carol A. Ammon, 11H, and President's Leadership Council member Marie E. Pinizzotto, M.D., BE80M, 19H.

FINTECH BUILDING 2

This 6-story STAR Campus gem connects the financial world with UD's Lerner College of Business and Economics and the College of Engineering. Inside, the focus of this public-private partnership will be on the "fintech"—financial technology—that is an increasingly crucial element of banking systems. Here, the necessary academic, business and technical expertise will coalesce.

THE CHEMOURS DISCOVERY HUB 3

This 312,000-square-foot facility on the STAR Campus is the new home to the Chemours company's research-and-development operations but will also bring collaborative R&D and internship opportunities for students. More than 300 of the company's top researchers will discover new products here, as Chemours (a DuPont Co. spinoff) will benefit from the pool of potential Blue Hen employees.

WHITNEY ATHLETIC CENTER 4

Thanks to a cornerstone Delaware First gift of \$10 million from Board of Trustees member Kenneth C. Whitney, BE80, and Elizabeth Whitney, this center adjoining Delaware Stadium gives Blue Hen athletes a state-of-the-art training and sports medicine facility. This project also updated the stadium's seating, concessions and press facilities.

WORRILOW HALL 5

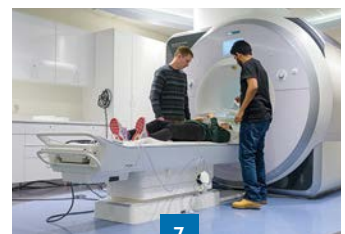
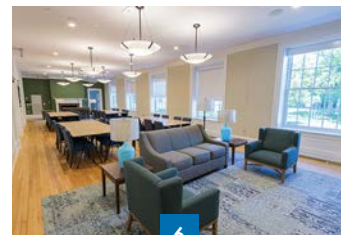
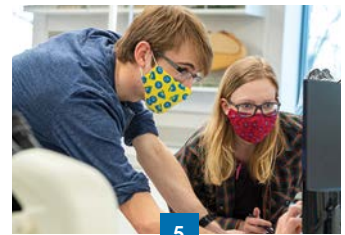
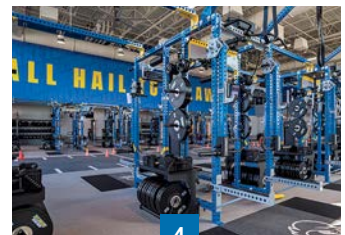
This longstanding building has been refitted and reinvigorated into a state-of-the-art, open-concept laboratory for the next generations of agricultural change-makers. The new space includes equipment for the UDairy Creamery, as well as a student test kitchen, thanks to support from Charles A. Genuardi, ANR70, and Patricia Genuardi.

WELLBEING CENTER AT WARNER HALL 6

This 100-year-old building at the historic center of the old Women's College has been turned into a space where all students can turn for their holistic health and counseling needs. Previously, such care had been split between three buildings spread across the South Green.

CENTER FOR BIOMEDICAL AND BRAIN IMAGING 7

This 11,600-square-foot, two-story extension to the Life Sciences Research Facility on Delaware Avenue houses the state's first research-dedicated fMRI scanner, used to measure brain structure and functions such as feelings, emotions and memory. 🐔





QUOTED IN THE NEWS

UD THOUGHT LEADERS SHARE THEIR PERSPECTIVES AND EXPERTISE



“A FOCUS ON
EMPLOYEES WILL
ULTIMATELY BENEFIT
SHAREHOLDERS.”

Finance Prof. and department chairperson
Laura Field in *Forbes*

“We definitely know that
birth rates are related to
work-life balance, and
I think we’ve all kind of
seen that fall apart
during this pandemic.”

Epidemiology Prof. **Jennifer Horney**
in an **NBC Philadelphia** story
on America’s declining birth rates

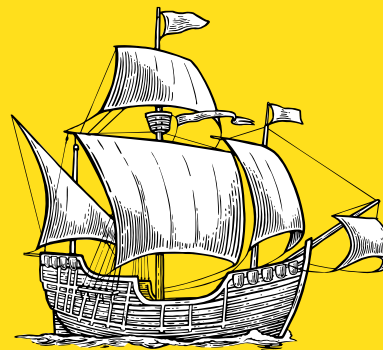
“Both papers consider the
possibility that our galaxy
is swimming in a sea of
particles that are trillions
of times lighter than an
electron, and these yet-to-
be-detected particles make
up all of dark matter.”

Electrical and Computer Engineering
Prof. **Swati Singh** discusses her
research to create a coin-sized
accelerometer that would be able to
detect dark matter with **Gizmodo**



“This is not a panacea.
It may be a step in the
right direction for some,
but I do not believe this will be a
majorly transformative change.”

Psychology Prof. **Sophia Choukas-Bradley** in
a **Washington Post** story on Facebook and
Instagram’s efforts to improve mental health
by allowing users to hide their “like” counts



“THAT’S WHAT
DRIVES THE INEQUITY.
WE’RE VALUING
BUILDINGS,
NOT PEOPLE.”

A.R. Siders, core faculty in UD’s
Disaster Research Center, in *Grist*
on government buyout programs for
areas frequently affected by flooding
and sea-level rise.

“THE CAPTAIN RAMMED
THE SHIP INTO THE BRIDGE
AND THEN WAS GIVEN THE
VALUE OF THE SHIP
TO LEAVE.”

Finance Prof. **Charles Elson** in *The Guardian*
on Adam Neumann, the CEO who oversaw
WeWork when its stock value plummeted from
\$47 billion to \$8 billion and still received a
generous compensation package

86%
of landlords
have legal
representation
during an
eviction hearing
2%
of renters have
counsel

WHYY story highlighting this study by
Associate Prof. **Stephen Metraux** and
then-student **Alexandra Guterbock, AS20**

TO SHOW A DISBELIEVING WORLD

A timely and essential truth-teller once described as “the Rosa Parks of education in Wilmington,” Beatrice “Bebe” Ross Coker has received many accolades in her 86 years. Earlier this spring, she received one more: UD’s Medal of Distinction, the highest non-academic honor bestowed by the Board of Trustees.

First awarded in 1979, the medal recognizes individuals who have made humanitarian, cultural, intellectual or scientific contributions to society; who have achieved noteworthy professional success; or who have given significant service to the University, community, state or region.

Coker fits that description on many levels. Born in Jacksonville, Florida, she graduated from Morgan State University and moved to Delaware in 1960, where she used poetry, theatre, social services, street-level activism and service on commissions and civic organizations to shine light on inequity, injustice and other examples of systemic racism wherever she found them.

She has stood before governors, legislators and judges, at microphones in many a public meeting and beside Black families as they tried to navigate systemic obstacles that their white counterparts never knew existed.

“I am of the experienced opinion that talking with each other in open and honest discussion is foundational to our growing to know and understand the reality of all humanity,” she said in a keynote Presidential Lecture to the UD community.

Titled, “The visibility of growing up invisible,” Coker’s address gave listeners her “experienced opinion” on the value of good communication, reflections from her own experience of segregated America, suggestions for improving education for all children and thoughts on how UD might best address its own pursuit of equality.

The “invisibility” in her title refers to the reality that Black people are too often referred to as “those people” or “they” or “them”—nameless individuals of no particular consequence. That’s one reason Coker enjoys talking to people. Those conversations can shed light on what has been painfully invisible to so many for so long; specifically, the rich cultural, professional and educational prowess in Black communities.

“Teachers in my day taught the child and not the circumstances,” she said. “You were taught to believe, indeed



EVAN KRAPE

Activist and educator Bebe Coker received UD’s Medal of Distinction, the University’s highest non-academic honor.

to know, that your mind was not to be wasted and that the primary reason of your living and learning was to serve other people, to benefit your brothers and sisters, to show to a disbelieving world, particularly of white Americans, that we were visible, we were victors, we were not victims, and that we were capable of achieving whatever our minds determined needed to be achieved.”

It is the same vision she has for UD.

“Look at your policies and practices, the stuff on paper,” Coker said. “Then fold the paper up and decide that you’re not going to just talk about it, read it and give it away as a brochure to get students in, but you’re going to encourage students and staff to understand that everybody has the right to literacy, the right to learn, the right to just be.” 🐦

—Beth Miller



This spring's UDance fundraiser raised \$1.56 million to help fight childhood cancer

KATHY F. ATKINSON

AN UNBREAKABLE BOND

In many ways, David Fu, Zack Turner and Colby Atkinson were your typical college roommates. The seniors shared meals, played Call of Duty after class and sang so loudly in the shower that roommates often joined in from elsewhere in the campus apartment.

But the three recent graduates also share a not-so-relatable bond: They have each survived childhood cancer.

Together, the trio have channeled their experiences with the disease into volunteer work for cancer-related charities, including UDance, a year-long campus fundraiser that this spring raised \$1.56 million for young patients and their families.

While the Class of 2021 graduates try not to focus too much on the past, they do find themselves reflecting over the dinner table about, say, that period when all their food tasted metallic, due to chemotherapy. Or they end up sharing a knowing glance every time a friend with the sniffles says: “I think I’m dying.” But, in those moments of feeling, well, sick of the sickness? They find inspiration in one another.

“Seeing the hard work of your roommates and their commitment to

give back, it brings up determination to do more,” says Fu, BE21. “We experienced at a young age how serious this disease can be, and not everyone wins this battle. So we find the motivation to keep pushing forward.”

At the age of 10, Fu was diagnosed with acute lymphocytic leukemia, or ALL, a common childhood cancer which begins in the cells of the bone marrow. Because this is an “unbearably heavy” disease for a fourth grader to process, one that required three years of treatment and a year of homeschooling, he said he was sent by his parents between hospital visits to Kay’s Kamp, then located in Middletown, Delaware, for a bit of normalcy.

At first, homebody Fu was not enthused by the thought of an overnight, medically supervised experience for sick kids, but immediately upon entering his cabin, he met Turner, HS21. As it turns out, this bunkmate – who had recently endured more than a month in a medically induced coma as well as surgery for a seven-pound tumor on his trachea – had, at the age of 9, also been diagnosed with ALL. (One of the things that got him through, Turner says, was a

formative relationship with a male nurse, one of few in a sea of female nurses, who took the time to play video games in his hospital room and, simply, “connect over guy stuff.”)

While at camp, the young boys hit it off, forging a friendship during summer activities typical for elementary school kids (fishing for striper and attending camp-sponsored dances on Friday nights) and not-so-typical (comparing radiation treatments undergone in the 3C North unit of Wilmington’s Nemours/Alfred I. duPont Hospital for Children).

During this same period, Turner was selected as a so-called B+ hero, a child cancer patient who benefits from the fundraising work of the Wilmington-based Andrew McDonough B+ Foundation, UDance’s nonprofit partner. Throughout the year, these kids are paired with student organizations on campus for friendship and support, and Turner was matched with Kappa Sigma, one of the largest fraternities at UD. The brothers invited him to their annual haunted house, among other activities.

“I think that core interaction is honestly why I went on to do Greek life here at UD,” says Turner, who paid forward the

“UDANCE IS LIKE A SECOND FAMILY TO ME”

—COLBY ATKINSON, AS21

support in his sophomore year when he helped reestablish the Pi Kappa Alpha chapter on campus, which has raised money for UDance, hosted 5K runs for breast cancer awareness and provided specialty bikes for people with disabilities. “I remember one student in particular who would always message me to make sure I was all right. It meant a lot.”

Fast forward to high school. Fu and Turner found themselves in remission, once again enjoying a more typical childhood. That all changed in 2013 when Atkinson, Fu’s classmate since elementary school, was diagnosed with a different type of leukemia, at the age of 14. His treatment involved six months in and out of the hospital for various procedures, including a bone marrow transplant.

“When the doctor delivered the diagnosis, I could tell my mom was going to start crying,” says Atkinson, AS21. “So I tried to put a smile on her face by asking a couple of dumb questions, like: ‘So, I’ll be able to play baseball again in the spring?’ I remember wanting to do what I could to make her laugh.”

While sports were not in the cards that spring, Atkinson did get paired as a B+ hero with UD’s baseball team, which he said provided emotional support not only for him, but for his mother as well.

When it came time to apply for college, the boys – now more like brothers – did not intentionally select UD in order to be together. They each had individual reasons for choosing the University, where commitment to giving back is part of the student-body DNA. Fu is enrolled in the school’s organizational and community leadership program, hoping one day to work for a nonprofit



PHOTOS BY EVAN KRAPE

From top to bottom: Colby Atkinson, David Fu and Zack Turner

pertaining to leukemia and lymphoma. In the meantime, he volunteers with the American Cancer Society’s Relay for Life. Turner, motivated by his experience with the limited number of male nurses during his hospital stay, enrolled in UD’s acclaimed nursing program. He has already put his studies to use as a medical assistant at Kay’s Kamp, trying to pay forward his own experience there. And Atkinson, a sports management major, was drawn to the University partially for its UDance work. He serves on the group’s executive board, working as a liaison between various campus organizations and a new generation of B+ heroes.

