UNIVERSITY OF DELAWARE MAGAZINE
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OUR CHANGING LANDSCAPE
A FEATHER (AND LOTS OF OTHER THINGS) IN THEIR CAPS
A FEATHER (AND LOTS OF OTHER THINGS) IN THEIR CAPS
CONNECTING OUR PURPOSE FOR A BRIGHTER FUTURE

One of the many great aspects of being part of the University of Delaware community—whether as an alumnus, friend, student, teacher, researcher, staff member or even president—is the ability to make a significant contribution to the betterment of society. Every day, we have the opportunity to expand our knowledge and understanding of the world, to form new ideas and explore new territory, and to serve the needs of others by making their lives healthier, easier and more fulfilling.

UD prepares our students to lead and add their own accomplishments to the proud legacy of our successful alumni around the globe. I see our students working diligently toward this goal, both in and out of the classroom. Their pursuit of education and their passion for a more inclusive, more responsive and more just world is truly inspiring. And they are doing far more than dream: They are achieving academic excellence and motivating others to join them in making a difference.

Our distinguished faculty, too, are continually building UD’s vibrant intellectual culture. Working at the forefront of discovery, they are addressing the world’s most complex challenges through engaged research, innovation, partnerships and a commitment to sustainability. Solving the toughest problems requires the collaboration of scientists, artists, engineers, humanists and experts from every field, and this kind of interdisciplinary work continues to grow dramatically at UD.

Enabling all this amazing work is UD’s dedicated staff—those who support and care for our alumni, students, faculty and beautiful campus. Throughout the COVID-19 pandemic, so many of them have demonstrated ever-greater levels of teamwork, flexibility and resilience, often taking on new tasks to meet unprecedented needs. They work largely behind the scenes, and we deeply appreciate their service.

Indeed, I am grateful for the endless contributions and enduring impact of the entire Blue Hen family. While we each take a unique route through life, we are so fortunate that our paths converge here at the University of Delaware to create a brighter future together.

Dennis Assanis, President

To read more about the University of Delaware’s recent accomplishments and impact, visit “Connecting Our Purpose: President’s Report 2022” at udel.edu/president-report.
As we explore a world in transition, Blue Hens remind us to:

18 Connect with Nature: Get down and dirty for the 30th anniversary of UD’s Botanic Gardens by meeting some of the plants and learning gardening basics.

22 Strengthen Our Bonds to Each Other: Micah Petersen wants to bridge the civilian and military divide through conversation and cultural connection.

28 Examine our Past: UD alumni help enrich our understanding of the past and its enduring connection to the present.

Every day is a great day to be a Blue Hen, and Commencement is one of the best. On Saturday, May 28, 2022, UD welcomes its newest alumni cohort, the esteemed Class of 2022.

Cover illustration by Jeffrey C. Chase

Every day is a great day to be a Blue Hen.
RIGHTING A WRONG

I feel like a great injustice has been done by excluding Fatty Patty’s from the article. I joke, but that place was legendary. As an Army ROTC cadet, I would secretly pack several large cheesesteaks in my rucksack and eat them instead of the meals, ready-to-eat (MRE) provided for us. There were a lot of envious, dirty, camo-covered faces in those long nights when I brought one out. How I would miss those cheesesteaks a few years later at the beginning of the Iraq war when we only had MREs for months on end. [Owner] Pat Gioffre [BE94] has my eternal gratitude.

Troy Gordon, AS02
Billings, Mont.

THE BALLOON’S MOST LOYAL

I was named Most Loyal from The Stone Balloon staff for their Staff Choice Awards in 2005 and got this shirt. I would get there early solo to beat the crowds, so I was always there at the smaller bar before the whole place opened.

Mike Fox, AS05
Crozet, Va.

FROM NEWARK TO THE BIG SCREEN

What a great blast from the past your Main Street issue is, thank you! As for my memories of Main Street: so many from my 1981-1983 years in Newark as a foreign grad student. Those were my first, formative, most adventurous years in America, so much so that they became the basis for my 2016 novel, Go Home, shortlisted worldwide by Stanford University Libraries for the William Saroyan International Prize in 2018 and currently in development by a multiple-Emmy-winning movie producer in Los Angeles. With some luck we’ll get to see Main Street on the screen, and the whole country will feel its charm.

Sohrab Homi Fracis, EG83M
Jacksonville, Fla.

HERE’S TO THE NEXT

I so enjoyed the latest UD Magazine, both for the stroll down Main Street and for insights into what the students are doing.

I was raised in Newark, arriving here at the age of three and knowing a time when Elkton Road was still dirt and Main Street ran in two directions. There was Pilnick’s Shoe Store, The Farmer’s Bank, which held the gorgeous paintings by the Laskaris that now hang in the Municipal Building, and the ladies’ shop, Leroy’s, which catered to those who could afford boutique, and the Goodwill, which didn’t.

The last time I was in the State Theatre, I arrived on the back of a motorcycle with a friend. We had boxed chicken, a small bottle of Scotch and did our own dinner theatre to Nosferatu, which still gives me nightmares. I spent my food money on those great and affordable egg salad sandwiches from Rhodes Drug Store and hot stuff from the Rathskellar, the cafeteria in the stone church.

While I enjoyed your magazine’s trip down memory lane, I continue to be awestruck by the changes that have happened to UD since I went there.

Chrysler is now the STAR Campus. There are course offerings and opportunities for careers that didn’t even exist in 1973 when I spent my last year in the first year of the Towers. Today, I see more women in the sciences and more research to keep our planet alive and well and its people healthier. There are new concert halls, student interest groups, food offerings, real estate, expansion, gyms and most important, an ever-increasing student body and graduation rate.

Any time I am back in Newark and seeing students walking Main Street, I know I am watching our future. Heads down, books and computers in hand, they are on their way to becoming the next… the next scientist, teacher, leader, designer, musician, artist, researcher, creator, astronomer, engineer… the next. Our future is in their hands, and according to your magazine, a bright future it is.

Karen Jesse, AS73
Wilmington, Del.

The last issue inspired some of our favorite letters to date. Thanks for joining us on our beloved Main Street and sharing so many great memories.
SONG FROM THE PAST  
I really enjoyed your “Dear Main Street” piece. Living in the Sig Ep fraternity house for three years, I have so many fond memories of life on Main Street, those good times typical of college years. Yet my most vivid memory is with a frat brother in the Oyster House after finals in January 1965. I had completed my studies at UD and was about to enter the Marine Corps as an infantry lieutenant. Vietnam was on the horizon. I have always remembered a mournful song being played on the juke box over and over—“Stranger on the Shore” by Acker Bilk. Life had shifted into adulthood overnight.

Bill Iredale, BE65  
Rockland, Del.

FROM THE WAR YEARS  
Do any other war year alums (1941-1950) remember Pop’s snack shop, just down the street from Harter Hall, an oasis for comfort food during hard (and not-so-hard) studying days and evenings? Or The Pool Hall, not so far from Pop’s, it was an excuse to take a break from studying and a second home to many on the men’s side of campus. The Deer Park, a venerable watering hole, was used by a rare professor for an occasional seminar site. And the extension of Main Street across the railroad tracks was where married couples found housing and at least one off-campus fraternity was located.

Robert Hilliard, AS48  
Sanibel, Fla.

Also from this issue

SUBTLE SIGNS OF ANGER  
I liked the column on anger issues and wanted to share some additional thoughts. There may be cultural expectations to feel a certain way for a certain period of time. Give yourself permission to take the time you need. Spend time alone to sort through your feelings. Spend time with others who understand your sadness. Remember your feelings are how you feel. Feel those feelings and sort them out as best you can. Find a trusted friend, adviser or therapist to understand the situation and work through it.

Lisa Cristofich, BE91  
Wilmington, Del.

Letters may have been edited for clarity or length.
FORMER BLUE HEN QB NAMED NEW FOOTBALL COACH

Here is a game plan even Monday morning quarterbacks can get behind: On Dec. 10, Ryan Carty, a UD alumnus and member of the University’s 2003 national championship team, took over as head football coach.

Carty, BE06, has spent the past four seasons as offensive coordinator and quarterback coach at Sam Houston State University in Huntsville, Texas, where his reputation for explosive plays helped land a national title. Now, the former UD captain returns to the field that has always “felt like home.”

Excitement for this new era of Blue Hen football has piled in—Joe Bleymaier, AS05, wide receiver coach for the Kansas City Chiefs, called Carty a “tremendous teacher,” while Super Bowl champion Joe Flacco, BE08, dubbed the move “awesome.”

But perhaps no one sums it up better than Carty himself. “I’m so humbled and excited to be involved in ushering in a new phase of one of the elite traditions in all of college football,” he says. “I can’t wait to begin our quest toward greatness.”

UD LAUNCHES CLIMATE CHANGE HUB

The greatest existential threat facing humanity will not be solved by one person, one institution or even one field of study. To mitigate the impending chaos of climate change, collaboration will be key.

Enter the Gerard J. Mangone Climate Change Science and Policy Hub, recently established to help government officials, community members and anyone else facing a climate change challenge easily find and connect with the right UD experts. The Hub will also assist hundreds of faculty, postdocs and student researchers across campus connect with one another to facilitate greater collaboration and impact.

Among the topics covered by UD expertise: how climate change works, what the impacts have been, the anticipated effects and the social responses to these challenges. Faculty also study policy creation and implementation, and they innovate solutions for communities facing worsening storms, increased flooding, fire, food insecurity and more.

Led by co-directors Dana Veron, a climate scientist and associate professor of geography and spacial sciences, and Jules Bruck, professor and director of landscape architecture, the Hub aims to move academic knowledge into the real world.

The process of creating the Hub involved dozens of faculty from every UD college. As it becomes more active, it aims to bring on additional partners to launch innovative, planet-saving projects. Stay tuned.
What an extraordinary moment. For the first time ever, both the Delaware Men’s and Women’s Basketball teams advanced in the same year to the NCAA Tournament.

One of only 24 universities with both teams in “the dance,” UD is also one of five in which both teams automatically qualified by winning their conference championships.

For the Men’s team, the conference victory, the sixth in UD history, marked a thrilling finale.

“It was the lowest of lows to the highest of highs,” head coach Martin Ingelsby said of the regular season’s end—three crushing losses in a row to the three glorious victories that propelled Men’s Basketball to the Colonial Athletic Association tournament title, all in a week’s time. “It really shows the character of our team, the maturity of our guys to handle those tough moments and then respond.”

Making this moment even sweeter? Women’s Basketball hoisted their third conference title for the first time since the 2013 season, as Jasmine Dickey, HS22, was named the CAA tournament’s Most Outstanding Player.

“We finished the job,” said head coach Natasha Adair. “We talked about this since last year. Every day, we worked. We knew the road back would be the hardest road, but we stayed the course and we stayed together. We have a group of leaders. From day one they believed. I couldn’t be prouder of these young women, not only for the win, but for their commitment.”

Although the dance was relatively short lived—with the 15th-seeded men’s team falling to the second-seeded Villanova, 80-60, and the 13th-seeded women’s team falling 102-71 to the fourth-seeded University of Maryland—the championship feeling is sure to last.

The men finished their season with a 22-13 record and the women finished 24-8.

“I’m really proud of our effort,” said Ingelsby. “We put a scare into [Villanova] for the first 17 minutes, but they hit some big threes. We’ve had an unbelievable run, and this group leaves as champions.”

Adds Adair, “I couldn’t ask for a better crew. I couldn’t ask for a better group of seniors, leaders and just a phenomenal team.”
When roommates Greg Tarnavskyi, AS23, from Ukraine, and Vlad Krylov, BE22, from Russia, saw video of Russia’s Feb. 24 invasion of Ukraine, they wanted to show a UD community united in its condemnation of the war. A Feb. 28 rally they organized on The Green would do just that, attracting students, faculty, staff—even alumni like Naoyuki Sunam, AS21PhD, who wrote “Stop Putin” in Japanese on a sign alongside the Ukrainian flag.

The rally opened with a recording of the Ukrainian national anthem, and when the music unexpectedly cut out, attendees began singing instead. Joining in song were fellow event organizer Brendan Czuczuk, AS24, and his father, Ihor, who drove from Trenton, New Jersey, to share information about the political and historical background of the war in his homeland.

Across campus, UD scholars have also been exploring the invasion, hosting multiple panel discussions this semester. “We are in a new Cold War,” said political sciences Prof. Stuart Kaufman, who foresees mass casualties and millions of refugees in the weeks and months ahead.

Holly Myers, an assistant professor of Russian in the Department of Languages, Literatures and Cultures, noted that every Russian schoolchild studies The Tale of Bygone Years (often known in English as The Primary Chronicle) and that this 12th century historical account is used to portray Kyiv as the cultural and spiritual home of Russians. Since the war began, she pointed out, there has been a state-controlled media blackout on the Russian bombing of Kyiv.

In a Feb. 21 speech, Putin claimed the very existence of Ukraine was artificial and only a result of the collapse of the U.S.S.R. But history Prof. David Shearer pointed out that it was the Ukrainian War of Independence from 1917 to 1921 that resulted in the establishment and development of a Ukrainian republic, not the 1991 dissolution of the U.S.S.R.

—Mike Chalmers and Margo McDonough

UNITED FOR UKRAINE
FINDING FALLEN HEROES

The mission of one UD researcher to scour the depths of the ocean in a patriotic quest has found its way to the silver screen.

Mark Moline, director of the School of Marine Science and Policy, is co-founder of Project Recover, a small team of scientists, historians and military veterans who search remote areas of the planet in order to recover the remains of American service members missing in action since World War II. Working with the nonprofit’s members/volunteers, as well as the Scripps Institution of Oceanography, Moline and colleagues have utilized underwater robots and other equipment to complete more than 60 missions around the globe, locating 50 aircraft associated with 185 missing Americans. So far, 14 persons have been repatriated— their remains identified and returned to the U.S. for burial— bringing long-awaited closure to families.

“In a very big ocean, our technology and persistence are enabling us to find these heroes and change the lives of generations of their relatives across the U.S.,” Moline says.

Now, a documentary about this work is taking viewers along for the emotional journey. Through archival footage, intimate interviews and breathtaking imagery filmed over several years, To What Remains leads audiences from the discovery of wreckage on the South Pacific seafloor to the living rooms of stunned family members and, ultimately, to a well-deserved final resting place at home.

The film was selected for the prestigious American Film Institute Film Festival in Los Angeles and premiered on Veterans Day, Nov. 11, at the historic Grauman’s Chinese Theatre in Hollywood. In December 2021, it became available in theatres nationwide.

But the work is far from complete—more than 80,000 Americans are missing since World War II. Researchers are in a race against time and the elements, both of which erode any evidence of an MIA: a dog tag, a leather wallet, bones, everything needed to identify individuals. To donate to the cause—or to stream the documentary—visit projectrecover.org.

“It is an honor to share our mission to a growing audience through this film, especially with the families of loved ones still missing," Moline says. "And with a promise that they are not forgotten.”

—Katy O’Connell, ANR00

Pictured above: The story of Jimmie Doyle (top row, third from left) is one of many shared in a new documentary on Project Recover, co-founded by UD’s Mark Moline to recover the remains of American service members missing in action.

Pictured at left: A diver flies a U.S. flag over an aircraft located in the Pacific Ocean.
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*Affiliated Faculty Member with the UD Department of Physical Therapy
**Orthopaedic Surgeon for the UD Athletic Department

DELAWARE ORTHOPAEDIC SPECIALISTS
FUELING STUDENT SUCCESS

Generous donors through Delaware First: The Campaign for the University of Delaware are fueling initiatives across campus to ensure UD continues to cultivate the next generation of changemakers.

FRESHMAN FANS

160 families sent their freshman students a Hengram as they started classes last fall. Many donated $20.25 in honor of their child’s graduation year and shared words of encouragement and support. The custom messages generated $3,934 for the Parents Fund, which supports health and wellbeing resources, career readiness programs, student leadership development opportunities, equity and inclusion initiatives and much more for all students.

430

The number of scholarships empowering current and future generations of Blue Hens through endowed funds that live in perpetuity.

74 GIVING TUESDAY PROJECTS

UD donors contributed more than $260,000 to support everything from student groups and internship programs to community service projects and experiential learning opportunities.

"WHEN TRANSFERRING FROM THE ASSOCIATE IN ARTS PROGRAM, I WAS OFFERED SOME FEDERAL LOANS FOR THE UPCOMING YEAR AT THE UD NEWARK CAMPUS, BUT IT WASN’T ENOUGH TO COVER MY TUITION. WITHOUT DONOR FUNDING, I WOULDN’T HAVE BEEN ABLE TO COMPLETE MY JUNIOR YEAR. NOW AS A SENIOR, THE FUNDING IS STILL A LIFESAVER AND MAKES THE STRESS OF NOT FINISHING COLLEGE NON-EXISTENT."

—Curtis Aiken III, AS22, Eppig Family Scholarship recipient, Delaware Diplomat

1,300 X 50 = 65,000

APPTS. IN FALL 2021

AVG. MIN PER APPT

COUNSELING MINUTES SPENT HELPING STUDENTS

The new Wellbeing Center at Warner Hall, a former residence hall, was converted, with donor support, into a holistic health and wellbeing hub. It provides students with resources like mental health treatment, victim advocacy, substance misuse counseling and more.

74 GIVING TUESDAY PROJECTS

Students interning in the Whitney Athletic Center, a multi-purpose, state-of-the-art facility dedicated to student-athlete success. Internships are focused on performance nutrition, athletic training, data analytics and more.

WHAT’S NEXT?

With the extension of Delaware First, generous donors will continue to fuel UD’s efforts to redefine student success with a more holistic approach to the Blue Hen experience, including greater access to need-based scholarships and funds, growth of college preparedness resources, enhanced career programs, increased hands-on learning and more.

Learn more or help support Blue Hens through the Campaign at udel.edu/delawarefirst

Generous donors through Delaware First: The Campaign for the University of Delaware are fueling initiatives across campus to ensure UD continues to cultivate the next generation of changemakers.
THE FOOD SOLUTION TO PLASTIC POLLUTION

Let’s face it: The planet is choking on plastic waste. And that’s not our only problem—we also waste a third of all food produced each year. Now imagine if one of these stark realities could help mitigate the other.

This is the goal of a multidisciplinary team of UD researchers working to transform agricultural waste into commercially viable, recyclable plastic. The National Science Foundation has provided $4 million in funding to UD and its collaborating institutions to support this work.

“We’re trying to make this society more sustainable by developing technology that has the potential to be practical,” says Chemical Engineering Prof. Raul Lobo, who is leading the research effort on campus.

The work is happening at a crucial time. Fewer than 9% of trashed plastic is currently recycled in America, meaning bottles and bags are stuffing landfills and leaching toxins into groundwater at an alarming rate.

But, there may be a solution in the massive amount of food—and food-adjacent—resources produced and wasted globally each year. Think corn husks or leftover fibers from sugarcane. Researchers say this so-called biomass can provide the building blocks necessary for next-generation materials that function just like plastic, minus the pollution. Unlike traditional petrochemicals typically used to create, say, milk jugs or shampoo bottles, such building blocks could easily be broken down and reassembled into something new.

Of course, such planet-friendly plastic only stands a chance if it becomes commercially viable, which is why UD researchers are also working to analyze commercial feasibility and address, by design, barriers to market penetration.

Working together in this holistic way, “we’re going to eventually be able to provide better products for society,” Lobo says. “That’s what engineers do.”

— Maddy Lauria

HEADSTRONG

Get your head in the game. It’s long been considered solid advice for any athlete. But female soccer players may want to think twice.

This was the message delivered last November by Thomas Kaminski, professor of kinesiology and applied physiology, at the annual sports medicine conference hosted by the Manchester United Football Club. Before a virtual audience of 850, he explained that women are more vulnerable than men to concussions that result from heading a ball, possibly because of their relatively limited neck strength.

Kaminski is a globally renowned expert on the subject. He co-led UD’s participation in the NCAA Concussion Assessment, Research and Education (CARE) project, the largest longitudinal research study ever conducted on the topic.

About this latest opportunity to share his knowledge, he says, he feels humbled, particularly because Manchester United is arguably “the most popular brand of soccer in the world in terms of professional league. It’s top-shelf stuff.”

—Amy Cherry
ON THE GREEN

CULTIVATING BOOKWORMS

Imagine walking into an elementary school classroom where the students don’t want to put down their books. These young readers—“bookworms” in the making—plead with their teachers for permission to read one more chapter.

In Delaware’s Seaford School District, thanks to the aptly named Bookworms curriculum developed by education professor Sharon Walpole, this is typical.

“The Bookworms story provides evidence that literacy research matters, and that strong pedagogy helps all children succeed, including those that we have often left behind,” says Walpole.

In 2015, with less than 32% of students achieving proficiency, Seaford ranked last among 19 Delaware school districts. After adopting Bookworms six years ago, that percentage jumped to 53% in 2019. During the challenging 2020–21 academic year, proficiency remained high at 41%—on par with the overall state average. Today, the district is one of the best performing in the area of English language arts.

So, how does it work? The open-access literacy program for kindergarten through fifth grade diverges from traditional curricula in several ways. Importantly, it incorporates full-length books rather than excerpts, recognizing that many children could be motivated to read, if only their assignments were more engaging.