“It was important for me to find the light during my treatment,” says Atkinson, who is still struggling with cancer-related complications, like stage-two kidney disease. “I tried to always be upbeat and smiling. And now, through UDance, I can try to bring that light for others.”

This focus on positivity is shared by all three roommates, who will tell you they have been through too much to sweat the small stuff. Take the current pandemic. Having to isolate from classmates? Take virtual classes? Wear masks in public? These restrictions are nothing new when you’ve been a cancer patient.

“I would not be the person I am today without this struggle,” says Fu. “It gives you a new mindset. It changes your perspective. It makes you want to be someone who helps others with whatever they’re going through. For this reason, cancer was not a curse. Cancer was a blessing.” 🐦

—Diane Stopyra

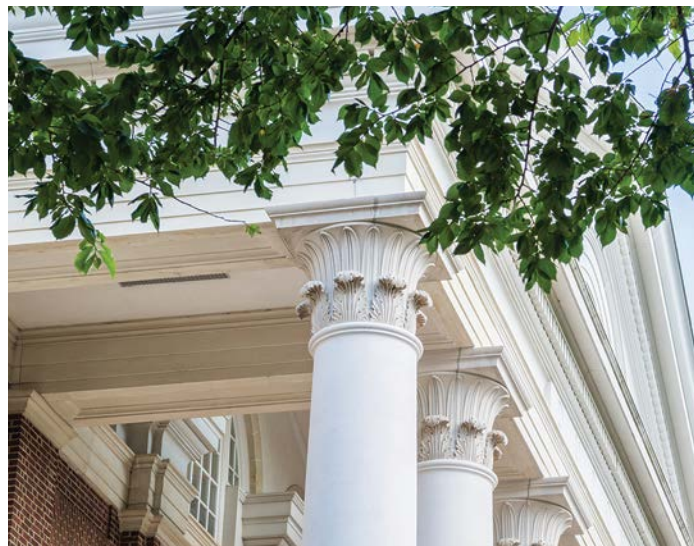
DELAWARE FIRST: MAKING THE REMARKABLE HAPPEN

As campus comes alive again this fall, philanthropy is at the heart of our success and advancements.

BIDEN SCHOOL LAUNCHES NEW PROGRAM

This fall, UD's Biden School will launch its new civil discourse pilot program supported by the Stavros Niarchos Foundation (SNF). The program will be called the SNF Ithaca Initiative, named after the home of one of Greek mythology's greatest heroes, Odysseus, whose talent for persuasive discourse was revered in ancient Greece.

The SNF Ithaca Initiative will cultivate engaged citizens while providing a new named professorship in the Biden School, new course offerings focused on civil discourse, a bipartisan cohort of resident and visiting fellows, graduate and undergraduate student scholarships, and a series of compelling new programs and special events designed to foster a healthier vision of democracy.



GENEROUS DONORS UNITE TO HELP ADVANCE UD

In June, UD launched the biopharmaceutical sciences master's degree. The program emphasizes hands-on learning in technical courses, exposure to open-ended problems as well as business, finance and regulatory constraints. Students also connect practical and conceptual learning through a 15-month internship along with coursework.

The program was made possible with philanthropic support from AstraZeneca, Bristol Myers Squibb, Merck & Co. and generous individuals like UD Board of Trustee Chai Gadde, BE06M.

CAMPAIGN DONORS ENSURE STUDENTS HAVE NEW, INNOVATIVE SPACES THIS FALL



WHITNEY ATHLETIC CENTER



WELLBEING CENTER AT WARNER HALL



AMMON PINIZZOTTO
BIOPHARMACEUTICAL INNOVATION CENTER

Learn more at udel.edu/delawarefirst



DELAWARE FIRST
THE CAMPAIGN FOR THE UNIVERSITY OF DELAWARE



RYAN GRIFFITH

BRIGHT FINISH LIFTS HENS INTO FALL

The unique 2020-21 season was a historic one for Delaware Football, as the Blue Hens won their first conference title since 2010 and reached the FCS Semifinals.

Head Coach Danny Rocco guided the Blue Hens to a perfect 4-0 conference record that led to a remarkable run in the playoffs and a 7-1 overall record. The Blue Hens' ability to get into the end zone while holding their opponents to a low scoring average led to Delaware being ranked in the top-five of the Top-25 national polls.

Delaware boasted four FCS Stats Perform All-Americans as offensive lineman David Kroll, BE21, and defensive back Kedrick Whitehead, HS22, were selected to the First Team. Defensive

back Nijuel Hill, BE21, and all-purpose player Dejoun Lee, BE20, 21M, earned Second-Team honors.

In just his fourth season in Newark, Coach Rocco has twice led Delaware to the playoffs. He earned CAA Coach of the Year honors and was a finalist for the Eddie Robinson Coach of the Year Award, given annually to the best coach in FCS. Rocco became the first UD coach to win the conference honor since 1991.

Lee was selected as the CAA Offensive Player of the Year and was also a finalist for the Walter Payton Award for the national offensive player of the year. Lee and Rocco were part of a league-best 16 Delaware CAA postseason honors as the Blue Hens touted eight first-team performers.

"I think this season is a testament to the kind of guys we have in this locker room," says sophomore quarterback Nolan Henderson, BE21. "Fourteen months of selfless, team-first decisions created one of the most amazing seasons in the midst of one of the most difficult years of our lives. We've achieved every goal we set out for ourselves from the beginning of the year. We took back control of the Battle of the Blue trophy, became CAA Champions and advanced deep into postseason play. The standard is set and it's time to raise the bar for next season. With all the unknowns of the last year, one thing has stood true. Spot the ball and we will go toe-to-toe with anyone." 🐔

Meet CLELLA BAY MURRAY



SHE'S CALLED JENNER'S POND HOME SINCE 2011

Twenty years ago, Clella Bay Murray authored a mystery novel, *A Pox on You*, just one of her several works of fiction—but writing wasn't her first career.

Born in Albia, Iowa, in 1930, Clella studied science at Smith College and earned a master's degree from the University of Michigan, where she researched the atomic effects on chromosomes.

Clella went to work at the Oak Ridge National Laboratory in Tennessee, where she met and married fellow researcher Richard B. Murray in 1956. They moved to Delaware, where Richard joined the University of Delaware's Department of Physics, and raised two daughters, Ada and Annette.

When Richard became provost at the University of Delaware, Clella turned to writing. Her mystery series features the fictional Noir group that resolves international incidents out of the public eye. Her daughters inspired her humorous magic series, including *Matrimonial Magic* and *Mayonnaise*. Her first children's book, *Dangerous Journey*, is based on a true 18th-century journal written by her great-great-grandmother.

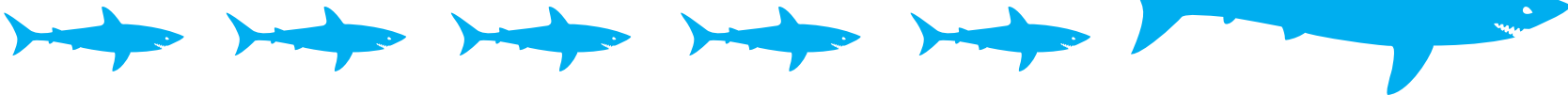
Clella's writing life has been far from solitary. She organized church and community groups. And she's still an organizer—including a book club at Jenner's Pond, where she has lived since 2011.

Call us today at 610-890-7434, or visit JennersPond.org/UD-CM to see for yourself why Clella Murray and so many other intellectuals choose Jenner's Pond for retirement living.

SIMPSON
——
at Jenner's Pond

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BABY SHARK, DOO DOO DOO



It's not easy being a shark. With headlines of beach closings and warnings of their deadly presence, they tend to make few human friends.

But sharks actually face significant danger from human activities, with pollution, industrialized fishing and climate change leading to stark population declines among these ocean predators.

As a result, efforts to establish breeding programs and improve oceanic conditions have taken on new urgency. Most recently, UD scientists conducted the largest-ever effort to artificially inseminate sharks, a success that resulted in 97 new whitespotted

bamboo sharks, including ones whose parents live on opposite sides of the country.

"Our goal was to develop artificial insemination as a tool that could be used to help support and maintain healthy reproducing populations of sharks in aquariums," says UD visiting scholar Jen Wyffels, who published the study in *Scientific Reports* and conducted the sperm microscopy work at UD's Bioluminescence Center.

In total, scientists collected and evaluated 82 semen samples from 19 sharks, with some samples going to nearby females for insemination and others kept cold and shipped across

the country. Once the samples reached Ripley's Aquarium in Tennessee or the Aquarium of the Pacific in California, researchers sedated and inseminated the female sharks—all in under 10 minutes. In all, 20 females were inseminated as part of the study, and 97 neonate sharks hatched after four months of incubation.

From this successful effort, Wyffels and her colleagues hope to continue to collaborate with aquariums on shark breeding programs and to apply the findings from this study to assist other species, such as the critically endangered sand tiger shark. 🐟

—Peter Kerwin

IDENTITY AND EXPERIENCE, ON CANVAS



A 2021 Guggenheim award recognizes Prof. Peter Williams' acclaimed artistic career

Peter Williams has been exploring issues of African American identity and experience in his paintings for half a century.

Now, on the eve of the art professor's retirement this fall, his artistic journey will only continue and grow, with support from a newly awarded Guggenheim Fellowship in Fine Arts. Williams is one of 184 American and Canadian scientists, scholars, artists and writers to receive a 2021 award from the Guggenheim Foundation.

"Mine isn't for a particular project; it's for whatever I want to do with it," Williams says of the prestigious fellowship. "I want to explore the medium in different ways—to try to make sense of what I've learned in my 69 years of life."

The specific Guggenheim awarded to Williams was established this year by actor Robert De Niro, who collaborated

with the John Simon Guggenheim Memorial Foundation to underwrite the award in fine arts in honor of his father, a 1968 recipient himself.

Williams uses narrative and storytelling in his art, which features vivid colors and cartoonish caricatures that challenge viewers to think more deeply about the dark issues they often represent. Since the beginning of the Black Lives Matter movement, many of his paintings have focused on issues of systemic racism, including violence against African Americans, slavery and mass incarceration. He has said that he always "believed in the idea of bearing witness to the times in which you live." 🐟

—Ann Manser

DATA DRIVEN

by Eric Ruth, AS'93

Already, they are flowing all around us, surging invisibly through our phones, our laptops, and even our refrigerators and cars: Endless streams of electronic current, carrying floods of information about who we are, what we do and how our world operates.

Gathered together, these oceans of digitized data are giving civilization vast new libraries of potentially invaluable knowledge—about our environment, our health, our society. Sorted the right ways, they even hold the promise of solving planet-size problems, from pollution to plagues to social injustice.

The age of Big Data has arrived, and at UD, researchers are already busy exploring its endless possibilities—along with its inevitable challenges.

These scholars see a new paradigm of potential, unlike anything history has known. They sense a still-untapped opportunity for making numbers serve humanity, for using our electronically enhanced capabilities as a tool that surpasses mere communication. They believe that by harnessing this ever-rising reservoir of data, we will be able to cure diseases, educate our children and lift up the planet's disadvantaged people.

They also wonder: What potential problems will rise as our lives become increasingly entangled with the machines that serve us?

Read on to learn how UD is addressing these critical questions and more. »

HEALTH



p.20-21 »

UD RESEARCHERS ARE USING DATA TO FIGHT OBESITY AND DIABETES; EXPLORING THE INTRICACIES OF THE BRAIN; UNCOVERING THE HIDDEN DYNAMICS OF PERSONALITY; AND FINDING PATTERNS THAT WILL HELP FIGHT DISEASE.

FINANCE



UD IS HELPING FINANCIAL INSTITUTIONS COMB THROUGH REAMS OF DATA THAT WILL HELP IMPROVE RISK MANAGEMENT, ENHANCE CUSTOMER SERVICE, CUSTOMIZE PRODUCT OFFERINGS AND STREAMLINE BUSINESS OPERATIONS

RAILWAYS / INFRASTRUCTURE



UD PROFESSORS ARE LEADING THE WAY TO SAFER AND MORE EFFICIENT RAIL NETWORKS BY CRUNCHING BIG NUMBERS.

SPACE



PROF. SALLY DODSON-ROBINSON IS COLLABORATING WITH COLLEAGUES AT YALE ON THE "100 EARTHS PROJECT," TO DISCOVER 100 EARTH-LIKE PLANETS. HER TEAM WILL COMB THROUGH VAST DATA TO FILTER OUT SO-CALLED "PARASITIC PLANETS"—STARS WITH A SPOT—WHICH ARE SOMETIMES MISIDENTIFIED AS PLANETS.

ENVIRONMENT



p.22 »

BIG DATA IS HELPING PROFESSORS ASSESS AIR QUALITY, IMPROVE SUSTAINABILITY AND TRACK CLIMATE CHANGE.

TAKE A QUIZ»

Q: What's the difference between Artificial Intelligence and Machine Learning?