The pay-off has been huge, with greater overall achievement seen across the board and particularly for pupils who are Hispanic, African American or living with disabilities.

But, according to Kelly Carvajal Hageman, director of instruction in the district, the rewards are not for the students alone: “The really positive gains I observe in everyday instruction are what make me most proud.”

—Jessica Henderson

BULLIED TEENS, COVID-19

As restrictions imposed by the COVID-19 pandemic have eased, renewed interaction with friends and classmates is widely seen as an emotional boost for most teenagers, a group that reported increased anxiety and depression during the period of isolation.

But new research suggests this isn’t always the case. “We think that teens are universally happy to be back to social interaction,” says Julie Hubbard, professor of psychological and brain sciences, who recently published a paper on the topic. “But it’s really not that simple.”

Hubbard and her team study children’s and adolescent’s peer relations and aggression. By chance, just before the pandemic upended school and social activities, they completed a large laboratory-based data collection to explore the effects of isolation on teenagers who have typically experienced challenging peer interactions like engaging in bullying or being the victim of bullying. About 100 participants completed additional questionnaires assessing their depressive and anxious symptoms in the early months of the pandemic.

What the researchers discovered is that some teenagers who endured particularly difficult peer relationships prior to COVID-19 actually experienced “improved quality of life during the pandemic,” Hubbard says.

The takeaway of this study, which was published in the journal Research on Child and Adolescent Psychopathology, may be just as important for parents and teachers as it is for teens: a helpful reminder about just how stressful interacting with peers can be for some young people.

—Ann Manser
RESEARCH REIMAGINED

by Lauren Bradford

The 42-year-old building named for George Worrilow, a longtime leader in public service and agricultural outreach, has been completely reimagined, and the newest generation of Blue Hens are loving it.

This flagship research facility for the College of Agriculture and Natural Resources (CANR) was originally constructed in 1980. Reopened in 2020, it is practically unrecognizable to the college’s 10,000-plus alumni.

As the primary laboratory building for more than 1,000 students and 80 faculty members, Worrilow Hall is where critical disciplines intersect, from genetics to animal physiology, soil chemistry to wildlife conservation, and food microbiology to poultry pathology. The renovated facility now boasts large open-concept laboratories, flexible lecture and demonstration spaces, updated lighting and ventilation, and mobile workstations to transform the way students collaborate and innovate. It even has a cafeteria.

This renovation was made possible by more than 100 donors and funded through Delaware First: The Campaign for the University of Delaware, UD’s most comprehensive engagement and fundraising effort to date. (See p. 11 for more.)

A highlight of the newly renovated space includes the bright and tech-friendly anatomy lab, which allows undergraduate pre-veterinary and animal science majors to use state-of-the-art technology to examine skeletal models and practice hands-on clinical veterinary procedures.

“It was very exciting walking into the building and seeing all the updates,” says Jocelin Aguilera, ANR22, a first-generation college student who took her genetics lab and pre-veterinary clinical experience classes in the renovated space.

Elsewhere in Worrilow Hall, plant and soil sciences graduate students and faculty researchers benefit from reimagined labs and diagnostic testing centers where their analyses help farmers, gardeners and Delmarva communities manage soils. Updated lab spaces include new work benches, additional storage and larger prep areas that streamline processes and promote collaboration across research groups.

“Except for the outer structure, Worrilow Hall is a totally new laboratory building,” says Ruifang Hu, ANR22PhD, whose research

CANR RESEARCH TAKES SHAPE AT MORE THAN A DOZEN CAMPUS FACILITIES, including: Allen Lab, which became ground zero for COVID-19 testing early in the pandemic; the Fischer Greenhouse, where students learn hydroponics, horticulture and other aspects of plant production; and Lasher Lab in Southern Delaware, the primary poultry diagnostic lab in the state.
focuses on the evaluation, uptake mechanism and mitigation of arsenic and cadmium in rice. “Our lab used to have two separate rooms and we needed to frequently go across two doors and a hallway during some regular sample processing. Now, we have a much bigger working space in just one lab unit, inside which there is a break room, chemical storage room, biological room, glove bag room, sample storage room, and sink and hood area.”

Rounding out the list of “whoa, that’s new” is the Genuardi Food Innovation Lab, a 3,600-square-foot space that includes equipment for UDairy Creamery dairy processing and a viewing gallery so visitors can watch cheese and ice cream production in action. In the adjacent test kitchen, undergraduates experiment with a variety of ingredients as they hone the entrepreneurial and food production skills that will carry them from classroom to career.

In an industry with shifting trends and evolving interests, the new Worrilow Hall offers flexible spaces, cutting-edge teaching labs and myriad new equipment. Most importantly, it continues the legacy of the late George Worrilow: promoting teamwork, problem-based learning and interdisciplinary research, and ensuring faculty and students can strive toward even more innovative solutions to feed the world and protect the planet.

In the Genuardi Food Innovation Lab in Worrilow Hall, the UDairy Creamery can produce up to 850 POUNDS OF CHEESE PER WEEK. Staff, student employees and interns typically make cheese two days a week and concentrate on ice cream production, cleaning and cheese packaging the remaining days.

Students make up to 200 GALLONS OF ICE CREAM PER DAY at UDairy Creamery locations.
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Beyond Buildings: George Worrilow’s Legacy
By G. Arno Loessner, Ph.D., BE64, 70M

A presence at the University of Delaware from 1927 to 1971, George Worrilow was a force of nature. Despite an infirmity that caused him to walk bent over, he could be funny, intense, personable and irascible. He was a natural storyteller.

Worrilow’s eminent Blue Hen career began as an assistant Cooperative Extension agent. Over the next four decades, he served as director of Cooperative Extension, dean of the College of Agriculture and Natural Resources (CANR), and vice president for University Relations. In that latter position, he oversaw an academic unit that became one of UD’s signature strengths, the Division of Urban Affairs, created in 1961 with a grant from Ford Foundation to strengthen the quality of state and local governance [now the Joseph R. Biden, Jr. School of Public Policy and Administration].

The Division director reported not to the provost, as such positions normally would, but to George Worrilow, a man who lacked an earned Ph.D. or a background in the social sciences, but who had the experience, networks and proven leadership to help such a unit succeed. It did. Today, more than 60 years after its inception, UD is one of only two of the original Ford grant recipients to continue its mission. The other is the Harvard-MIT Joint Center for Urban Studies.

Worrilow understood the importance of being an “engaged University.” A politically savvy fundraiser, he knew people in all walks of life and could open doors by assuring University presence in critical areas, including seafood and marine studies. In the Delaware General Assembly, he was revered on both sides of the aisle. In fact, when the University administration proposed building Worrilow Hall to the State Bond Committee, representatives of both parties supported the proposal. But board Chairman Samuel Lenher saw this as an opportunity to invest in another project he deemed necessary. Trustee approval for Worrilow Hall would depend upon the administration’s agreement to double the size of Morris Library.

The challenge caused then-President Arthur Trabant to negotiate a deal with the state to fund both projects, which meant accepting a smaller building than originally planned for Worrilow Hall. The state agreed, so long as state money for library expansion was matched by private funds raised by the University. That 1978 deal launched UD’s first capital campaign.

Now, as I reflect on that transformational period and the large list of donors who support the institution, including those who have contributed to the most recent iteration of Worrilow Hall, I think it’s right to give some credit for UD’s continuing advancement to our departed friend, George Worrilow.

This article is excerpted from an essay written by G. Arno Loessner, BE64, 70M, friend and colleague of Dr. Worrilow. Loessner’s assignments in UD administration (1978–93) included vice president for advancement and University secretary. He retired as professor emeritus in the Biden School.
Want to see the devil’s walking stick? Go past the princess tree. Hang a left when you hit the pink star cluster.

No, these are not the fantastical props of some wizarding film or video game, but, rather, some of the enchanted plants thriving within the University of Delaware Botanic Gardens, or UDBG. The prismatic space—which celebrates its 30th anniversary in 2022—may not hold magic in the traditional sense, but it does cast a spell.

“Plants make life possible on Earth,” says John Frett, professor emeritus and first formal director of the gardens. “If we do not study them, how can we expect to survive?”

The idea for UDBG started not as some grand strategic plan, but fittingly, as a seed. In the 1950s, horticulture faculty began acquiring plants to supplement textbook learning. In 1973, an alumna’s donation led to the more formal Emily B. Clark Garden, built with soil turned up during the construction of Smith Hall. The blooming space kept expanding and, in 1992, earned official recognition from the University.

Today, UDBG comprises 12 gardens and 15 acres on South Campus, and it serves as an outdoor laboratory supporting scientific research and education across disciplines, from landscape architecture to plant pathology to sculpture. Some species are wondrously rare—that Wuyan snowbell from China is the only tree of its kind in the U.S.

“This place is a diamond in the rough,” says horticultural manager Andrew Adams, ANR17. “We may lack the resources of, say, a Longwood Gardens, but we make up for it in willpower, determination and love of the game.”

Even more than an academic resource, UDBG, free to enter and open to the public, is a place of respite and restoration for the community, especially since the onset of COVID-19. According to interim director Valann Budischak, BE84, the grounding experience it offers is... well, magical.

“The stress relief people find in the gardens is real,” she says. “This place serves as a great reminder: We are all small cogs in this truly beautiful wheel.”
DIGGING DEEP INTO UDBG

>4,000 PLANT SPECIES WITHIN UDBG

656 HOURS LOGGED BY VOLUNTEERS IN 2021

1 NUMBER OF TIMES THE HORTICULTURAL MANAGER HAS FALLEN INTO THE WETLANDS AREA WHILE THINNING INVASIVE CATTAILS

3,255 PEOPLE WHO ATTENDED UDBG’S LAST IN-PERSON PLANT SALE

200,000,000 AGE OF THE MOST ANCIENT SPECIES REPRESENTED IN THE GARDENS: THE GINKGO TREE

MEET THE PLANTS MOST LIKELY TO...

...Freak you out: Skunk cabbage. It looks like decaying flesh and smells like rotting meat, which attracts the flies that pollinate it. In early spring, this low-growing weirdo generates its own heat(!) to melt surrounding snow.

...Cure your hangover: German chamomile. One too many beers at the Deer Park last night? When made into tea, this herb and its daisy-like flowers have been soothing headaches and sour stomachs for millenia.

...Hurt you: Bed of nails. No, not the kind you’ll find in a circus act or your acupuncturist’s office. This bad boy, a relative of the tomato, boasts more spikes per square inch than barbed wire.

...Be mistaken for an alien species: Passion flower. Purple, electric-looking blooms somehow appear both trippy and regal. Tack on a couple of bright yellow, egg-shaped fruits, and this tendriled vine is one sci-fi flower.

HORTI-HOROSCOPIES

Want to launch your own, at-home botanical garden but not sure where to begin? Let the planets dictate your UDBG-inspired picks.

ARIES: Patience is a virtue… just not one you possess. Check out the mother-of-thousands plant, which sprouts cool, miniature versions of itself soon after planting.

TAURUS: Self-sufficient and hardy, the sugar maple is a tree after your own heart.

GEMINI: You never take yourself too seriously—and neither does the cockscomb, whose blooms resemble the disembodied nose of a muppet.

CANCER: Taking care of other people is your nature. Find a kindred botanic spirit in the St. John’s wort shrub, which also boasts healing properties.

LEO: Commanding attention is your bag, so the elephant ears plant—with head-turning leaves that span two feet—will engender respect.

VIRGO: A workaholic who never takes the easy route, you’ll rise to the occasion (and all the demands) of a temperamental gardenia.

LIBRA: Alabama snow wreath—beautiful, even when disheveled—has your name all over it.

SCORPIO: Organization turns you on. So will the perfect, tidy symmetry of a spiral aloe.

SAGITTARIUS: Admit it: Motivation isn’t exactly your forte. Opt for the snake plant, which withstands even total neglect.

CAPRICORN: That tough outer shell isn’t fooling anyone—you’re a big softie on the inside... just like the prickly pear cactus.

AQUARIUS: As a nonconformist with a rebellious streak, you’ll appreciate the variegated Solomon’s seal, which refuses to stay put and behave.

PISCES: The heart-shaped flowers of the aptly named bleeding hearts plant speak to your sultry, romantic side.
GARDENING 101:

Home to a compelling cast of characters, gardens are the Netflix of the outdoors. The so-called monkey face orchid packs a comedic punch, marigolds bring the (pollinator) drama, and the devil’s tooth fungus—which appears to bleed from its spores—is straight horror.

But beyond their, ahem, streaming value, gardens are good for your health. Research shows digging in the dirt boosts memory, improves sleep and even increases happiness—that last perk thanks to a bacteria in soil that elevates serotonin levels in the brain.

“When it comes to maintaining the wellbeing of our physical health and psyche, it’s just below food and water,” says ornamental horticulture professor Susan Barton, ANR81, 05PhD, about the importance of engaging with the outdoors. “Gardening is restorative.”

Ready to join the more than 60 million Americans who’ve discovered the pleasure of pruning, the wonder of weeding, the magic of mulching? Read on for groundbreaking tips you need to dig.

KNOW BEFORE YOU GROW
THE NEWBIE GUIDE TO GETTING STARTED

DO YOUR PREP: The work of gardening begins long before you pull on your first sun hat. “People choose plants that look pretty,” says Carrie Murphy, ANR06M, educator with UD’s Cooperative Extension. “But you need to have a plan.” First, determine goals: Attracting pollinators? Creating habitat? Adding color? Next, scout a highly visible location for “keeping your fingers on the pulse,” Murphy says, and observe the area for up to a year, noting sun and moisture levels. Then (and only then) make selections appropriate for your objectives and designated space.

LOVE YOUR GROUND: As the foundation of a healthy garden—and all life on Earth—soil deserves respect. Send a sample to your nearest soil laboratory for a test, which is your “best and easiest management practice,” says Prof. Amy Shober. If done right—remove twigs and grass—this will determine nutrient deficiencies, helpful for tailoring a fertilizer regime. Equally important: Stop referring to your soil as… you know. “Dirt is a four-letter word.”

CALL FOR BACKUP: Before you encounter the inevitable horticulture hiccup (hungry deer! unexplained wilting!), ask for help. Your county’s Cooperative Extension office offers free resources, judgment free. Says Lorene Athey, instructor in landscape architecture: “There is no shame in gardening.”

THE MIGHTY OAK

You’ve heard the standard advice: Trade in your SUV. Ditch the single-use plastic. Recycle. But one of the most effective strategies for saving an imperiled planet has flown largely under the radar—er, canopy. If you really want to make a difference, plant an oak tree.

“We have wrecked the world, and we have to put it back together,” says Doug Tallamy, professor of wildlife ecology and author of The Nature of Oaks. “These trees are a primary tool.”

The strapping oak, widespread across most of the U.S., addresses two crises threatening humanity: climate change (hello, carbon sequestration) and biodiversity loss. The oak tree supports thousands of animal species, including 950 caterpillars alone and, therefore, the entire food web. Plus, oaks are fun. “It’s empowering to be part of the solution,” Tallamy says. “And enormously entertaining bringing life to your yard.”

IN THE WEEDS
THE (GARDENING) GLOVES ARE OFF

Dragons versus nightwalkers. Taylor versus Kanye. No, the epic battle of our time is weeds versus your prized tomato plants. According to resident expert, Prof. Mark Van Gessel, mitigate this garden-variety headache by pulling early and often—every 10–14 days—when the ground is moist. And remember: There’s no quick fix. Well, maybe one: “Train your kids early.”
GOING TO POT

Gardeners are only as good as their tools. To help select for your shed, we’ve enlisted the help of Carrie Murphy, ANR06M, who leads the Lawn and Garden program at UD’s Cooperative Extension, and two of her Master Gardener volunteers, Michele Walfred, AS07, and Gail Hermenua. Happy stocking!

| **1. GLOVES:** | To protect your hands from spiders, thorns, blisters and UEOs (unidentified earthy objects). Hermenua recommends two pairs: one thin, flexible option for enjoying the tactile experience of digging in the dirt, and a thicker, reinforced pair for handling gnarly branches. |
| **2. FLEXI BUCKET:** | To harvest produce, mix your soil or haul… well, just about anything. This indestructible plastic tub is easier to maneuver than a wheelbarrow (choose one with handles) and just as functional. |
| **3. HAND PRUNER:** | To trim stems or remove dead branches. Walfred likes a bypass type, which is curved for especially sharp, precise cutting: “This is the item you don’t want to skimp on.” |
| **4. CULTIVATOR:** | To keep your soil loose and porous. Go for the long-handled version of this toothy tool, Hermenua says: “It will save your back.” |
| **5. HORI HORI:** | To slice, dice, weed and dig. Your most versatile secret weapon, this heavy-serrated Japanese knife “does just about anything,” Murphy says. |
| **6. HAND SPADE:** | To edge your beds or mix in compost and fertilizer. Look for a carbon or stainless steel blade and, for better shock absorption, a wooden handle over fiberglass. |
| **7. APRON:** | To protect your clothes from grime. Be sure it has pockets – you'll want to carry not just tools, but a notebook for jotting down questions and reminders. “You may forget where you planted those daffodils,” Walfred says. |
| **8. WATERING WAND:** | For all your H2O needs. Screw it to the end of your hose to extend your reach and manage the flow of your spray, especially for more delicate plants. |
| **9. SHOVELS:** | To dig, repot or move your soil around. You’ll want a handheld, round-nose model with a convex blade for scooping, plus a long-handled option with a foot step for bigger jobs. |

INTERESTED, BUT WOULD LIKE MORE INFORMATION?
The College of Agriculture and Natural Resources has prepared an online library to obtain more information about these and other topics. Use the link to the right to learn more.

udel.edu/canr/digital
The interpreters had fled their native Afghanistan as teens, embarking on a yearlong, 5,000-mile odyssey by foot that took them to France and then to the U.K., where they eventually found asylum. Now, decades later, the two men were back in their homeland, earbuds in place, translating interviews with provincial governors and transcribing 12,000-line Excel documents that detailed the transfer of American military equipment to Afghan National Forces.

It was July 2021, and the U.S. military withdrawal had begun. Capt. Micah Petersen, AS17, EOE17M, was among the last soldiers on ground. Sitting in a Kandahar office late one night, he turned to the interpreters. After enduring such a long and tumultuous struggle to leave, he asked, why return?

The men spoke of the global effort that for 20 years had improved life expectancy, childhood literacy and women’s education in their native land. “If 36 other countries can come to help,” they answered, “this is the least we can do.”

And there it was: Service in its most pure and selfless form. The war effort would soon dissolve, and the Taliban would assume swift and terrifying reign of the nation. But in the months that followed, Petersen would often think of those interpreters.

“There’s a lot to be said about whether what happened in Afghanistan was worthwhile,” the Blue Hen says now. “But these two men thought that the mission of the United States, and of NATO, at large, was worthy enough to risk their lives, leave their families and come back.”

Service, Petersen has learned, manifests in many ways and from every corner of the globe. That is why the Army captain has devoted much of his life to connecting with everyday citizens around the world and strengthening the bonds between officers and civilians.

**LAND OF OPPORTUNITY**

Petersen’s own life story is rooted in geopolitical strife. His mother fled southern Africa in the late 1970s during the civil war between what was then the Rhodesian government and Black nationalist organizations, escaping to a small Texas university on a tennis scholarship.

“I grew up with the narrative that the United States gave my mom everything she had,” Petersen says. “She got a second chance in a country where you can pursue your dreams. If I could play a small role in helping the United States provide that opportunity to others, then I want to play that small role.”

A Bronze Star recipient and infantry company commander of the 82nd Airborne division, Petersen now oversees the development of 160 soldiers in Fort Bragg, North Carolina. At 29, he has earned dual undergraduate degrees in Chinese and political science, as well as a master’s in geography—all from UD, where in 2017, he received the University’s highest honor bestowed upon an outstanding senior, the Taylor Award.

Through the Schwarzman Scholars program, inspired by the Rhodes Scholarship and designed to promote international understanding and peace, Petersen has also earned a master’s in global affairs from Beijing’s Tsinghua University. After company command, he has even been offered the opportunity to pursue a fully funded PhD and then
teach as an assistant professor at the United States Military Academy at West Point.

Impressive, yes. But Petersen shies away from conversations about these accolades and focuses instead on the impact he hopes to make. At its core, his mission is about others. “The University of Delaware instilled in me that people matter first,” Petersen says. “That carried over to my time in the Army where people are everything.”

FROM TEXAS TO DELAWARE TO WEST POINT AND BACK

As a home-schooled high schooler, Petersen dreamed of playing basketball at Duke, where he was waitlisted. He applied to 17 more schools and was accepted to 14, including West Point.

“You don’t really turn down West Point,” Petersen told himself, but then he visited Delaware and met Michael Arnold. After spending several friendly hours with the longtime director of UD’s Honor’s Program, Petersen thought, “If this is how they treat their students, I’d be an idiot not to come here.”