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FROM SLOW AND STEADY TO FAST AND FURIOUS, INFORMATION IS POWERING OUR FUTURE

STUDENT SUCCESS

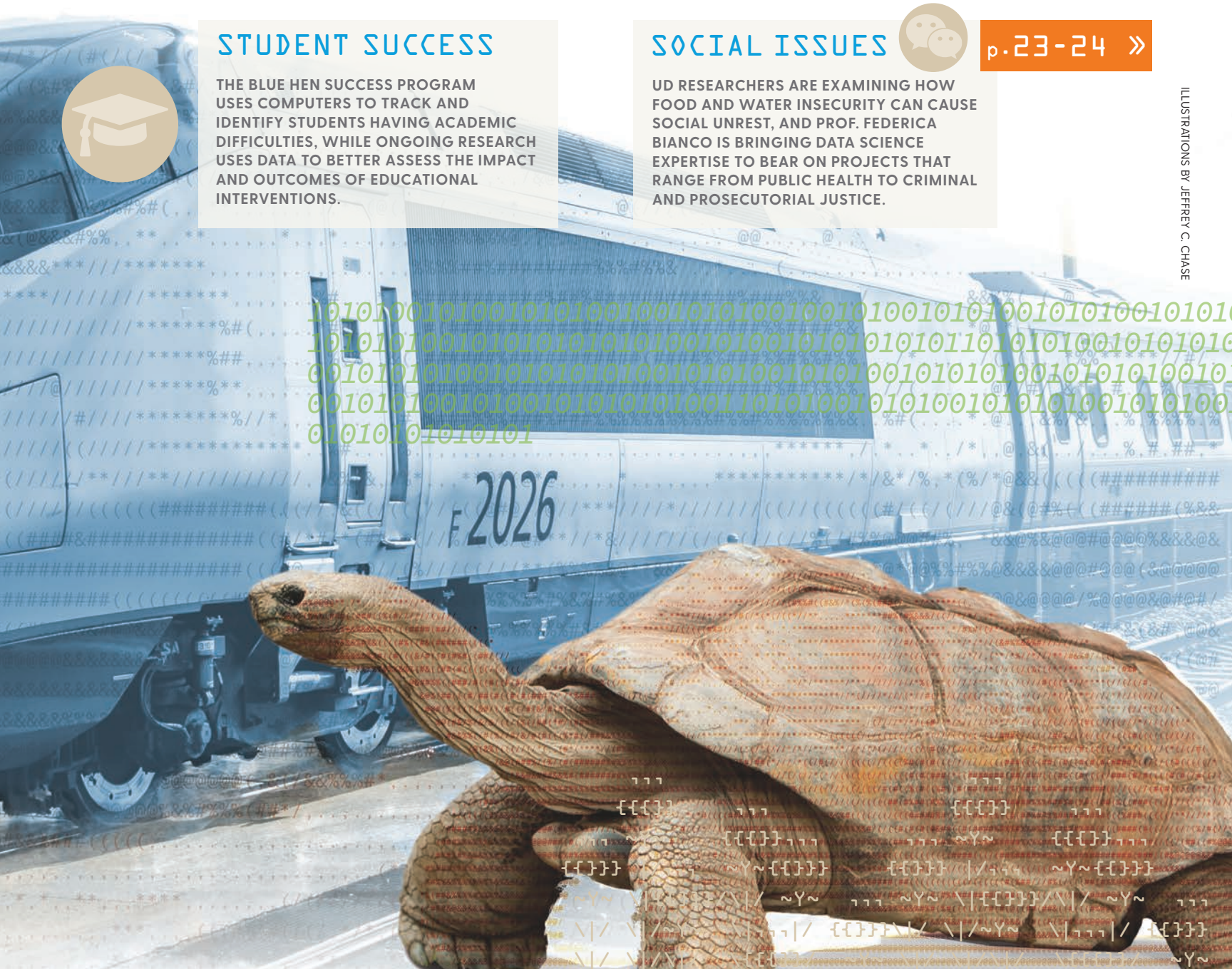
THE BLUE HEN SUCCESS PROGRAM USES COMPUTERS TO TRACK AND IDENTIFY STUDENTS HAVING ACADEMIC DIFFICULTIES, WHILE ONGOING RESEARCH USES DATA TO BETTER ASSESS THE IMPACT AND OUTCOMES OF EDUCATIONAL INTERVENTIONS.

SOCIAL ISSUES

UD RESEARCHERS ARE EXAMINING HOW FOOD AND WATER INSECURITY CAN CAUSE SOCIAL UNREST, AND PROF. FEDERICA BIANCO IS BRINGING DATA SCIENCE EXPERTISE TO BEAR ON PROJECTS THAT RANGE FROM PUBLIC HEALTH TO CRIMINAL AND PROSECUTORIAL JUSTICE.

p.23-24 »

ILLUSTRATIONS BY JEFFREY C. CHASE



A : AI gives computers the ability to do things typically requiring human intelligence, such as recognizing faces, translating languages. Machine Learning is a subset of AI that lets computers become "smarter" at seeing patterns, such as analyzing images of the brain and spotting a disease

jgs^

UD LEADS THE WAY

It's the right time to make our world a better place. And UD is in the right place to lead the way.

Across campus, professors from disparate disciplines are already diving into the world of "Big Data," sensing that technology has now made it possible to solve problems with the help of super-fast, super-smart computers that can "think" like people, but compute in ways no human ever could.

At the forefront is UD's new Data Science Institute, an interdisciplinary thought hub that has hired some of the nation's cutting-edge professors to add early momentum. Already, UD's FinTech Center is preparing to turn out the next generation of financial industry big-number crunchers. And UD aims to make itself a center of excellence

for high-tech sleuthing through the Cybersecurity Initiative.

"We are thrilled with the interest we're generating," President Dennis Assanis said after more than 300 scholars applied to be part of the Data Science Institute's resident faculty. "We don't want to be just another player. We want to be a leader."

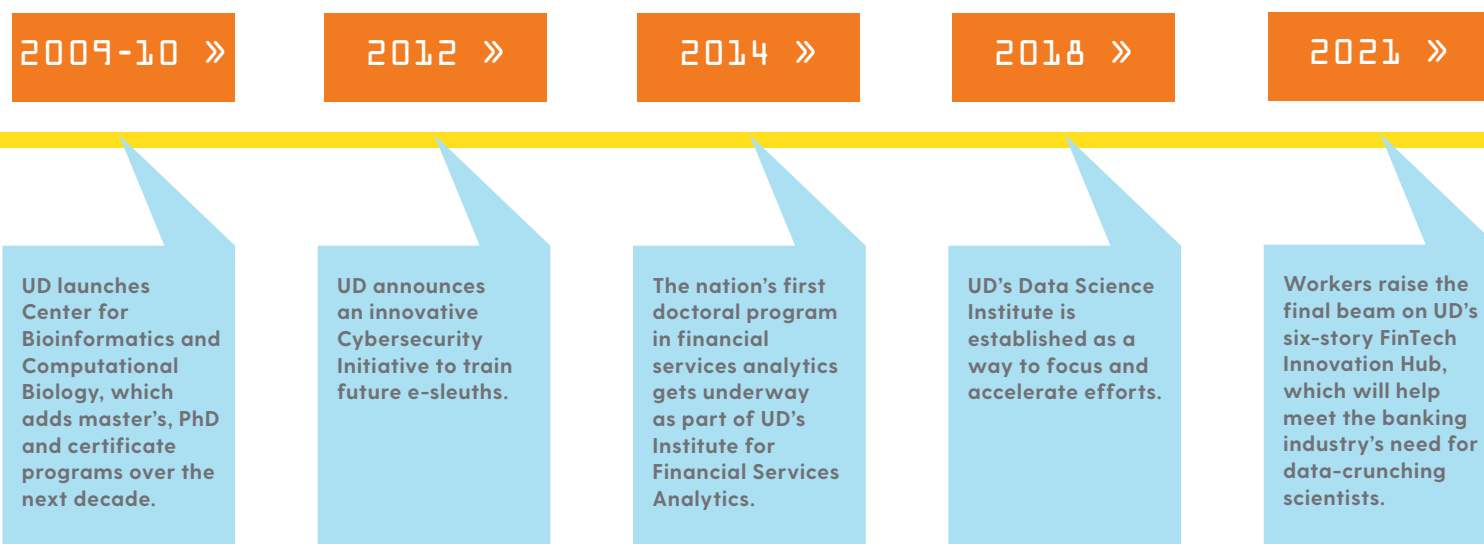
That quest will be helped by location: Situated near major transportation hubs along the East Coast Corridor, and enhanced by gleaming new buildings at the STAR Campus, UD is uniquely positioned to stay ahead of the learning curve in this evolving new field. And the ultimate winners may prove to be students themselves – the global economic market for Big Data is expected to hit \$103 billion by 2027,

twice its 2018 level. Demand for data scientists is expected to rise by 16% by 2028, Indeed.com says.

The effort is also lifted by UD's existing strengths in math and computer sciences, along with its prominent programs in biotechnology, bioinformatics, environmental sciences, public policy, financial analytics and education.

"What's happening here is very unique," says UD astrophysicist/urban scientist Gregory Dobler. "A lot of times you see a data science institute as they're being formed – very top-down. It's more unique to see this work from the bottom up. Faculty members are saying they want to collaborate, work across colleges and put something together – and that draws on all of our expertise." »

ud data innovation—a recent timeline



TAKE A QUIZ» Q: How did UD use "Big Data" to fight the pandemic?

THE FORMULA THAT FORMED THE FUTURE

For the past several decades, and onward into this new age of Big Data, good results demand good mathematics – formulas that allow experts to reel in meaningful conclusions from sometimes chaotic seas of numbers.

That's when they turn to the magic of a 50-year-old formula, co-developed by a UD professor and still regarded worldwide as a key foundational tool in Big Data's number-crunching advance.

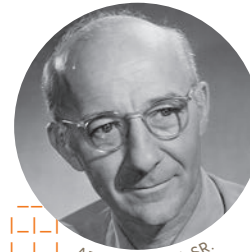
Called "Ridge Regression," this statistical marvel came from the minds of the late Prof. Arthur Hoerl and DuPont Co. research statistician Robert Kennard, AS49, 52M. In oversimplified terms, the formula allows researchers to control for highly correlated variables in mathematical models – variables like temperature and pressure – because they tended to skew the predictions in ways that seem to contradict known scientific realities.

What the formula also did was cause immediate skepticism: It seemed like a statistical sleight-of-hand to the statistics establishment, says Hoerl's son Roger, AS81M, 83PhD, now a statistics professor at Union College in New York.

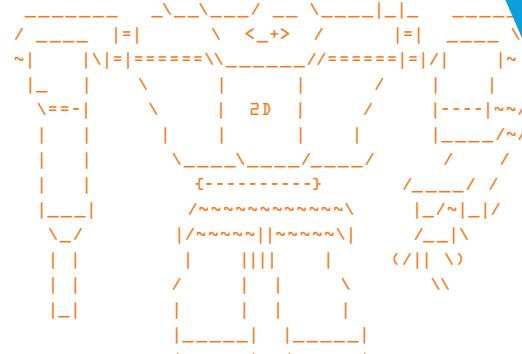
But Arthur Hoerl was undaunted, championing his technique against all doubt. "He was a courageous and sometimes stubborn man, especially when he was convinced he was right," Roger says. "He could dig in his heels. He was definitely not the person who was gonna go along to get along." »

$$J(\theta) = \frac{1}{m} \sum_{i=1}^m \text{Cost}(h_{\theta}(x^{(i)}), y^{(i)}) + \frac{\lambda}{2m} \sum_{j=1}^n \theta_j^2$$

—RIDGE REGRESSION FORMULA



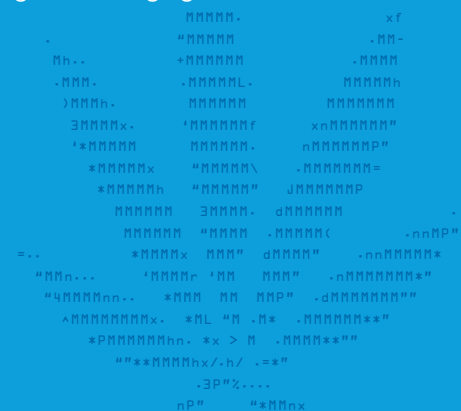
ARTHUR HOERL SR.



REEFER * MADNESS

Great minds sometimes don't think alike – even in the same family. That's certainly true in the case of Arthur Hoerl, the UD professor who would become a legendary statistician (as well as Manhattan Project scientist). Google his name, and you'll most likely not find the professor, but his father, Arthur Hoerl Sr., an early Hollywood figure who is remembered for (of all things) writing the screenplay for the cult-favorite propaganda film *Reefer Madness*.

Made as a stark warning of marijuana's pernicious evils, Arthur Sr.'s 1936 movie (originally titled *Tell Your Children*) is arguably more widely known today than his son's game-changing formula. »



SURFING THE TIDAL WAVE OF DATA



EVAN KRAPE

Cathy Wu has always had a great sense of timing. And this time, things seem so right for a revolution.