Petersen would find a welcome home in Newark and in UD’s esteemed Honor’s Program, but his spring semester would be his most difficult yet. He broke his ankle, his high school relationship ended, his childhood best friend was kicked out of his home for drug use, his parents divorced and his grandfather died—all during midterms. The UD freshman sat outside of Russell Hall and wept.

“If this is what I’m dealing with,” he wondered, “what am I doing here, in Delaware?” Petersen reapplied to his top schools and departed in the night, leaving a note on his roommate's door: “Transferring to West Point, Matt. Bye.”

In the New York military academy, Petersen thrived. He received an academic opportunity to travel to China for free. He excelled in every class. But as he thought about his legacy and pictured himself standing before his soldiers someday, telling them that people matter more than anything else, something felt amiss.

“How could I say that and at the same time leave a university full of amazing friends and mentors?” he asked himself. “And for what? A ‘better degree?’ I felt very fake.”

And so, Petersen returned. With $1.73 in his bank account and no guaranteed scholarship, he came back to Newark and received immediate support from Honors’ advisers Jama Allegretto Lynch, Kristin Bennighoff and Christine Schultz.

Petersen credits the staff at the Honors Program; former professors Alan Fox, Jennifer Lobasz and Saleem Ali; and mentors like former UD Alumni Association President Ken Jones, BE80, and former assistant dean Frank Newton, EHD10EdD, with his success. “Without them, my time at UD would have never been possible,” he says.

EXPOSURE THEORY

After taking his first Chinese class at UD, Petersen “immediately fell in love with the intricate ties between culture, history and language.” Language drives thought, and Eastern thought, with its focus on ongoing, continuous change, was so different from the West.

The world, too, was changing, and everything politically, socially and economically was heading toward East Asia. While riding a passenger train through central China, Petersen had a chance encounter with agricultural workers that would shape his academic future. Fascinated by Petersen’s ability to speak Chinese, the locals asked him why white Americans befriended Black people.

Petersen thought of this exchange long after the ride ended. Was racism engrained in the cultural mindset, he wondered, or did it stem from a lack of exposure? He began to think about the Chinese migration to southern Africa, to the place where he had personal, familial ties. If you take individuals who grow up in a homogenous culture where they’re the majority and put them in a homogenous culture where they’re the minority, does that change their attitudes and perceptions of race?

Petersen considered exploring this topic through a master’s
degree in history until UD Prof. Afton Clarke-Sather suggested geography. After all, human geography examines where people live and why. It defines place beyond physical borders and includes aspects of community, belonging and acceptance.

For his master’s thesis, Petersen interviewed entrepreneurs, construction workers and hospitality workers in South Africa, Zimbabwe and Mozambique and found that those who worked hand-in-hand with local Black Africans (the construction workers) had a much stronger respect and appreciation for Black people and culture.

It confirmed Petersen’s theory: Exposure matters. To cross any cultural divide, we must first understand the other side.

This concept now serves as the basis for Petersen’s newest academic endeavor, in which he aims to develop an effective military policy for East Asia that properly integrates the aspects of culture and religion by examining what worked—and didn’t—in the Middle East. Key to this effort’s success will be understanding people, culture and society.

RENEWED AWAKENING

Petersen’s people-first approach began at UD, when he formed Reviresco Inc., Latin for “to become renewed.” The idea started in 2014 with ROTC colleague David Dinerman, BE16, who, along with four other cadets, joined him on a 20-day, 1,700-mile run from Delaware to Houston, Texas (then the number one destination for retired veterans).

The friends thought they’d raise money for veterans’ causes, but while running, they quickly discovered a gap in civilian knowledge and understanding.

“If you ask me what I do, and I tell you I’m in the military, most people say, ‘Thank you for your service,’ or ‘You’re my hero’ or ‘Do you have PTSD?’” Petersen explains. “Very rarely is it followed up with, ‘What do you do in the service? Are you a finance officer? Who do you manage money for? Are you a logistics officer? What does that mean?’”

There is a great need to educate, to converse, to understand. “It seems very common sense,” Petersen says, “but I think people need permission to know that it’s okay to ask those questions.” Reviresco provides that permission.

Through this work and his larger role in the Army, Petersen has sat beside the fifth richest man in the world; he’s met two U.S. presidents and the leaders of Afghanistan military. None compare to Robert.

A joyful, 6-year-old orphan with no arms and no legs, Robert came into Petersen’s life on his second trip to China. One day, as his fellow classmates brought candy for the children and Petersen held Robert in his arms, the boy leaned down, grabbed the entire bag with his mouth and told Petersen to “RUN!” When the two finally reached the front of the orphanage, they encountered a security guard to whom Robert flashed the widest grin.

“Robert tells him, ‘Thank you for what you do. I appreciate it,’ and hands him the entire bag of candy. It blew me away. Here’s a kid with no parents, no arms and no legs, teaching me more about giving to other people than I would have learned in any other way.”

That’s service, in its purest, most selfless form. It manifests in many ways, from every corner of the globe, and might just be our saving grace.

“This is going to sound hokey,” Petersen concedes, “but I think the greatest individual tool we have is understanding that we often learn the most from the people we least expect.”

—Micah Petersen
When you go to your doctor’s office or lab for bloodwork, you meet a nurse or phlebotomist, who draws your blood. But the person you’ll probably never meet will be the first to know whether you have high cholesterol, diabetes, COVID-19 or a variety of other conditions.

That person—the medical laboratory scientist (MLS) wearing a traditional lab coat and goggles, and too often holed up in a hospital basement—is an integral cog in the healthcare wheel, directing the laboratory medicine aspect of patient care.

“It’s known as a silent profession because nobody sees the face of that medical laboratory scientist,” says Esther Biswas-Fiss, chair of UD’s Department of Medical and Molecular Sciences (MMS).

Yet without their expertise, making diagnoses would prove difficult. Also known as a clinical lab scientist, the MLS works to analyze a variety of biological specimens. They use sophisticated equipment to perform complex tests on patient samples, and the data they find plays an important role in identifying and treating a wide range of conditions, from cancer to heart disease and beyond.

In fact, an estimated 60-70% of all decisions regarding a patient’s diagnosis, treatment, hospital admission and discharge are based on the results of the tests medical laboratory scientists perform.

And yet this critical work is in critically low supply, with nearly 26,000 annual openings and a projected job growth of 11% this decade, a percentage greater than the average for all occupations, according to the Bureau of Labor Statistics (BLS).

But UD experts are quick to note that the worker shortage is not a pandemic problem. It’s just a problem being realized during a pandemic.

“The shortage has been driven by people retiring, and really, not enough people being trained,” says Biswas-Fiss. “It’s a very specialized profession, and some programs are closing nationwide. It’s both a marketing problem and a lack of awareness.”

As a high school student, Beyanka Langhorne, HS22, only knew about career pathways for becoming a nurse or a doctor. She’s since gotten used to telling her family exactly what she plans to do with her MLS degree.

“We’re essential personnel. We are the backbone of the healthcare field. Without our testing, without our knowledge, we can’t give the doctor any kind of results to diagnose you,” —Beyanka Langhorne, HS22

11% projected job growth this decade for MLS careers
laboratory technician in a blood bank and hopes to be employed in microbiology or immunohematology after graduation.

Lack of awareness and appreciation for the MLS profession extends beyond prospective students.

Hospitals are struggling everywhere, says Leslie Allshouse, UD’s MLS program director, who estimates hundreds of regional openings for MLS jobs. “They’re just not getting enough hires, and they’re having trouble keeping people,” she says.

As a result, many healthcare systems are offering sign-on bonuses—a welcome shift for students like Rose Principe, HS23, who majors in MLS with a pre-med pathway.

“Pay is not rising with demand and hours worked,” Principe says. “I’m seeing techs quit, then come back as travel techs and make two times more money just to get stationed at the exact same hospital they were working at before.”

Meanwhile, UD is home to one of the country’s premier medical laboratory programs. Founded in 1949, the major is also one of the oldest at the University, and its legacy of academic strength continues through a variety of expanded majors, including medical diagnostics with a pre-physician assistant (PA) focus, and applied molecular biology and biotechnology.

Despite its long-standing history as one of the oldest science majors, MMS has always been a forward-facing department that anticipates changing healthcare needs as the population grows.

“There’s been a really concentrated effort to make sure that we’re at the cutting edge of technology and, as always, to ensure that our graduates have opportunities to work,” says Biswas-Fiss.

As the nation struggles to diversify its workforce, UD’s MMS program also offers a much-needed labor supply with underrepresented minority students comprising 40% of the undergraduate population and 60% at the graduate level.

Most importantly, MMS provides the education that will serve health and humanity long after the pandemic is in the rearview mirror.

“As long as people are getting sick,” says Biswas-Fiss, “there will always be a need for what we do.”

—Amy Cherry

A current medical laboratory technician, Beyanka Langhorne, HS22, hopes to work in microbiology and immunohematology after graduation.
Revolutionary Views
Blue Hens preserve the past to inform the future

by Artika Rangan Casini, AS05
ave you seen the tent? Murky at first, but then clear, it appears like a ghost; an apparition of the story you’ve only ever heard about in books.

Outside the theatre, a man turns to his wife and says, “Arrogance destroys you every time.” She nods. “It feels like we’re fighting some of the same battles again,” she replies.

Inside, tears stream down the face of someone gazing upon George Washington’s war tent for the first time, its centuries-old fabric a symbol of unity for a fractured, fragile nation. Here in a Philadelphia auditorium, 246 years after the country’s founding, the artifact survives, bearing witness to our world and reminding us of a time when the nation’s future hung in the balance.

Of all the sights to see at the Museum of the American Revolution—and there are many; so many, in fact, that a single ticket covers admission for two days—nothing rivals the tent. To stand in its presence is to travel through time and return to present-day slightly altered and awestruck.
Tyler Putman, AS11M, 14M, 20PhD, senior manager of gallery interpretation at the museum, remembers an elderly Black descendant of Mount Vernon’s enslaved laborers telling him that being at the exhibit was the first time in her life she had found something from her Washington heritage to be proud of. “It’s not about forgiving or apologizing,” says Putman. “It’s about making sense of an incredibly complicated and diverse period of history.”

Presenting this nuanced, complex perspective is the museum’s mission, and the Blue Hen fingerprint is etched deeply in this endeavor, from the exhibitions our alumni have curated to the hallowed tent they helped preserve.

Legacy of liberty

In the mid-1700s, the school that would become UD was just a tiny institution, with a small graduating class of roughly a dozen men. Three of those alumni—Thomas McKean, George Read and James Smith—would go on to sign the Declaration of Independence, helping to launch a new paradigm of freedom for a nation and a beacon of liberty for much of the world.

In 2017, a museum would be built to commemorate this revolutionary period, and UD alumni would again be part of the story. Working alongside Putman today are assistant curator of exhibitions, Matthew Skic, AS16M, and manager of special programs, Hannah Boettcher, AS16M.