As the leader of UD's fledgling Data Science Institute, this pioneer in "bioinformatics" has a long and stellar record in exploring the ways that computers can help pry open the secrets of living organisms. Now, she's been given the task of coordinating UD's cross-college campaign to make Big Data a key tool in solving an ever-widening array of global challenges.

Being on the cutting edge is a familiar role for the native of Taiwan: As a young scholar, she helped accelerate the nascent fields of computational biology and artificial neural networks, pairing her expertise in quantitative thinking with

her love of life sciences. A few years ago, she helped create a revolutionary open database that gives researchers from around the world a virtual library of protein sequences that are now helping decode human disease.

"I think that's my thing, from early on: Whenever I'm trying to pick a research project, I always think: In 5-10 years, what will be the most impactful applications we can think of?" »

CATHY H. WU, Unidel Edward G. Jefferson Chair in Engineering and Computer Science. A professor of Computer and Information Science and Biological Sciences, Wu is also director of UD's Data Science Institute and Center for Bioinformatics & Computational Biology. She has been recognized as a Thomson Reuters/Clarivate Highly Cited Researcher annually since 2014 (>43,000 citations).

TAKE A QUIZ»

Q: In a pandemic, what role can artificial intelligence and machine learning play?

2017 »

\$76,690

Median annual wages
for bioinformatics
scientists

2018 »

85 PERCENT

Percentage of
companies that the
World Economic Forum
estimates are likely or
very likely to adopt big
data analytics

2019 »

NUMBER 1

The job of data scientist
is named the number-
one most-promising job
in America by LinkedIn

2020 »

2,500

The number of patents
using the UD-led UniProt
protein database. Up from
less than 100 in 1995

BRAIN POWER

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Through the pandemic, Big Data played a key but quiet role, helping to monitor patients, identify promising drugs, and forecast the virus' spread. Across the state, it's seen as having potential for easing physicians' record-keeping burden, streamlining care and keeping costs down.

At UD, a big part of the mission is helping with those community-wide solutions – while simultaneously taking some decidedly deep dives into human physiology.

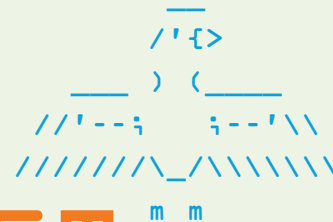
At the Data Science Institute, Prof. Austin Brockmeier is leading an effort to use data analysis and machine learning to pinpoint the patterns in brain activity related to speaking and listening, moving and sensing. Ultimately, his results may help those who struggle with chronic disease.

Statistician Cencheng Shen uses machine learning and statistics to find relationships between brain activity and a variety of phenomena, ranging from personality and disease to our connections with social networks.

In the wider health arena, Prof. Rahmat Beheshti is using AI to study how social, economic, environmental and biological factors affect public health epidemics such as obesity and diabetes. "The most exciting and promising aspect of this area of research is the ability to work on some health problems that were almost untouchable before applying the new analytical methods that data science offers," he said. »

"The most exciting and promising aspect of this area of research is the ability to work on some health problems that were almost untouchable..."

—Prof. Rahmat Beheshti



HELPING OUR PLANET...

Every night, all around the world, giant telescopes aim toward the skies, searching for the shimmering wisps of light that reveal the secrets of the cosmos. Perhaps it's time we turned the telescopes around, and had a good look at ourselves.

Big data has opened the window on a new type of global observatory

The multidisciplinary approach is characteristic of data-driven approaches, which are finding their way into each of UD's nine colleges.

that focuses on the Earth and its teeming populations, giving scientists an unprecedented view of ecological dynamics and the sometimes harmful interplay between humans and nature.

At UD, researchers from across campus are retuning their strategies to accommodate this recent flood of data, aiming to improve the outlook for an environment in peril. At the new Data Science Institute, urban scientist and astrophysicist Gregory Dobler is applying the image analysis techniques of astronomy to human-populated landscapes, sensing that this "Urban Observatory" could become a key tool in assessing air quality, energy consumption, public health and sustainability.

Already, his efforts have benefited from the cross-campus, collaborative approach that is key to data research:

He's now working with Jeff Buler, associate professor of wildlife ecology, who has been examining the effect of urban lighting on migratory birds, hoping to minimize their sometimes deadly impact.

Dobler said he was drawn to UD by that kind of organic, connective energy. "What's happening here is very unique,"

he says. "It's a building-from-scratch kind of thing and I'm excited to get my hands dirty, jump in there and build this thing."

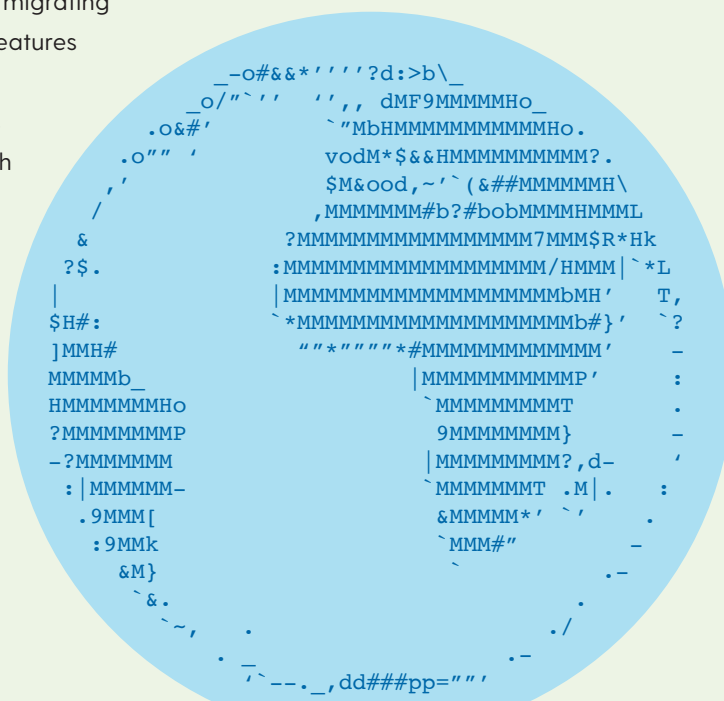
Ultimately, Buler hopes to set up algorithms that can track migrating insects, bats and other creatures through existing weather radars. Buler and Dobler's multidisciplinary approach is characteristic of data-driven approaches, which are finding their way into each of UD's nine colleges.

Mechanical Engineering is just one of those: There, assistant professor Joe Kuehlis using streams of data to untangle the complexities of ocean

currents and their impacts on climate, potentially boosting economies and preventing loss of life in hurricanes.

At the College of Earth, Ocean, and Environment, data scientist Jing Gao has created a new global simulation model to predict how urban land will change over the next 100 years under different social and economic conditions. And CEOE doctoral student Carter DuVal is using algorithms to analyze the "fingerprints" that big storms leave on sandy ocean floors to model and predict how future storms will behave.

"Until we began using a fingerprint algorithm, we didn't have strong enough tools to do this," says Art Trembanis, an associate professor of oceanography who is part of the study. »



TAKE A QUIZ»

Q: How much of the world's population is expected to be concentrated in big urban centers by 2030?



...AND ITS PEOPLE

The rise of artificial intelligence and Big Data has given the world broad new avenues of potential – and also some stark warnings about where those roads might lead.

Even as UD scholars work to apply high-tech tools to solving social problems, they share a growing recognition that the technology itself will soon pose thorny ethical challenges, possibly harming the very society it aims to help.

They sense clear potential – for easing water shortages, for examining social unrest – but they also wonder: Will Big Data's promise be equitably shared? Who will lose their jobs to a machine? And what can be done to minimize the threat posed by the “harvesting” of personal data?

“The democratization of data science, the gap between the haves and the have nots – in the knowledge of how to analyze and interpret data – is getting bigger,” says Cathy Wu, a pioneer in data science and head of UD’s Data Science Institute. “How do we bridge that gap and also ensure we involve people who otherwise would be left out of the data and the decisions based on it? How do we prepare people for future changes in their jobs as data science evolves? We have to ensure data science really provides a positive impact to society, which requires attention to ethics, policy and education.”

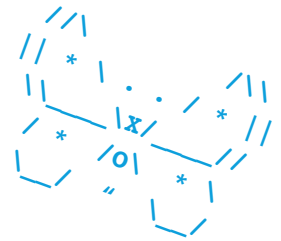
Those are the kinds of topics explored in Rahmat Beheshti’s UD class, which aims to give students a foundation on the social implications of AI, and explore practical ways to address them. Some of the featured topics included ethics in AI, disinformation, replacing jobs and sustainability.

At the same time, academic work to address social ills through data is gaining momentum at UD:

- Using geolocated Twitter data, UD researchers are examining how food and water insecurity can cause social unrest, and Prof. Federica Bianco is bringing data science expertise to bear on projects that range from public health to criminal and prosecutorial justice.
- Sensing the growing threat from cybercriminals, UD scientists will use military-grade data science and machine learning tools to help Delaware’s water systems safeguard against supply disruptions.
- Using simulations and computer modeling, researchers studying the use of offshore freshwater resources have found that the practice could threaten onshore aquifer systems, lead to diminished groundwater availability, and cause widespread land subsidence.
- UD researchers are exploring ways

that Big Data can be used to monitor the condition of railroad infrastructure and predict potential hazards.

- Combining machine learning, data science and virtual technology, researchers are finding more effective ways for users to interact with education and health care systems, and exploring better ways of assessing how bias may be distorting efforts to help struggling students. »



Will Big Data's promise be equitably shared? Who will lose their jobs to a machine? And what can be done to minimize the threat posed by the “harvesting” of personal data?

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A : The UN says that by 2030, two thirds of the world's population will be concentrated in large cities, up from 55% in 2016. That means two in every three people will live in cities with at least half a million inhabitants.

A PROFESSOR WITH PUNCH

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It's tempting to decide that Federica Bianco is an astrophysicist, but elite academic labels seem too limiting, too willfully oblivious of her eclectic scholarly pursuits.

On any given day, this data-crunching, professional boxing, sky-reaching scientist could find herself combing reams of statistics about urban pollution, or possibly even prosecutorial justice, so long as the problem demands

an eye for detecting patterns amid the vast expanses of statistics.

That globe-spanning, multi-disciplined approach is just the way she likes things, and a big reason why she came to UD as an early recruit of UD's Data Science Institute, where her digital expertise is being snapped up by researchers in such disparate fields as public policy and physics.

"I do think that it suits the way that I think, the structure of my brain," the Genoa, Italy, native said of data's allure. "It comes very naturally for me to focus on pattern recognition—it helps you in designing the stages of research, in seeing what the next step is, and envisioning what question to ask next. And that's a huge thing."

It's just about as huge as one of her ongoing projects: She's a key player in the largest astrophysical survey ever attempted, the Rubin Observatory's Legacy Survey of Space and Time. This effort to photograph the entire Southern Hemisphere sky will harvest 30 terabytes of data every night, searching for such "transient" objects as exploding stars and jostling black holes. »

Federica Bianco is an assistant professor of physics and astronomy, public policy and data science. In her spare time, she's also professional boxer, known as "The Mad Scientist."

TAKE A QUIZ»

Q: What's UD doing to bring Big Data expertise to more people?

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CLASS CHATTER

When the world needs expertise on the cutting-edge potential of artificial intelligence, it turns to trailblazers like Kevin Montgomery, AS88.

The CEO and co-founder of the California startup called IoT/AI has been leading the way for more than a quarter century now, helping NASA and the Department of Defense push the very limits of technology, and leading global health innovation programs at Stanford University.

His big reach has embraced a broad array of solutions: augmented reality surgery, biomedical imaging for space-related research and now networks of smart sensors that can help monitor and manage complex infrastructures such as power grids and transportation systems.

All the while, the accolades and innovations grew: He won the Entrepreneur of the Year Award from the Strategic News Service in 2013, and the Edison Innovation Award in 2015. In 1998, he received a Smithsonian Award for his pioneering work in aircraft telemedicine.