All are graduates of UD’s Winterthur Program in American Material Culture. A field of study dedicated to the historic and philosophic connection between people and their “stuff,” this 70-year-old program “essentially invented material culture studies as a discipline,” says faculty director Martin Brüeckner. Alumni now work in famed sites across the country, from the Metropolitan Museum of Art to Colonial Williamsburg. Distinguishing this esteemed program is UD’s joint sponsorship with the Winterthur Museum, Garden and Library.

A separate partnership with Winterthur also exists in art conservation—a relationship that is “key to our collective success,” says department chair Debra Hess Norris, AS77, 80M. Students, faculty and alumni from this internationally renowned and highly scientific field have preserved the Dead Sea Scrolls, Emancipation Proclamation, façade of Notre Dame, Lady Liberty’s torch and, of course, the war tent of a military commander turned president.

“It will be in my obituary,” Virginia Whelan, AS97M, says of the role she played in its conservation. Joined by Joanna Hurd, AS20M, and a small team of about six others, the five-year project spoke to the very heart of their professional mission and training.

“What conservators do is save a view of the past,” says Whelan. “We preserve because objects carry meaning and feeling,” adds Hurd. “They connect us to memories we don’t have.”

Ongoing revolution

At only five years old, the Museum of the American Revolution has already welcomed its millionth visitor. It is a source of pride for Putman, who loves conversing with guests. Most haven’t studied the Revolutionary War since fourth grade, and fewer still have seen a depiction featuring anyone other than white men.

“People ask things like, ‘Was George Washington racist?’ ‘Was there such a thing as a good slave owner?’ They’re powerful conversations, and we don’t often get the chance to ask difficult questions or talk about difficult topics in an educational way.”
Preserving the other Oval Office

Conservation is not restoration. Rather than making something new, the field instead focuses on retaining as much original material as possible and having it live for as long as it can.

That was Virginia Whelan’s goal as textile conservator for Washington’s tent. When Whelan, AS97M, began working on the project in 2015, she knew she would have to call upon every facet of her UD education, from history to chemistry to needleworking.

Over the next two years, she would stabilize hundreds of holes in the tent’s roof and wall. Some were as large as a deck of cards; others were barely visible. To find the right color, she dyed nylon netting in different shades of “dirty linen,” working to match the tent’s tone and hue. She stitched the new fabric using polyester threads thinner than human hair. The process took more than 525 hours of actual stitching, and Joanna Hurd, AS20M, played a critical role in its success.

Alongside curators, conservators, structural engineers, a tent maker and project manager, they helped design and install a new sub-tent to support Washington’s original. The Blue Hens used rare Earth magnets—no punctures, no stitches—to hold the two structures in place. This collaborative effort now gives the appearance of a tent under tension, as it would have looked when erected in the field, when, in fact, the tent is fully supported and under little to no stress.

Roughly 23-feet long and 14-feet wide and made of an undyed linen fabric, the tent is further protected by limiting its exposure to light, which is damaging to textiles. “If you want to preserve something, keep it in the dark,” says Whelan. “But conservation is about balancing preservation and education.” And so, the exhibit lighting during the tent presentation is carefully controlled for no more than 15 minutes a day, the tent is in total darkness otherwise.

On April 19, 2017, on the anniversary of the “shot heard ‘round the world” that ignited the Revolutionary War, the Museum of the American Revolution opened in Philadelphia, and Hurd and Whelan saw the public reaction to the tent for the first time.

“Until you see it and are in its presence, you don’t really understand its impact,” says Hurd. It’s profound. “In the darkest days of the Revolution, things didn’t look good,” Whelan adds. “But the tent symbolizes the difficulties that seem insurmountable, and it represents the freedom of the people to govern themselves.”

A museum fosters such critical dialogue. “Some people think of America’s founding as the ‘good old days,’ and it’s our job to present a bigger history—the oppression of women, Native Americans, enslaved people,” Putman says. “Then there are others who say, ‘These were the Dark Ages. Everyone was evil, the world was a mess,’ and we say, ‘But then how did people come up with these ideals that we still haven’t lived up to?’”

In leading special events at the museum, Boettcher never tires of this centuries-long interpretation. “The Revolution is ongoing and includes all kinds of voices,” she says.
“It’s something to define for yourself.”

She takes joy in designing events that cross history, art, music, theatre, academia, current events and pop culture. For instance, Boettcher helped organize a baroque orchestra concert to accompany an exhibit featuring a contemporary painting of Hessian soldiers captured in Trenton, New Jersey, imagining the music they might have played. The event serves as a reminder to Boettcher that “the Revolutionary War is owned by so many different people, in so many different ways.”

That’s what curator Skic finds especially fascinating. Having grown up in Hopewell, New Jersey, about 10 minutes away from where Washington crossed the Delaware, he has long been enthralled by people and events from the past. In high school, he discovered UD’s program in American Material Culture, and when he went to the website and read Putman’s student bio, he thought, “Wow, I want to be like him.”

In his current role, Skic now explores the ways ordinary people experienced world-changing events. “The complexity and diversity of the past is often oversimplified in ways that can lead to misunderstandings or a misguided impression of history,” he says. “History is how we define ourselves as a nation, how we establish our ideals and work to fulfill them.”

In time, Civil War would tear the nation apart over the momentous question Washington’s generation failed to answer: Do the words “all men are created equal” apply to all people?

Once again, his tent would bear witness to war. Eventually, it would return to the Lee family and be sold to raise funds for the care of Confederate widows. The buyer, a Pennsylvania minister named W. Herbert Burk, dreamed of building a museum to honor Washington and the American Revolution. In time, his dream would come true. And the tent, like the Republic, would survive.
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After two long and lonely years away, Blue Hens are finally flocking back to campus this June for the much-anticipated return of Alumni Weekend, slated for June 3–5, 2022.

UD’s signature event typically brings thousands of alumni and friends to Newark, and this year features a mix of new and old favorites. New to the line-up: the evening Dela-fest beer garden, featuring live music, craft brews, lawn games, food and photobooth, all under a canopy of string lights; a family-friendly 6-WIRE instrumental concert with crossover musical styles; and a drag show brunch. Familiar favorites include Brunch with the Mascots, a Double Del photo shoot and a 5K, offering a little something for everyone.

“We’re ready to celebrate!” says Justine Talley-Beck, BE98, senior director of UD’s alumni engagement. “We know Blue Hens want to relax and relive some of the best years of their life along with classmates and family. We’re excited to be able to provide this chance for them to do so safely, through a variety of options.”

UD colleges and departments are offering a wide range of professional and educational events, and the Classes of 2017, 2012 and 1997 will celebrate their milestone fifth, 10th and 25th reunions, respectively.

“Alumni Weekend had been an annual tradition for us up through 2019,” said Double Dels Paul, BE82, and Holly Bryk, AS85, who met at the Alpha Phi house and are the proud parents of Jacqueline, AS14, and Alley, BE17. “We’re so excited to get back to the campus we love with the Blue Hens we’ve missed. We’ve definitely felt the absence of this tradition in our lives.”

Like the Bryks, you, too, can return to Newark this June to laugh, learn, reminisce and, of course, celebrate the many reasons we’re #BlueHensForever.

Register today at udel.edu/alumniweekend.

—Megan Maccherone
LET FOOD BE THY MEDICINE

UD alumnus and Alzheimer’s patient credits changes in diet and lifestyle with recovery

The first obvious clues of Frank McNear’s cognitive decline began in 2009. Until then, his commercial painting company in St. Croix had enjoyed decades of continuous growth and profitability. Now, he was underbidding all projects and losing revenue. Something he had excelled at for years was a skill suddenly lost. It took three more years for his haziness to turn into early on-set Alzheimer’s.

After his diagnosis, McNear, AS71, moved with his wife, Pat, to a town he had been visiting since he was 19, essentially “to die,” he says. “I thought I had seven years, max.”

But it was there, in San Miguel de Allende, Mexico, that McNear overheard a conversation about a doctor who helped reverse several cases of Alzheimer’s. He investigated the case study further and discovered that two of the patients sounded exactly like him, with similar experiences of forgetting how to navigate their hometowns and not recognizing people they had known for years.

This was a turning point for McNear, who had started writing a book about his descent into dementia, which, admittedly, got quite depressing. But after hearing about neurologist Dale Bredesen, an international expert on aging and former director of UCLA’s Easton Center for Alzheimer’s Disease Research, he started believing in a happier future.

Bredesen is best known for a protocol of dietary supplements and lifestyle changes that claim to prevent or reverse cognitive decline, and he has drawn media fanfare and acclaim from health gurus, along with criticisms that his research is costly and offers limited evidence. (UD Magazine shares McNear’s personal story as an interesting alumni perspective, not as an endorsement for treatment.)

After getting in touch with Bredesen, McNear learned that the medical doctor had isolated 36 factors associated with dementia, including stress, diet, mold exposure, other environmental inflammations and lack of exercise. For McNear, Bredesen recommended a strict diet, improved sleep habits, regular exercise and dietary supplements—no pharmaceuticals. These included CoQ10, fish oil, coconut oil, methylated B12, vitamin D3, zinc, alpha lipoic acid, citicoline, probiotics and ashwaghanda.

“You have to avoid sugar and processed food like the plague,” McNear says of the inflammation-causing substances, adding that Bredesen believes inflammation is the primary cause of Alzheimer’s, and refined sugar is a leading cause of inflammation. “My diet is low in carbs and high in healthy fats,” McNear continues, “but it isn’t really a diet. It’s just a healthier way to eat.”

In a few months, McNear felt more mental clarity, but also lost a lot of weight. A consequential attempt to restore five pounds would ultimately send him into a cognitive relapse.

“I bought eight giant cinnamon rolls and licorice sticks,” he recalls. “I stopped taking the vitamin supplements, too. Then, mentally, I got to the point where I
couldn’t hold a thought in the time that it took to walk across a room. If I wanted to say something to somebody, I would yell it at them before it left my mind.”

This episode further reinforced the dietary and lifestyle-changing effectiveness to McNear.

“Dr. Bredesen is convinced that there is no such normalcy about memory loss due to aging,” he says. “If your memory is bad, you have a problem. It’s not because you’re old. It’s because of how you’re living, what you’re exposed to.”

Today, McNear dines with friends several times a week. At 73, he walks 25 to 30 miles a week and cares for an elderly German shepherd and a “contrary” miniature parrot. He received a perfect score on his most recent cognitive test, a drastic improvement from the 35th percentile he was at several years ago.

“I feel my memory is as good or better than most people I know at my age,” he says, admitting that stress can have a negative effect on memory, but “nothing like before.”

McNear has also finished his happy-ending book, Defeating Dementia: My Story of Recovery from Alzheimer’s, along with two more. His case was also included in Bredesen’s latest book, The First Survivors of Alzheimer’s.

“I wrote my books because I wanted to help people avoid problems,” he says. “I feel like I owe it to the universe, like I’m getting extra time to help others.”

—Megan Maccherone

NOTE: This story about Frank McNear’s health journey is his own. His perspective is not a substitute for a medical professional.

“ALZHEIMER’S AND B12

UD research sheds new light into link between diet and degenerative brain disease

UD researchers have found a link between vitamin B12 and Alzheimer’s in worms.

Yes, you read that correctly. After examining C. elegans, a tiny soil-dwelling worm that shares similar genetics to humans, biology professor Jessica Tanis and her research team noticed that worms with Alzheimer’s and higher levels of B12 could wiggle, where their B12-free counterparts could not.

The finding yields new insight into the potential impact of diet on the dreaded degenerative brain disease that afflicts more than 6 million Americans.

“Right now, there is no effective treatment for Alzheimer’s,” says the biological sciences assistant professor. “There are factors that you cannot change—aging, genetic predisposition. But you can control what you eat.”

Tanis and her students found that giving B12 to worms deficient in that vitamin caused paralysis much more slowly, an immediate sign that B12 was beneficial. The worms with B12 also had higher energy levels and lower oxidative stress in their cells.

Vitamin B12’s protective effect relies on an enzyme called methionine synthase, the team found. Without its presence, B12 has no effect. But adding the vitamin was only beneficial if the animals were deficient; giving more B12 to animals with healthy levels did not help.

“We’ve essentially identified this molecular pathway and we’re looking to see what else it activates,” Tanis says. “Can B12 be protective for multiple neurodegenerative diseases such as ALS and Parkinson’s? We’re looking into it.”

—Tracey Bryant

MCNEAR’S DAILY REGIMEN

“I try and begin after eight hours of sleep. There are restorative processes in the brain that require good sleep habits to succeed. I walk a minimum of 10,000 steps a day at a brisk clip. I do intermittent fasting of 12 to 16 hours between the last meal of the day and the first meal the next. I eat tons of vegetables, preferably organic. I also eat a lot of red wild fish, mostly Alaskan salmon, and I avoid sugar and gluten. I also take 10 natural supplements daily. People need to be tested to reveal any deficiencies that need to be addressed. I maintain dental hygiene, and I also try to meditate at least once a day to eliminate stress. I do not do the protocol perfectly, but it is working.”
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OUT OF THIS WORLD

It will tell us more about the origins of the universe than has ever been possible.

That is the promise of the James Webb Space Telescope, which rocketed to the final frontier on Christmas day 2021 for a million-mile journey through the cosmos.

If this exquisitely engineered, $10 billion instrument is successful in its mission, humanity will owe a debt to Elaine Stewart, EG19, an aeronautical engineer for NASA who served on the telescope’s contamination engineering team. In this role, she cleaned the hardware, she performed inspections in ultraviolet light to check for particulate contamination like dust, and she helped set requirements for how clean the primary mirrors need to be. In other words, Stewart ensured the telescope will be able to do its job, which is to look back over 13 billion years to the light created just after the big bang, giving humanity a glimpse into the farthest reaches of space ever seen.

“I’ve had so many amazing experiences,” says Stewart, who became involved as an intern her sophomore year at UD. “Every step of the way, everyone I worked with at NASA was willing to teach me and respected my thoughts.”

The telescope, which represents two decades of collaboration between NASA and the European and Canadian space agencies, includes a primary mirror for stargazing that measures over 21 feet across, far larger than any rocket could carry. Consequently, its design includes origami-like folding sequences, now unfurling in space as planned. Researchers hope to receive the first images from Webb by mid-summer — images expected to significantly expand knowledge of black holes, exoplanets, dark energy, primordial galaxies and other features of the universe’s earliest periods.

“There is a lot we don’t know,” Stewart says. “We don’t know how galaxies got black holes in the center of them, or how they were formed. We’re hoping Webb will help us learn.”

Being one of few people present for Webb’s December launch from Kourou, French Guiana, was “so cool, and I have been so fortunate,” Stewart says, adding that much of this fortune is down to her time as a Blue Hen. She cites the Delaware Space Grant that funded her first NASA internship, as well as the UD professors who encouraged her to aim high.

It was these mentors, she says, who “gave me the engineering and experimental mindset.”

—Beth Miller
CLASS NOTES

1960s

JOHN RILEY, AS68, of Wilmington, Del., has published How He Played the Game: Ed “Porky” Oliver and Golf’s Greatest Generation, a biography that “captures the essence of a bygone era of PGA golf,” according to friend and fellow Blue Hen CHARLIE HORN, AS75, who suggested the title.

1970s

LAURA KALPAKIAN, AS71M, of Bellingham, Wash., has written her first nonfiction work, Memory into Memoir, along with a companion book, The Unruly Past.

ANN PALMER, EHD76, of Atlanta, has retired from her nine-year tenure as president and CEO of the Arthritis Foundation. Palmer held previous leadership roles with the American Cancer Society, the American Diabetes Association and the Cystic Fibrosis Foundation, all of which gave her “an amazing view of humankind: People come to get help and then stay to help others.”

JAMES H. VANSCIVER, EHD77M, of Lewes, Del., has published his sixth book, About Lewes, a poetic rendition of the attractions in his hometown.

GREG MELLISH, EG78, of St. Augustine, Fla., was promoted to assistant vice president of engineering for the CSX freight railroad, operating in the eastern U.S. as well as Ontario and Quebec.

1980s

THOMAS M. FORREST, BE82, of Wilmington, Del., will conclude his yearlong term as chair of the Delaware Bankers Association this May.

KAREN STOUT, AS82, 95EDD, of West Chester, Pa., has been nominated by the Biden administration as a member of the National Council for the Humanities.

RICHARD PRZYWARA, AS83, BSPA95M, of Pike Creek, Del., was appointed president and CEO of Woodlawn Trustees, committed to affordable housing, planned orderly development and preservation of open space in Wilmington. He is only the fifth CEO and president in the organization’s 120-year history. Previously, he held leadership positions with West Chester University and the New Castle County government.

KYLE RUFFIN, AS84, of Hainesport, N.J., has written a memoir, In Stroke’s Shadow: My Caregiver Story, about his Lane Halff whom he has hiked 300 miles of the Appalachian Trail.

MOST PEOPLE THINK OF ARTHRITIS AS AN OLD PERSON’S DISEASE, AND YES, THERE’S SOME TRUTH TO THAT, ANN PALMER ADMITS. BUT TWO-THIRDS OF ALL CASES AFFECT PEOPLE UNDER 60 AND NEARLY 300,000 CHILDREN SUFFER FROM THE CONDITION. “THE UNIFYING THEME IS PAIN,” SAYS PALMER, WHO ENCOURAGES PEOPLE TO FIND COMMUNITY SUPPORT. “PART OF HOW YOU HEAL IS BY TAKING ACTION. THAT CAN BE MEDICINE IN ITSELF.”

A VERY BIDEN BOOK

As an unwritten rule, if you want to know what a person is really like behind the scenes–especially how they act when no one else is watching–talk to their siblings. This holds true even for the leader of the free world. Enter Growing up Biden, an engaging new memoir from VALERIE BIDEN OWENS, AS67, 18H, chair of the University’s Biden Institute, the first woman in U.S. history to have run a presidential campaign and younger sister to the sitting president. Trusted adviser and insightful strategist, Biden Owens managed her brother’s seven consecutive U.S. Senate races, his two presidential campaigns, and his largely successful operating in the eastern U.S. as well as Ontario and Quebec.

JAMES H. VANSCIVER, AS66, 04H, has called her his “sounding board or gut check,” and “he’s always, best friend. The book offers an in-depth look into Valerie’s career in politics, her central role in her brother and nephews’ lives after the tragic loss of Biden’s first wife and daughter, her upbringing in an Irish Catholic family, the first time she met First Lady JILL BIDEN, AS75, EH06EDD, 10H, and more than a few delightful moments of levity. As high-profile as these nonfiction characters may be, Growing up Biden is also about coming of age in a middle-class, Claymont, Delaware neighborhood. About a working mom breaking gender barriers, navigating the elusive nature of confidence and managing much more than campaigns. And, crucially, about the familial ties that transcend struggle, triumph and–yes–even politics.

PHOTO BY BRADFORD GLAZIER

“FORTY YEARS LATER, WE ARE STILL CLOSE-KNIT,” SAYS RICH PRZYWARA ABOUT HIS LANE HALFF, WITH WHOM HE HAS HIRED 300 MILES OF THE APPALACHIAN TRAIL.

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As an unwritten rule, if you want to know what a person is really like behind the scenes–especially how they act when no one else is watching–talk to their siblings. This holds true even for the leader of the free world. Enter Growing up Biden, an engaging new memoir from VALERIE BIDEN OWENS, AS67, 18H, chair of the University’s Biden Institute, the first woman in U.S. history to have run a presidential campaign and younger sister to the sitting president. Trusted adviser and insightful strategist, Biden Owens managed her brother’s seven consecutive U.S. Senate races, his two presidential campaigns, and his largely successful
JANICE (TIMINSKI) PAINE, AS89M, of Naples, Fla., retired in August from her longtime position as education program manager at the United Arts Council of Collier County in Naples, where she’d been on staff since 1997. While at the council, she administered after-school arts education programming for students at low-performing schools, as well as artist residencies, lectures and performances in music, dance and theatre.

1990s

MEGAN (TOTINO) MARTIN, AS91, of Harrisburg, Pa., received the 2021 Legislative Staff Achievement Award from the American Society of Legislative Clerks and Secretaries for her efforts to modernize the operations of the State Senate.

FUN FACT: MEGAN (TOTINO) MARTIN IS THE FIRST WOMAN TO SERVE AS SECRETARY-PARLIAMENTARIAN IN THE PENNSYLVANIA SENATE. UNDER HER LEADERSHIP, THE SENATE WAS THE FIRST LEGISLATIVE CHAMBER IN THE NATION TO MEET VIRTUALLY TO ADDRESS THE IMMEDIATE NEEDS OF PENNSYLVANIANS AT THE OUTSET OF THE PANDEMIC.

CARLONDA RUSSELL REILLY, EG92M, 96PhD, of Greensburg, Pa., has been named to the Women in Manufacturing Education Foundation’s 2021 Hall of Fame. Reilly is vice president and chief technology officer for industrial technology firm Kennametal Inc.