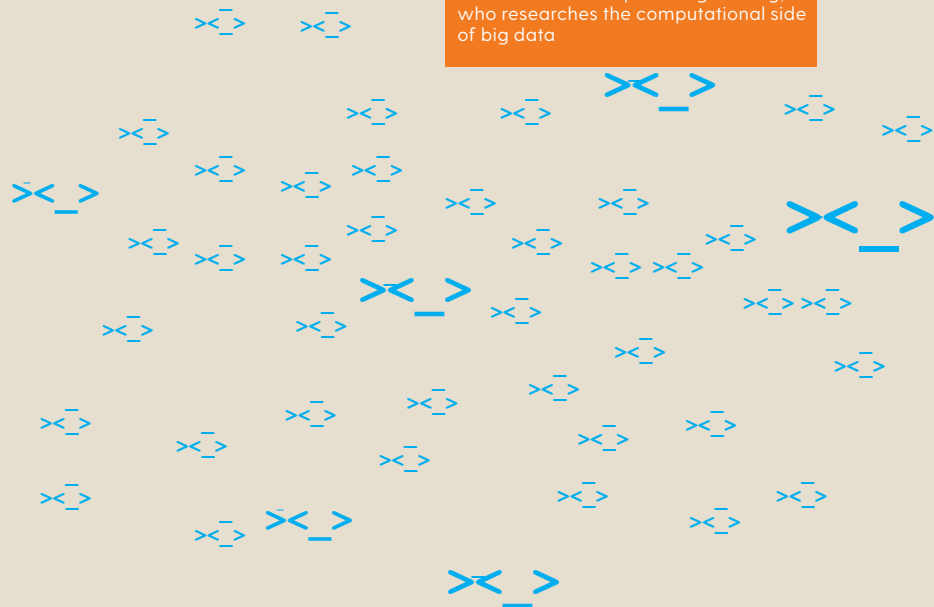
But his latest project has the potential for truly broad impact: It's called Collaborate.org, and it aims to become a worldwide "intelligence dashboard" that integrates and disseminates data from an array of sectors, from industry to academia to nonprofits. By centralizing and then sharing once-siloed information, the online portal aims to help the world meet its challenges in unison, pushing back against a rising tide of grim realities.

"In the future are worlds we don't wish to live in," he told GeekWire. "We need to be smart about our actions today to drive us toward worlds that are great for all of us." 🐦

"Big data has existed for a long time, as massive groups of fish move in the ocean, massive groups of birds fly in the sky and a massive number of people travel around the world. Today, the key is how to get some indices, trends or patterns from these massive data, and how to find a needle in the ocean."

Xiang-Gen Xia

Charles Black Evans Professor of Electrical and Computer Engineering, who researches the computational side of big data



▲ UD's Predictive Analytics and Data Mining Certificate program is open to the public, and offers a 15-week, live-online course that helps businesses leverage data. For more, visit www.pcs.udel.edu/data.

Learners and Leaders: Lessons from the Pandemic

What happened when our homes became our schools, and our screens become our classrooms?

Some students faded from the picture, becoming heads of households virtually overnight, babysitting younger siblings while their parents worked or working when their parents could not.

Teachers, many of them parents and caregivers themselves, developed lessons for both in-class “roomers” and online “Zoomers,” occasionally witnessing once-private situations that they would never have seen in person.

Classes became an entirely new experience, accompanied by fresh opportunities and unexpected challenges. Some instructors livened the discontented dynamic with music; others edged forward through experimentation and improvisation.

Unfamiliar paradigms emerged. Families found they had broader access to teachers, as special-needs kindergarteners learned to troubleshoot their own tech glitches.

The educational world changed, dramatically, instantaneously, for better and worse, as learners and leaders groped for new ways forward. Here, Blue Hens share some of their lessons learned.



ADDRESSING COMMUNITY NEEDS

Dorrell D. Green, EHD98, O4M
*Superintendent, Red Clay Consolidated
School District, Del.*

Initially, we had to ensure that every student had access to technology—to devices, broadband, Wi-Fi. But access didn’t guarantee use, and use didn’t guarantee deep understanding. Families were adjusting; staff members were adjusting. People were being laid off. One of the first things we learned at UD was Maslow’s Hierarchy of Needs, and that quickly came back to me as a school leader. We had to address food, clothing, shelter—those immediate necessities. For a time, we were doing more feeding than engagement or instruction.

We were trying to find an education response to a health crisis. But we had other pandemics: social injustice; hot, contested elections; things our students were observing and witnessing. It put a lot in perspective. Fundamentally, it made us ask, how are we in tune with what our community needs, and how do we address and prioritize those needs?

One of the things we’ve really embraced is youth voice. We retrofitted a school bus and traversed the community to give students an opportunity to let us know how they’re feeling and what they’re dealing with. We deconstructed the whole system: The value of custodial staff, nutrition workers, nurses (who became contract tracers and later sourced vaccines). And we helped elevate our communities in ways that brought the value back to public education.



MAKING SPACE FOR WHAT HAS NEVER BEEN

Kammas Kersch, AS12, EHD16M

*Educational innovation specialist,
Chester County, Pa., Intermediate Unit*

When the pandemic hit last March, I was a tech coach supporting grades 7-12. It quickly became apparent that our teachers, just like our students, needed to be met where they are. We began scaffolded professional learning at two different levels for teachers to self-select weekly topics, whether it was adding captions to a video or developing content for students with different learning needs.

I remember learning very early that many of my high schoolers would not be attending any synchronous

learning because they were working full-time or solely responsible for younger siblings. That had never happened before. But we said, "OK, that is where your needs are right now, and we support that, and we'll meet you. We'll build asynchronous content, and you'll get high-quality instruction to continue with your education."

While the reason for all of this was certainly negative, the push into effective tech-integration has been phenomenal. Moving forward, I think we'll see continued growth and confidence. I hope we'll also begin to rethink assessments: What is most effective? What is most authentic to measuring growth? How will that continue to evolve? We're just scratching the surface of what education could look like moving forward.



SHARED CHALLENGES AND OPPORTUNITIES

Heather Uberti, EHD97

*Kindergarten and special
education teacher, Lake
Washington School District, Wash.*

Throughout the past year, my students and I faced many technology challenges together. Someone had to reconnect to a meeting, or a website wasn't loading, or the camera wasn't working. So we'd say, "Hmm, what should we try next." Students hear that and soon begin to repeat the same phrases.

Small issues that seemed so stressful at the beginning taught us to be flexible. The students sensed and learned that, too. Technology even enabled some families who were working during the day to engage at more convenient hours, allowing them to attend more conferences and become an integral part of their students' education. Although remote teaching/learning was far from ideal, I was pleasantly surprised with how capable even my youngest learners proved to be.



BUILDING PERSONAL RELATIONSHIPS

Daniel T. Goldsamt, AS91

*6th grade math teacher,
Montgomery County Public
Schools, Md.*

Personal relationship building has to take place. Whether in-person, 6 feet away or virtual, getting to know your students is incredibly important, and technology has actually helped with some of that. We use things like Nearpod, which is basically like PowerPoint and Google Slides on steroids, where you can also see, in real-time, what students are doing. I remember Zoom as a '70s TV show, but there are special features—polls, chats, breakout rooms—that make lessons interactive and allow students to be more independent in this format.

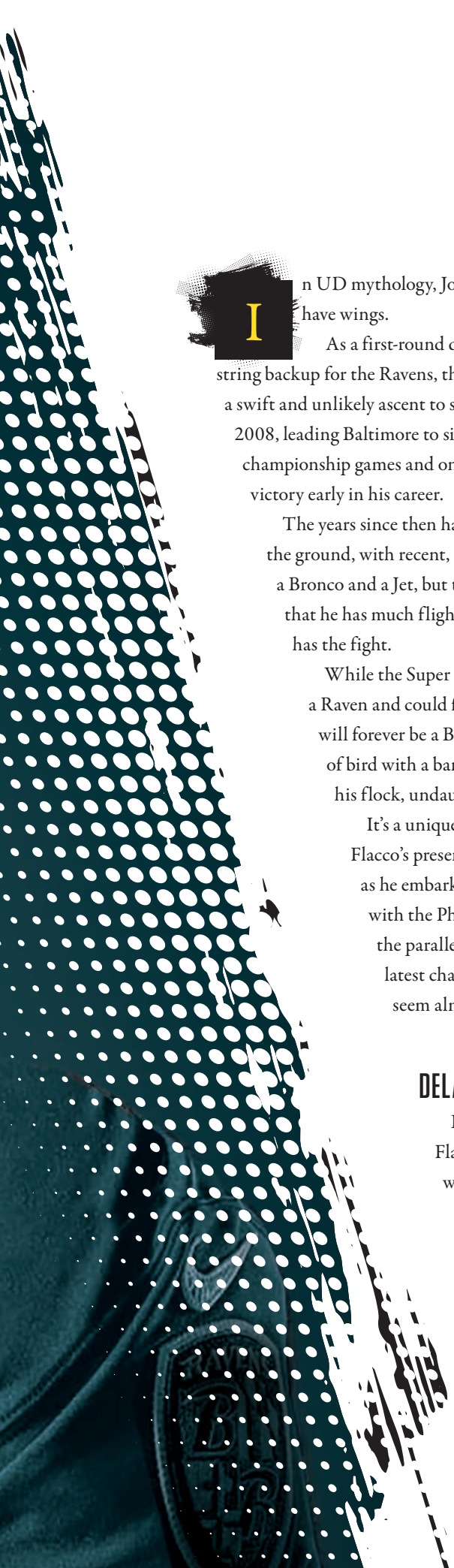
I also start out my classroom with a song that students choose. We've done everything from the Barney theme to ACDC to Taylor Swift to the Beatles. It's a really good way to start class. We try everything we can.

FORTITUDE AND FLIGHT



PHOTO BY SHAWN HUBBARD/BALTIMORE RAVENS

BY ARTIKA RANGAN CASINI, AS05



In UD mythology, Joe Flacco would have wings.

As a first-round draft pick and third-string backup for the Ravens, the young athlete made a swift and unlikely ascent to starting quarterback in 2008, leading Baltimore to six playoffs, three AFC championship games and one spectacular Super Bowl victory early in his career.

The years since then have kept him closer to the ground, with recent, short-lived stints as both a Bronco and a Jet, but there's a lingering sense that he has much flight left in him. He certainly has the fight.

While the Super Bowl MVP has soared as a Raven and could fly high as an Eagle, he will forever be a Blue Hen, that rare breed of bird with a bandage on its beak, leading his flock, undaunted and undeterred.

It's a unique alter ego that connects Flacco's present with his past. Indeed, as he embarks on a one-year contract with the Philadelphia Eagles this fall, the parallels between the first and latest chapter of his football career seem almost indistinguishable.

DELAWARE DAYS

Back then, Joseph Vincent Flacco, BE08, was just a kid who wanted to play ball.

Recruited to the University of Pittsburgh on a full scholarship, he assumed that a large Division I FBS school was his best bet to

advance to the next level. And perhaps it would have been, if only he had played. Instead, Flacco served dutifully as backup, rarely taking the field.

After throwing just four passes in 2004, he left Pitt for UD, though he was not released from his scholarship. His first semester at Delaware was spent in the dining room of a shared Elkton Road apartment, where he hung a curtain for privacy and paid \$250 monthly rent, along with out-of-state tuition. As an accounting major, he rode a bike to class and to the Field House. Ineligible to play his first year, he practiced instead.

Wide receiver and team captain "Swervin" Kervin Michaud, EG08, 11M, can still remember how the ball whistled through the air the first time Flacco threw it. Offensive linesman Mike Byrne, AS08, can picture Flacco on the sidelines in khakis and a polo shirt (NCAA rules prevented him from even wearing the uniform). "He was the best practice squad quarterback in the country," Byrne jokes. "He was tearing our defense to shreds, but he was just out there having fun."

For his part, Flacco was at home. "I dove all in. I was willing to do whatever I had to do to make it work," he says.

At the time, Sonny Riccio, HS06, was the established starting quarterback, so even without the NCAA rules, Flacco knew he wouldn't play. It didn't matter. "I was happy to practice. I thought it was a really good opportunity to learn the offense, grow and become part of the team."

And he did. He and the guys would spend Friday nights at Tony's Pizza, just north of campus. "We'd go out and talk for two hours, then go home, fall asleep and play a game the next day," Flacco remembers. "Probably not what you think of when you think about the college lifestyle, but it was just an awesome group of guys who came from good families and were willing to work hard and sacrifice and do all the things you needed to do to make a good football team."

They would have extraordinary success, ascending to the Division I FCS championship game in 2007 under head

coach K.C. Keeler, HS81. (A Blue Hen legend in his own right, Keeler's 2020 championship with Sam Houston State makes him the most successful coach in FCS playoff history.)

At Delaware, Keeler and offensive coordinator Kirk Ciarrocca worked to elevate the talent of the entire team, from the acclaimed matchup against Navy, where Flacco threw for 434 yards, to the five-overtime game against Richmond, which UD ultimately lost, but which still stands out in Flacco's mind as one of the most memorable games he's ever played. "It taught us a lot about what kind of team we could be."

It's always been about the team. Even now.

LOOKING AHEAD

The Eagles roster is young, but Flacco feels good. "The offensive line is really good," he says. "They know what they're doing and can move. All the skilled positions are young guys with a lot of talent and a lot to prove. Those things set you up well for success."

"MY JOB IS TO CONTINUE TO DO WHAT I LOVE TO DO AND TRY AND SHOW THAT I'M STILL REALLY GOOD AT IT."

As a veteran among that youthful flock, Flacco senses that experience will be his prime asset. "My background is from a bunch of different teams and with a bunch of different players," he says. "My goals are to help cultivate a winning culture and help guys get the most out of themselves."

And yes, the kid from Audubon, New Jersey, wants to prove that he can still play at the highest level.

"I don't see myself completely fulfilled in a backup role, but I see it as a path that I'm willing to take in order to get to where I ultimately want to be," he acknowledges. "I want to play again. I have no idea when that will happen. Is it this year? Is it next year? Is it two years from now? My job is to continue to do what I love to do and try and show that I'm still really good at it."

CONFIDENCE AND CONVICTION

At UD, Ciarrocca often said that Flacco never made the same mistake twice. With a hunger to learn and play, Flacco knows his greatest strength has endured: "I'm not afraid to fail," he says. It's how you grow.

"We're taught confidence, but that comes from doing things that are hard to do," Flacco adds. "You don't accomplish something difficult right away or all at once. It's something that builds over time, and the more you can fight tiny hurdles every day, the more confident you can be."

One of the first hurdles Flacco ever faced was on the basketball court, as a high school sophomore who rarely got to play. His father urged him to speak honestly with his coach, and he did. He can't remember now what he said, or what was said in return, but decades later, the conversation remains "one of the most important things I've ever done in my life. It gave me instant credibility with myself."

It instilled a confidence that would help him leave Pitt, trust



PHOTO COURTESY OF UD ATHLETICS

In the Whitney Athletics Center, Joe and Dana Flacco tour the new Strength and Conditioning Center that bears their name.



The highest NFL draft pick to come out of Delaware (1st round, 18th overall), Flacco also set 20 school records, including yards passed in a single season (4,263 in 2007) and career completions (595).

PHOTOS COURTESY OF MARK CAMPBELL

in himself, and listen to the voice within that knew his worth and value, even when others doubted it.

When the Ravens' owner called Flacco into his office the year before the 2012 Super Bowl to ask why he wasn't signing the \$19 million, five-year contract they offered, Flacco stuck to his guns and spoke his truth. And then he won—both the most important game of his life (parts of which he still can't watch without getting nervous) and a contract worth six times the initial offer.

It all stems from that tough high school conversation. "Once you can express yourself, it allows you to feel good about moving forward, whatever happens," Flacco says. "When you're playing every single Sunday, you're going to lose a couple games, and you have to be willing to have honest conversations. Sometimes you might feel you weren't given the chance to impact the game, and you might hear, 'Yeah, you did, and you weren't good enough,' and that's okay. But you gotta put yourself out there."

RIISING ABOVE THE NOISE

Appropriately, Flacco is now playing in a city notorious for its candor. If he fails on gameday, Philly fans will let him know.

Which is fine. His teammates, past and present, have marveled at Flacco's ability to take in the feedback while tuning out the noise. "He's always composed and in control," says famed UD running back Omar Cuff, AS08. "And he needs to be. A quarterback who gives in to the pressure won't deliver an accurate pass."

Gino Gradkowski, AS11, played with Flacco on the Ravens, and as center, he has snapped the ball to some of football's greats—Peyton Manning, Cam Newton, Matt Ryan.

"Joe is Joe. He's the same person on the fourth down in the fourth

quarter as he is in practice," says Gradkowski, who recently returned to UD as assistant director for student leadership development after nearly a decade in the pros. "His presence is contagious. It makes you feel more confident and comfortable."

That's leadership, at least as Flacco sees it: Work hard. Do what you're supposed to do. Make good decisions. Be accountable. Form relationships. Show other people that they can trust you to do your part—nobody else's, just yours. And then do it well. With everything you've got.

It's what he learned at Delaware, and it's why he and his wife, Dana, have invested in the University's new Whitney Athletics Center, designed to be a one-stop facility for all 600-plus student-athletes in all 21 D1 sports programs, as well as a training ground for the next generation of Joe Flaccos.

"Some of my biggest memories at UD were playing in the stadium and having 22,000 people excited about winning football games," he says. "I remember how cool it was to play there and how passionate the people were, and I want all the players coming through to have the same experience I had."

One look at the facility, and it's clear their experience will be even better. That the Blue Hens of tomorrow will have the possibility of seeing their own wildest dreams come true. After all, it's happened before.

"I never would have thought that I would be a first-round pick or afforded a real opportunity to play at the next level. I felt like I'd be the kind of guy that was fighting for a roster spot at training camp, at best. So the fact that it turned out the way it did is a testament to the place, the organization, the coaches, all the players."

It's the ultimate story of a Blue Hen. And who would Joe Flacco be, if he were anything but? 🐓



21

Construction
programs
in the world

When you envision the construction industry, you might think of a construction site you've driven by recently, with people building structures out of wood and cement.

The backbone of today's construction industry, however, is increasingly digital, with greater reliance on tools like 3D modeling, real-time monitoring, sophisticated contract management systems and much more.

In other words, you need technical skills and business savvy to succeed in the growing field of construction. That mix is exactly what students receive in UD's construction engineering and management program, which graduated its first cohort this spring.

Recent alumnus Ryan Webber, EG21, BE21, came to UD as an entrepreneurship major and added construction engineering management as a second major. "It's the perfect in-between between business and STEM," he says.

As an undergraduate researcher, Webber has worked with faculty to use

drones to create 3D models of buildings and sites. "We are trying to make new methods of surveying more efficient and commonplace in the industry."

UD's construction engineering and management program was developed with support and feedback from industry leaders, including UD alumni who parlayed other engineering degrees into success in the construction field. The new program combines engineering foundations with specialized construction skills, business courses and a co-op internship program to give students real-world experience, distinguishing UD's program from most others.

Through a unique study abroad program in Dubai, students get to see modern marvels of construction up close, including the world's tallest

building, the Burj Khalifa skyscraper. Students can also network through the registered student organization Construction Engineers of America and tour active construction sites—when it's safe to do so, of course.

One of the driving forces of the construction engineering and management program is Francis "Skip" Gardiner, EG62, founder and president of Gardiner Realty and Development Company in Crofton, Maryland. After studying civil engineering at UD, he completed a master's degree in construction engineering at Cornell University. That specialized degree helped him refine his skills in scheduling—"where fortunes can be made or lost"—as well as gain knowledge in concrete, economics, accounting, communication and more.

Several years ago, as Gardiner's sons were looking to follow in their father's footsteps, the Blue Hen turned to his alma mater. He approached the College of Engineering and started a fund toward a construction engineering and management program. The fund grew over time with support from other donors, and enthusiasm for the program swelled, too.

In 2010, representatives from The Whiting-Turner Contracting Company—which has recruited engineers from UD for more than three decades—met with UD engineering leaders to discuss industry trends, needs and

\$97,180

Average annual salary
of a construction
manager

Source: Bureau of Labor Statistics

opportunities to support the launch of a modern construction engineering and management program in Delaware.

“We were very much interested in students who had direct experience and education in the construction industry,” says Kris Satterfield, EG91, a senior project manager at Whiting-Turner.

“What we do in terms of construction is different from the pure engineering that we learned in school from the design side,” adds Joshua Fanelli, EG97, division vice president and regional manager at Whiting-Turner.

In 2016, UD hired associate professor Edgar Small as founding director of its newly launched construction engineering and management program. An expert in project management, green construction, bridges of the future and more, Small consulted industry partners

ZERO

There are no other construction engineering programs in the Northeast/Mid-Atlantic corridor, which embodies one of the most dynamic construction markets in the country. UD offers the only accredited program within easy reach of companies in this vital geographic area.

to help shape the program and offer valuable feedback along the way.

“He’s very enthusiastic about what he’s doing, and he’s very knowledgeable. When you look at the program he’s put together, I think that shows,” Gardiner says of Small. Now, there are three UD faculty members: Mohsin Siddiqui, Ri Na and Small, who focus solely on construction engineering and management.

Meanwhile, Gardiner and other alumni continue to support the program and have contributed funds for scholarships for construction engineering students. Students also have opportunities to hone their skills through internships at companies such as Whiting-Turner and others.

“That’s extremely valuable to their potential, their career growth and their decision-making,” says Fanelli. “They get to know what kind of companies they like; what they like or don’t like about

8%

projected growth in construction manager jobs, 2019 to 2029

the business; and they can take what they learned in the summer and apply it to their studies next semester.”

Sometimes these internships eventually lead to full-time opportunities for the student. Both Fanelli and Satterfield got their starts at Whiting-Turner as UD student interns.

Next up: a master’s degree program, still in development, for professional engineers to bolster their knowledge, skills and credentials. 🐦

—Julie Stewart, with additional reporting from Jordan Howell, AS11

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ABET-accredited construction programs in America



ANTHONY FOGGIO

“THERE IS, AND REMAINS, A TREMENDOUS NEED FOR CONSTRUCTION AND ENGINEERING TALENT IN THE INDUSTRY.”

—Francis “Skip” Gardiner, EG62

UD’s construction engineering program offers a unique study abroad experience in Dubai.

NEVER FORGET

Twenty years after the 9/11 attacks, we remember the outpouring of grief and love from this tragic day.

In 2001, a nation stood transfixed by the sight of unspeakable terror, and a shocked campus reached out as one with messages of sadness, hope and love, scribbled on ribbons, and saved for posterity. Over the years, Blue Hens have expressed their feelings and reflections, some of which are shared below. Today's students cannot know how those moments felt, but in many ways, their echoes live on within us all.



UD's candlelight vigil on Sept. 11, 2001, was one of the first public gatherings in response to the attacks.

“9/11/01: The day that burned a hole in every American's heart. I truly hope that those who lost loved ones have found peace. No matter who or what you believe in, know that you are never alone. Your Blue Hen family will always be here for you.”



“I'll never forget the worried look on my roommate's eyes — her entire family living in NYC. I'll never forget the outpouring of patriotic support and togetherness the entire campus exhibited. I'll never forget.”

“We should all remember. And we should all embrace each other and respect each other as much as we did when the wounds were still fresh.”



A GRIM DUTY, PROUDLY DONE

Joe Palermo, EHD74, was teaching a class at the FBI Academy on 9/11 when his beeper went off: Two planes had hit the World Trade Center, and he was needed at the Pentagon — ASAP. “I was the only car on I-395 going northbound. I looked left and the Pentagon was engulfed in smoke and black flames. That was 10:30. The plane had hit at 9:37.” The special agent would spend the next few weeks amid the wreckage, searching for bodies, recovering remains, sleeping on-site. “Two or three times we had to evacuate because of bomb scares,” he says. “The third time we said, ‘We’re not going, we’re not leaving.’” The grim images remain in his mind: A teddy bear from a child who had been aboard the plane; the bodies of American soldiers,

incinerated and torn. “When I came out after each and every trip, I was just emotionally exhausted. But I didn’t want to be anywhere else in the world,” the Wilmington, Delaware native says.

“My roommates and I were glued to the TV all day and night. We tried to call our families in PA, NJ, and NY, but could not get through. We were so scared.”

“Out of five roommates, four of us were Army ROTC. We definitely knew our futures now were going to look VERY different, but none of us were scared about it. We knew what we signed up for and knew we had a job to do.”



“It made us realize that we would be graduating college during a time of war.”

“When I look up at the night sky and see the stars, I will always remember you.”

“No life is futile, no loss in vain.”

Remembering the five UD alumni who perished in the World Trade Center:

Ronald Breitweiser, BE84

Peter C. Frank, BE93

Alan D. Kleinberg, BE83

John A. Larson, BE88

Karl T. “Smitty” Smith Sr., AS79



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ALUMNI NEWS

A KNACK FOR MAC

The recipe for success relies on crucial ingredients: talent, tenacity and copious amounts of hard work. Perhaps that's what makes Myles Powell so successful.

Engineer by day, chef by night and founder and CEO of 8 Myles comfort food, Powell, EGI2, has had a wildly successful year. This spring, his line of gourmet, frozen mac-n-cheese meals debuted in more than 200 Target stores across the Northeast—a “mylstone” projected to increase revenue by 567% and an achievement that is, in many ways, a natural progression of the determined character Powell first cultivated at UD.

Delaware is where Powell would study until 4 a.m. — and still fail his exams. He briefly considered dropping out, but that didn't align with his internal compass. Instead, he enrolled in support programs, retook calculus and enhanced his study skills with help from friends and classmates.

“Engineering taught me to love a good challenge,” he says. That lesson would serve him well in the culinary world.

Powell has appeared on the Food Network show, *America's Best Cook*; earned his MBA; launched his own business, 8 Myles (a nod to both his name and the Eminem music biopic about “bouncing back when life knocks you down”)—all while working full-time.

He has grown his business from selling barbeque sauce in two local shops to selling mac-n-cheese—tossed, of course, in his famous sauce—to more than 100 supermarkets, including select Whole Foods stores; the New Jersey-based chain, Kings Food Market and Balducci's; and now, Target—all while working full-time.

Powell hopes to lose the day job someday soon. Until then, it pays the bills and supports his true passion: feeding people healthy, delicious, soul-fulfilling meals. 🍷



BAO Celebrates

by Megan Maccherone

Before there was a Black Alumni Organization (BAO), there was Richard “Dickie” Wilson. For decades, the longtime Upward Bound director held UD’s Black student community together. Under his wing and watchful eye, students excelled in class and on campus, then graduated and moved on.

So in 1981, when alumni were invited back to Newark for a luncheon in Wilson’s honor, dozens returned to campus for the first time. But more than that, they planted the seeds that would continue Wilson’s legacy.

“We started talking about how important it would be for us to meet on a regular basis, so we did,” says Norma Gaines-Hanks, AS74, 97EdD, associate professor in UD’s College of Education and Human Development and one of the founders and first presidents of the BAO. “From there, we started talking to folks in alumni relations about formalizing our group.”

At the outset, a core group of 10–12 people developed plans for the



Five members of the BAO pose together at the organization’s 10-year anniversary

organization’s mission, UD connection, vision and execution. Together, they aimed to serve as a resource for prospective and current students, as well as for the University in its progress toward more diversity and inclusivity. By 1984, the BAO succeeded in getting Black representation on the Alumni Board and had completed a constitution. Members also began having regular meetings with the UD president.

Gaines-Hanks credits Barbra Frank Andrisani, EHD68, a former trustee and subsequent president of the UD Alumni

Association in the 1980s, with helping the BAO gain traction on campus. She helped the group so much that they made her an honorary member of the BAO.

“We were growing really fast,” says Neysa Gaines Smith, AS76, Gaines-Hanks’ sister, fellow BAO founder, and later secretary and president of the BAO.

A large part of BAO’s early efforts centered around student recruitment. Informally, BAO members worked within their own networks to ask families to consider sending their children to UD and discussing UD’s changing campus culture.

In December 1990, the organization introduced an official logo using a Kente-motif, which symbolizes a transition or honor. The design evolved into graduation stoles, handwoven by an artisan in Ghana, and still worn today by Black graduating students.

In 1991, 10 years after its founding and nine years away from the new century, the BAO established its first campaign—Approaching 2000—with a goal of reaching 2,000 Black students

“We laugh, we cry, we

40 years



From 1991-1993, the BAO published PAMOJA, TOO!—building off the popular PAMOJA student newsletter—to keep alumni engaged and informed.

and alumni by the year 2000. At the start of the campaign, UD counted only 1,300 Black students and alumni among its community. By 1995, the dream had been achieved.

But more work remained. Beyond recruitment, the BAO wanted to financially support Black students at UD. They established a Book Scholarship, a small award given to one Black student in every college, or rather, every college that had a Black student at the time (which wasn't always the case).

By 2013, the organization raised enough funds to establish the Black Alumni Organization Endowed Scholarship, awarded to Black students across the University who excel academically and engage in the campus community.

To honor the legacy of the BAO and its milestone anniversary, alumni and supporters of the organization are now seeking to raise \$25,000 to increase the scholarship's impact, opening more doors for students of color who may be facing financial barriers.

Terrance Bowman, EG95, is one of its many proud donors. "As an alum, I know how grateful I was to receive scholarship assistance," he says. "I'm happy that I now have the opportunity to pay it forward to the next generation of scholars."

And this generation benefits greatly from the BAO, which has worked to expand alumni outreach and enhance mentorship opportunities, including more connections to the Center for Black Culture (CBC).

"Part of the CBC's mission is to create spaces of belonging and support for Black students, which build lifelong relationships," says CBC Director Kasandra Moye. "Black alumni are family and integral to the work of the CBC. Our partnerships reinforce student success and community, foster pride and preserve cultural traditions."

In short, they help achieve what the BAO sought to do 40 years ago.

"I often say that UD is the place where I 'grew up,' and gave me my foundation for who I am today," says

Lionell Flamer, AS04. "It's unbelievable to me that people I met as a teen would become my extended family. We laugh, we cry, we support, we love each other. We've been there for graduations, promotions, weddings, funerals, child births and everything in between. I'm fortunate to have the BAO as the vessel that keeps me and so many other of my extended family members connected to the University we love."

For its 40th anniversary, the BAO is planning a Homecoming event while also raising funds to increase the award amount of its endowed scholarship. For more information, visit www.udel.edu/homecoming. 🐦



BAO alumni and friends celebrate at a pre-pandemic Homecoming event.

PHOTOS COURTESY OF UNIVERSITY ARCHIVES AND RECORDS MANAGEMENT

support we love each other."

— Lionell Flamer, AS04

FROM THE FILES OF LEGENDS & LORE

Memorial Hall was built to carry our thoughts into the past. Bronze tablets bearing the names of fallen soldiers reflect Blue Hens' sacrifice in a century-old world war. Greek columns speak loftily of a time when colleges' now-pervasive brick-and-ivy vernacular was first embraced.

Today, some 97 years after it opened, the building's own past seems less visible. Few realize this centerpiece of The Green was built to commemorate World War I with the help of thousands of Delaware schoolchildren, who contributed their spare pennies to its construction, or that its basement was hand-excavated by UD students and professors. Not many know that it originally served as UD's main library, or that it held the first iteration of The Scrounge, which served as a social bridge between the segregated men's and women's campuses.

And hardly anyone remembers the Great Library Flood of 1937.

It happened on a July day after the school year had ended, when a torrential storm poured 17 inches of rain onto campus in just 12 hours, inundating the basements of several buildings—including Memorial's, where 90% of the

THE BEST UD STORY YOU NEVER KNEW.

- ✧ *The story: "A flood of bibliographic proportions"*
- ✧ *The year: 1937*



library's books were shelved.

Within hours, an intrepid squad of six staffers and professors moved 10,000 volumes out of the basement and propped them onto The Green, pages fanned open to facilitate drying. Because windows and doors were swollen by water and couldn't be shut, "the creatures of out-of-doors came in and lodged," noted William Ditto Lewis, head librarian at the time. "As late as the opening of school, a small and very much puzzled toad was found wandering in the stack."

Each day, students and staffers would spend three hours hauling books outside to dry—and another three hours bringing them in at night.

"The Memorial corridor became a storeroom for half-wet books and newspapers; more than a score of electric fans, corralled from all parts of the campus, converted the general reading room into a drying room while

our friends worked fanless in classrooms and offices during the heat of July," Lewis told *The Review*.

Some things were lost for good: A complete file of *The New York Times* and an art collection presented by the Carnegie Foundation. And despite Memorial's iconic location, Lewis was not impressed with its prominent placement.

"The architect probably selected the lowest spot in what is probably the lowest campus in America, then dug a hole and put his library in it," he quipped to the *Newark Post*, which described a city contending with its own chaos, and the destruction of "bridges, roads, cattle, crops, merchandise in stores, machinery and supplies."

"Newark Police performed heroic deeds as they rescued motorists, calmed hysterical women and risked their lives through the wild night that will never be forgotten," the *Newark Post* reported. 🐔

PHOTO COURTESY OF UNIVERSITY OF DELAWARE ARCHIVES

CLASS NOTES

1950s

Jack Terres, EG58, and Ann Follett

Terres, AS62, of Bethlehem, Pa., (quietly) celebrated their 60th wedding anniversary at the end of January 2021. Ann recently retired from the Southeast Pennsylvania Council on Aging after 15 years and now serves on the county's Aging Advisory Council, while Jack continues golfing a few times a week. The couple volunteers for Meals on Wheels. After singing in their church choir for the past 52 years, they look forward to returning when the pandemic comes under control.

1960s

Sandra Browning Windsor, AS60, of Denver, Colo., has published a novel, *Fractured*, after writing her memoir in 2016.

Morrie Spang, EG66, of Atlanta, Ga., recently retired from Nelson Architectural Engineers. He was a lead structural engineer for Detroit's Renaissance Center, Moffitt Cancer Center in Tampa and new bleacher projects at the universities of Georgia and Alabama. He managed Chicago's Harold Washington Library design project from the design competition through construction and spent more than 20 years developing telephone company projects from coast to coast.

Roland Vinyard, AS68, of Sprakers, N.Y., has published *The Ballad of Pete Hauer*. Written entirely from primary sources, the book details the four-decade-old mystery of a pacifist who killed someone he barely knew in 1975, then hanged himself in remorse. Vinyard has also written an original song of the same name.

1970s

Guy Pedelini, BE75, of Lititz, Pa., has been elected president of the Board of Directors of Court Appointed Special Advocates of Lancaster County.

Richard D. Bond, AS79, of Wilmington, Del., has been selected by his professional peers as one of *Delaware Today* magazine's 2021 top dentists. Bond practices with Dental Associates of Delaware.

Christopher W. Nicholson, AS79, of Baltimore, Md., was selected through peer review as *Best Lawyers'* 2021 Lawyer of the Year for Family Law. Nicholson has been recognized by *Best Lawyers* since 2015.

1980s

Lee Revis-Plank, AS86, of Milton, Del., was elected to Milton Town Council.

Edward Urban, CEOE86M, BE86M, CEOE89PhD, has been named a fellow of The Oceanography Society to honor his outstanding service and leadership

to the oceanographic community over several decades. He is former executive director of the Scientific Committee on Oceanic Research.

Jeff Foster, BE89, of Monroe, Ga., has been sworn in as superior court judge for the Alcovy Judicial Circuit, following his election. He has previously served as a magistrate, municipal court judge, trial attorney and former chief assistant district attorney.

1990s

Tracy Chapman Hamilton, AS90H, of Henrico, Va., has received the 2020 International Center of Medieval Art Annual Book Prize for her book *Pleasure and Politics at the Court of France: The Artistic Patronage of Queen Marie of Brabant (1260-1321)*. She is an associate professor at Sweet Briar College in Virginia.

Maureen Johnson, AS94, of New York, N.Y., has published her latest young adult murder mystery, *The Box in the Woods*,



Jeff Foster, BE89



Maureen Johnson, AS94

COLLEGE DEGREE LEGEND

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- AS • Arts and Sciences
- BE • Lerner College of Business and Economics
- EG • Engineering
- EOE • Earth, Ocean and Environment
- EHD • Education and Human Development
- HS • Health Sciences
- BSPA • Biden School of Public Policy & Administration
- M • master's degree
- PhD
- EdD • doctoral degrees
- DPT
- H • honorary degree

SHARE YOUR NEWS

The *Magazine* encourages alumni to send us news to share with your fellow Blue Hens. A new job, a promotion, a personal or professional award ... they're all accomplishments we want to announce.

Email a note or a press release to

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Please include your hometown, graduation year and college or major.



Christopher Burgos, BE99



Kyle Somers, AS06

featuring intrepid student detective Stevie Bell. She also wrote the prequel novel to Disney's new Cruella movie, titled, *Cruella: Hello, Cruel Heart*.

Susan Kein-Wolfson AS95, of Woodbury, N.Y., and her husband, Craig Wolfson, have opened a law firm, Wolfson and Klein-Wolfson, PLLC, which specializes in employment law, wills, trusts and estates and residential real estate.

Mark Logemann, AS95, of Hockessin, Del., has been promoted to chief of Emergency Medical Services for New Castle County. "As a University of Delaware alumnus, I am proud to remain in Delaware and serve our population," he says.

Christopher Burgos, BE99, has been named chief executive officer of Diamond State Financial Group in Delaware, where he is currently president and managing partner.

2000s

Michelle Kopp Eichinger, HS00, O3M, BSPA10M, of Lancaster, Pa., earned her

Ph.D. in planning, design and the built environment from Clemson University.

Angela Marconi, EG00, O2M, of New Castle, Del., has been named air quality division director for the Delaware Department of Natural Resources and Environmental Control.

Brian Gold, EG03, of Boston, Mass., is now inaugural director of the Massachusetts Early Childhood Funder Collaborative, a partnership to serve young children in the state.

Bradford Winton, BE03, 10M, of Ardmore, Pa., was promoted to director at Citi Private Bank in Philadelphia.

Sarah Noonan Davis, AS04, O6M, has been named Delaware's deputy secretary for special populations, strategic planning and innovation, overseeing the Divisions of Services for Aging and Adults with Physical Disabilities, Substance Abuse and Mental Health, Developmental Disabilities Services, Visually Impaired, and Management Services. She is also former UD faculty/staff.

Wendy Garcia, AS04, was named to the No. 11 spot in the "Power 50" of minority- and women-owned business enterprises by *City & State New York* magazine. Garcia is chief diversity officer for the Office of the New York City Comptroller.

Julissa Gutierrez, AS04, was named to the No. 1 spot in the "Power 50" of minority- and women-owned business enterprises by *City & State New York* magazine. She is chief diversity officer for the state of New York.

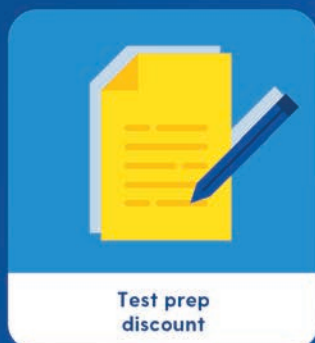
Julia Mayer, AS04, of Boston, Mass., recently published her new book, *Painting Resilience: The Life and Art of Fred Terna*, about the life of a Holocaust survivor.

Artika Rangan Casini, AS05, of North Star, Del., is writing her first book, a "modern-day *Wizard of Oz*."

Pierre Anderson, BE06M, of Wilmington, Del., has been named chief information officer and senior vice president of Artesian Resources Corporation.

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UNIVERSITY OF DELAWARE
ALUMNI ASSOCIATION

Kyle J. Somers, AS06, of Pottstown, Pa., has joined Wisler Pearlstine, LLP, as partner.

Cameron Knight, AS07M, has been named director of the bachelor in fine arts acting program at Rutgers University. Knight is an actor, director and educator.

Matthew Donovan, CEHD08PhD, of Milton, Del., has been named principal of Sussex Technical High School in Georgetown, Del. He had last served as principal of Middletown High School.

2010s

Brittany Holiday, AS10, of Philadelphia, Pa., was honored by the Hope Partnership for Education, which renamed its graduate support office the Holiday Lounge in her honor.

David Plouffe, AS10, of San Francisco, Calif., who served as Barack Obama's 2008 campaign manager, has taken an of-counsel role with Precision Strategies, where he will provide strategic counsel to the agency's political clients.

Leann Moore, AS12, 14M, of Newark, Del., has been named executive director of The Newark Partnership, a community coalition dedicated to the economic, cultural, aesthetic, environmental and social enhancement of the city. She had worked at UD's Institute for Public Administration.

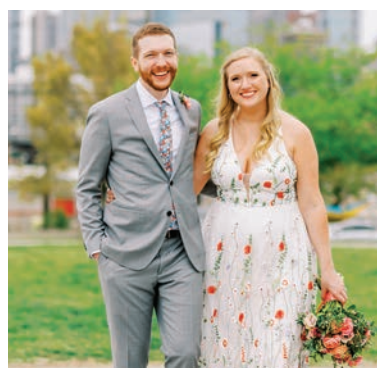
Harry Wroth Shenton IV, AS11, and **Amanda Michelle Shenton, AS11**, of Hockessin, Del., welcomed daughter Aria in July 2019. Harry graduated as valedictorian from Widener School of Law last May, and Amanda was hired last fall as a placement coordinator for Wilmington University.

Kerry Benson, AS12, of Philadelphia, Pa., has published her second mocktail book, *Mocktail Party*, which features 75 non-alcoholic, plant-based recipes.

Jake Derrick, AS13, 19M, and **Dena Hillison, AS22M**, of Philadelphia, Pa., were married on April 24, 2021, in an intimate wedding with several fellow Class of 2013 Blue Hens in attendance.



Brittany Holiday, AS10



Jake Derrick, AS13, 19M, and Dena Hillison, AS22M



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Maggie Gallagher, ANR13, of Westwood, Mass., earned her doctor of veterinary medicine degree from Tufts University and has accepted a one-year internship in emergency medicine at VCA South Shore, a full-service veterinary emergency and general practice medical facility in Weymouth, Mass.

Jeffrey Richmond-Moll, AS14, 19PhD, has debuted his new exhibition, *Extra Ordinary: Magic, Mystery, and Imagination in American Realism*. He is curator of American art at the Georgia Museum of Art. His exhibition reevaluates the meaning of magic realism and surveys American artists within the genre.

Jon Smith, AS14, can be heard as a member of the London Voices on the soundtrack of Disney's recent release *Raya and the Dragon*.

Timothy Abel, EG15, of Philadelphia, Pa., has been named the 2021 Philadelphia Young Civil Engineer of the Year by the American Society of Civil Engineers' Philadelphia Section.

Rony Baltazar-Lopez, AS17, of Lincoln, Del., translated *Boxes of Love* into Spanish. The children's book celebrates cafeteria workers and the school lunch heroes of the COVID-19 pandemic.

Dan Armistead, AS18, has written two musical compositions that advanced to the semifinals of the Wind Ensemble and Orchestral Divisions of The American Prize competition. Armistead is currently a graduate student at UD. 🐦

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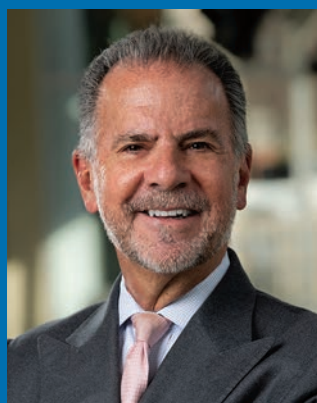
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ALUMNI HONORS

Four distinguished alumni have received the UD Alumni Association's most prestigious annual awards. **Bill Marrazzo, EG71**, and **Quinetta Roberson Connally, BE92**, have been named to the Alumni Wall of Fame, while **Pete Wolf III, AS91**, and **Kimberly Zitzner, AS90**, have received the Outstanding Alumni Award.



From left to right, Bill Marrazzo, EG71; Quinetta Roberson Connally, BE92; Pete Wolf III, AS91; and Kimberly Zitzner, AS90

Bill Marrazzo is president and the longest-serving chief executive officer for WHYY, the leading public media organization serving the tri-state area. At UD, he has assisted Levi Thompson, dean of the College of Engineering, in transforming in-person curriculum to online learning formats at the onset of the pandemic. Previously at UD, he served on the Chemical and Biomolecular Engineering Advisory Council and has guest lectured in the department.

Quinetta Roberson Connally is a management professor at Michigan State University with more than 20 years of global experience in teaching courses, facilitating workshops and advising organizations on diversity, equity and inclusion. She has remained active with

the Lerner College and the Black Alumni Organization, and regularly gives of her time, talent and treasure. Together, with alumnus and former University Trustee Tony Allen, AS93, O1PhD, she established the Fund for Urban Education, which helps provide sustained assistance to Delaware schools serving low-income and other at-risk students.

Pete Wolf is the executive director of the Philadelphia branch of Life Science Cares, an organization dedicated to fighting poverty through funding and volunteer work. Wolf spent more than 20 years as a lawyer for life science companies before developing an interest in nonprofits. At UD, he has served on the Advisory Board for Horn Entrepreneurship, the Parent and Family Leadership Council,

the College of Arts and Sciences' new mentoring program and as an adjunct professor in the Lerner College.

Kimberly Zitzner served for more than 25 years as the director of Catholic Campus Ministry through St. Thomas More Oratory. During the pandemic, she worked tirelessly and adapted to rapidly changing circumstances, embracing an online format to continue serving students. She has represented UD's religious community at many large-scale events through the years and has coordinated numerous religious and spiritual gatherings, memorials and vigils. Zitzner also chairs the Religious and Spiritual Life Concerns Caucus at UD and serves as an adviser to sexual misconduct and non-discrimination cases. 🐦

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Meet U.S. Army Spc. Jun Cho, a University of Delaware student, a Delaware Army National Guardsman, a cadet in the ROTC, and an immigrant from Busan, South Korea. Through his service in the Delaware Army National Guard he receives multiple avenues of support from his state. Spc. Cho receives education benefits, paid

training, a monthly check and help in gaining his citizenship through his part-time service. We are happy to say Spc. Cho received his citizenship this past year while he was volunteering to help defend the Capitol building in Washington, D.C. He can finally call himself an...

American Soldier.



IN MEMORIAM

David Tevis Bunin, AS50, Jan. 23, 2021
 Samuel Conrad Lukens, EG50, March 1, 2021
 Barbara Ann Gillam Fetterhoff, AS51, Nov. 11, 2020
 Carl David Walbeck, EG51, Nov. 17, 2020
 Susan Elizabeth Forsythe, BE52, March 23, 2021
 Robert M. Thompson, Jr., ANR52, Nov. 11, 2020
 Thomas Byron Duff, BE56, Feb. 3, 2021
 Millie Graham Bryant, EHD59, Nov. 25, 2020
 Jane M. Forrest, EHD60, Sept. 6, 2020
 Henry O. Foster, EG65PhD, May 16, 2021
 Carolyn Mary McDermott, AS65, Feb. 5, 2021
 William F. Maloney, EG68, March 18, 2021
 Joseph Kear Wald, AS73, 78PhD, Oct. 2, 2020
 Norma Kay Powers Long, AS77, May 17, 2021
 Laurence (Larry) Ira Lipman, BE79, April 21, 2021
 James Paul Botluk, AS81, March 14, 2019
 Devin T. Stewart, AS96, March 31, 2021
 Bonnie Moxey Maxwell, AS05, May 5, 2021
 Christian Harris, AS21, April 24, 2021

Faculty and Staff

Denise M. (Soukup) Berilla, longtime administrator in the College of Engineering and College of Earth, Ocean and Environment, April 19, 2021
 John Trimble Brook, retired vice president for government and public relations, April 16, 2021
 Thomas M. (Tom) Church, professor emeritus and chemical oceanographer, Feb. 11, 2021
 Edward Fagen, electrical engineering professor from 1974 to 1989, March 3, 2021
 W. Bruce Finnie, professor emeritus of English, Feb. 18, 2021
 J. Michael Foster, retired music resources supervisor and WVUD host, April 29, 2021
 Thomas F. Merrill, professor emeritus of English, Jan. 15, 2021
 William "Billy" Pearson II, offset press operator in University Printing, Jan. 24, 2021
 Clarence Melvin Reitnour, professor and leader of equine sciences program, Feb. 17, 2021
 Susan Zarebicki, administrative assistant in the communications department, Feb. 17, 2021 🐦

Please share news of a loved one's passing with us at
<https://inmemoriam.udel.edu>

Come What Mae

"Oh, well," she said,
 again, again,
 about the things she could not change
 right now.
 We knew she meant
 a comma,
 not a period.

Implacably persistent,
 and hard,
 like a redwood,
 to get around.

Her judgments
 were strong flavors that still linger—
 California wine
 and dark chocolate.

Her actions
 blossomed into gardens
 laid on rooftops,
 transforming other women's books,
 ideas, and teaching.

Her legacy a staircase
 built for coming generations,
 spiraling high.

Almost a rounded century,
 but still
 a few regrets.
 Born too late.
 In purple, white, and gold,
 she would have led the suffragists:
 she would have marched
 with Ida B.
 and Mabel Lee.

And also gone too soon
 to climb onstage,
 upright and stiffened by a metal frame,
 to cheer
 a woman President.

Not simple,
 always looking for the route aslant,
 when there was no way through.
 Yet proudly willing to be summed up
 in one word:
 feminist.



A CONVERSATION WITH...

What can a love triangle from 200 years ago reveal about the quelling of women's ambition? Quite a bit, according to UD professor and religious historian **Christine Leigh Heyrman**. Her latest book, *Doomed Romance: Broken Hearts, Lost Souls and Sexual Tumult in Nineteenth-Century America*, explores the paradoxical nature of the 1800s evangelical Protestant movement, which elevated women as swiftly as it undermined them. Told through the story of Martha Parker, "It Girl" of the 1820s, we learn how a jilted suitor and his network of powerful allies vengefully turned the young Parker into a cautionary tale for ambitious women of her generation.

What do you make of the contradictions within the evangelical movement?

I find them fascinating. On the one hand, evangelicals were founding schools for women that were the educational equivalent of colleges for men. They were providing the first opportunities for women to influence life outside the household and make themselves heard in public. But some (and ultimately, a majority) began to ask, "Where will this lead? Will it undermine traditional gender roles? Will we get a bunch of gals like Martha who get engaged to one guy but then see an opportunity to broaden their world and take it?" And so, Martha becomes a casualty of the very opportunities that, ironically, evangelicals themselves created.

What aspect of your research surprised you most?

I was struck by the letters and documents of the time, which revealed these informal, subterranean ways that women were kept in line. It was interesting to glimpse how male networks operated to contain women and deal with the consequences of women's empowerment; how they created a cadre of educated women who were effective outside the household but then used that same machinery to cut them down to size.

What exactly is evangelicalism, and why does it interest you?

Evangelicalism is a religious style. It teaches that you come to understand God through your heart, not your head. You don't reason your way to faith; you feel your way to faith. I'm interested in evangelicalism because it contained so many possibilities. It's often viewed today as a conservative movement, but if you look closely at its origins, it has been associated with very progressive causes: women's empowerment, criticisms of slavery and racism [which Heyrman explores in her previous book, *Southern Cross*]. I write with one eye on the newspaper. It seems many evangelicals don't know their history, and it's important for them to reckon with that history.

Why write this book now?

I'm 71. Women in my generation are very concerned with the legal and structural barriers preventing women from getting ahead. In many ways, 2021 is a much better world, but what persists are those informal, subterranean, sneaky ways of making sure that women are contained. I was looking for the counterpart to that in early 19th century.

Do you find any hope in Martha Parker's story?

I saw this as a bleak tragedy when I was first putting it together, but then I realized how formidable [Martha's sister] Ann Parker Bird was. I was glad to learn about her resistance to the guys who were trying to trash her sister. But what really lit up my dashboard was discovering that Martha's eldest daughter Eliza was able, with Ann Parker Bird's assistance, to fulfill her mother's dreams and become a major figure in foreign missionary work. It's a snail's progress, but it struck me as a much more hopeful ending for the book.

What do you want readers to take away?

The pleasure of a tale told well enough to think about the ways—right up to the present—that women are still being both empowered and undercut. 🐦



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