JENNIFER NELLANY, BE92, of New York, N.Y., is board president for the Sarcoma Alliance, a nonprofit focused on guidance, education and support for people suffering from this rare cancer. Nellany came to learn of the organization after her late husband’s diagnosis and would stay engaged long after his passing.

JOSEPH BLOCH, AS93, of Wilmington, Del., was named chief of the New Castle County Police. After 29 years on the force, he says, “I still have a passion for the job.”

NANCY ZIMMERMAN, AS94M, of New Providence, Pa., received the 2021 Frank Mulhern Leadership Award from the Pennsylvania State Modern Language Association for “outstanding leadership in the world language profession.” Zimmerman is associate professor of modern languages at Kutztown University.

FUN FACT: AS A STUDENT LIVING IN THE BROWN RESIDENCE HALL, JOSEPH BLOCH HAD A PART-TIME JOB AT WINGSTOGO. AFTER SHIFT, HE WOULD BRING HOME A BIG BUCKET OF WINGS, AND HE WOULD STOP AT THE STONE BALLOON FOR BEER. “I WAS THE PIED PIPER, BECAUSE I WOULD HAVE MORE AND MORE PEOPLE FOLLOWING ME BACK TO MY DORM EVERY NIGHT,” BLOCH SAYS. (YES, HE WAS 21 AT THE TIME... BUT HE “CAN’T ACCOUNT FOR ALL OF THE MINIONS WHO FOLLOWED.”)

ADVANCING INCLUSION

DR. IRIS GIBBS, AS90, has already advanced her field in myriad ways. A professor of radiation oncology at Stanford University, she has spearheaded innovations that allow physicians to deliver crucial, tumor-shrinking radiation treatments—therapies that once took several weeks—in just one or two sessions.

But Gibbs is also saving lives in another crucial front: making her field more inclusive.

In December, at the annual conference of the prestigious Radiological Society of North America in Chicago, Gibbs gave a plenary lecture about the cost of an undiversified physician workforce. Partly because African American doctors are more likely to practice in underserved communities, a woeful lack of representation within this and other specialties means “Black people experience the worst cancer outcomes of all races and ethnicities,” she told the crowd.

Gibbs, a first-generation college graduate, pointed to structural barriers faced by would-be physicians of color, such as insufficient pipeline programming and arbitrary metrics used for scoring licensing exams. She also outlined steps any member of the medical community can take to address the situation: “Start by educating yourself about the historical context of current health disparities,” she urged attendees. Meanwhile, fellow Blue Hen DR. MICHELE JOHNSON, AS75, professor of radiology at Yale, gave a lecture on actionable ways to ensure equitable patient care.

Despite much work to be done, there are reasons to feel optimistic, and Gibbs finds one of these through her service on the dean’s advisory board for UD’s College of Arts and Sciences, where she helps guarantee “every single student who interfaces with this school can find a place that feels like home,” she says. “I’ve been so pleased to know this is what is on the minds of University leaders as they shape the vision for the future.”
TODD MOORE, AS95, of Florence, N.J., has created a community-based mobile testing unit to raise awareness for peripheral artery disease, or PAD. The mobile unit travels from state to state, stopping at health fairs, community centers, food banks, retirement communities and elsewhere to provide free educational material and screenings for PAD. Moore is the scientific director of cardiovascular disease at Janssen Pharmaceutical.

ROBERT MOORE, AS95, of Runnemede, N.J., has joined Bangor Savings Bank as a senior vice president, trust compliance officer. This August, he and CHRISTA HOPKINS MOORE, HS96, will celebrate 25 years of marriage.

SHAWN VREELAND, AS95, of Fredericksburg, Va., received the Joint Civilian Service Achievement Award for his work on an annotated chronology of the U.S. withdrawal from Afghanistan. He is the senior editor for the Joint Chiefs of Staff at the Pentagon.

ANDREW HILL, BE96, 97M, 03PHD, of Philadelphia, has been promoted to assistant vice president at the Federal Reserve Bank of Philadelphia. In 2021, he also received the James B. O’Neill Economic Education Multiplier Award from the National Association of Economic Educators.

DR. TOBI SHEIKER, AS96, of Wilmington, Del., has opened Balance Chiropractic, LLC, a full spectrum healing spa, in Centreville, Del.

LEONARDO (LEO) R. VIANA, ANR97, of San Diego, Calif., was named vice president of conservation collaboration for the Sustainable Forestry Initiative, a nonprofit that collaborates with universities, government officials and others to promote the value of sustainably managed forests.

**FUN FACT:**

THE NATIONAL AWARD WON BY ANDREW HILL WAS NAMED IN HONOR OF THE FOUNDING DIRECTOR OF UD’S CENTER FOR ECONOMIC EDUCATION AND ENTREPRENEURSHIP, O'NEILLISNOW PROFESSOR EMERITUS OF ECONOMICS AT UD.

**FUN FACT:**

Leo Viana still draws on lessons learned while playing UD lacrosse: “Whether you’re trying to break down another team’s offense or tackle the climate change crisis, teamwork is required to get things done.”

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FROM CHICKEN COOP TO HEN HOUSE

BRET A. MARTINE, EG98, has come a long way since his bird poop days.

As a kid growing up on a 100-acre farm in Hartly, Delaware, Martine tended to steers, Clydesdale horses and a 650-foot chicken coop, which he spent weekends cleaning. “I did things you wouldn’t expect a child to do,” he says.

When he was 8 years old, as a reprieve from chores that sometimes began at 4:30 a.m., a neighbor took Martine to see UD football games—box seats on the 45-yard line—and he fell in love with the University. When he enrolled, becoming the first in his family to pursue higher education, his father joked that “farm life is so hard, it drove you to college.”

This farm life, where troubleshooting equipment was routine, laid the foundation for his engineering studies and future career as vice president of Century Engineering. Now, the Dover resident has also been appointed chair of the chapter president’s council for the American Traffic Safety Services Association, or ATSSA, a national trade organization seeking to make our roadways safer.

“In some shape or form, most people have been impacted by the loss of a friend or loved one on the nation’s highways,” he says. “It seemed like the right cause at the right time.”

But no matter how busy his work life becomes, Martine still finds time to take his own three children to see the Fightin’ Blue Hens every year, even baking a UD-themed cake for the final tailgate of the season. “We love the tradition,” he says—no coop cleaning required.

Photos from top: Martine enjoys UD games with his wife, Yvonne.

“The more sugar the better,” says Martine of his annual tailgate cake.

Martine attends UD football games with as many as 40 friends, including a new generation of Blue Hens.
George Barrett, HS99M, of Syracuse, N.Y., served as chief of fire and director of emergency medical services for the Cicero Volunteer Fire Department for two years, beginning in April 2019. Through the pandemic, Barrett kept the agency fully operational without any COVID-19 infections acquired on the job. This commitment to service comes down, partly, to the example that was set for Barrett while studying at UD’s on-site physical therapy clinic, which treated patients even without insurance.

Erin Sharwell, AS99, of Philadelphia, was named head of circulation services at the University of Pennsylvania Libraries. She previously served on the faculty at The State University of New York at Brockport and at Coastal Carolina University.

2000s

Thomas Reilly, BE00M, of Wilmington, Del., has written Chasing Time, a fictional story of a UD history professor who utilizes a mystical, ancient key to track down clues that will save his wife.

Fun Fact: Thomas Reilly based the main character in his book, Chasing Time, on two UD professors, John Sawyer and Ajay Manrai. Like Sawyer, the book’s protagonist uses fact finding, team building and problem solving to unravel mysterious clues, and like Manrai, the fictitious historian focuses on a world beyond Newark, Del.

“MY UD PROFESSORS FOSTERED A DESIRE TO GIVE BACK TO THE COMMUNITY, AND THEY REALLY BROUGHT THAT OUT IN ME.”

Erin Sharwell, AS99, GEORGE BARRETT, HS99M

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**Fun Fact:** Jeff Markovitz likens his writing career to rock climbing. Each pursuit—reaching the top of a steep mountain or the end of an emotionally charged chapter—can feel impossible at times, “but eventually you get there... with enough training, effort and hope.”

Matthew J. Camp, AS02, of New York, N.Y., published his first opinion piece in Inside Higher Education, titled, “Books or Bombs,” which advocates for federal investment in higher education. Camp is director of government relations at Teachers College, Columbia University, where he runs the Advocacy Academy, and is an adjunct assistant professor at NYU.

Jeffrey Markovitz, AS04, of Philadelphia, has written The Sharpest End, which chronicles his rock climbing friend’s journey with stage three non-hodgkin’s lymphoma. Proceeds from the book, which the friends have promoted on a tour of East Coast climbing gyms, go toward the Leukemia and Lymphoma Society.

Lindsay Paoli, BE06, of Doylestown, Pa., has sold her software company and joined the JJellyfish team. As director of delivery management, she will “help tech startups go from $0 to $1 million in revenue.”


**2010s**

Wenqing (Wennie) Xu, ANR14PhD, BE21M, of Chengdu, China, earned tenure and a promotion to associate professor at the Louisiana State University, where she teaches food safety and food microbiology. In September, in a sunrise ceremony, she was married to Chuck Barthold in California’s Yosemite National Park.

Sarah E. O’Brien, HS17, of Wilmington, Del., was named 2021 Employee of the Year by the Children’s Advocacy Center of Delaware. She is a case manager at the Rockland Center office.

Hannah Duffy, AS19, of Newark, Del., and Yasmin Mann, AS20, of Middletown, Del., have been named National Institutes of Health Oxford Scholars. This prestigious program will allow the women to pursue doctoral degrees in biomedical research, with half their time spent at NIH labs in America, and the other half at either Oxford or Cambridge University in the U.K.

Yasmin Mann, AS20

**Fond Memory:** As a Blue Hen, Yasmin Mann helped create a device to make bowling accessible for people with limited mobility, which is being used by a local school for children with disabilities.

Sara Wheelock, Alumni Relations

As a former student-alumni ambassador, regional NYC alumni president and current UDAA secretary, Stephen Shallo, AS07, always reps his Blue Hen pride.
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BABATUNDE A. OGUNNAIKE

Babatunde A. Ogunnaike, engineer, scholar, poet and mentor, died on Feb. 20, 2022.

Dr. Ogunnaike joined UD as an adjunct professor in 1996 and would become the William L. Friend Chair of Chemical Engineering and dean of the College of Engineering from 2011 to 2018. He distinguished himself both as a scholar and practitioner. An expert in process control, modeling and simulation, systems biology and applied statistics, he possessed a robust knowledge of both industrial and academic applications of chemical engineering.

Dr. Ogunnaike was also a poet. At 21, he contributed words that were later used in the Nigerian national anthem. When UD President Dennis Assanis was inaugurated in 2016, he composed a poem, “Dawn at the Well of Inspiration,” that he read at the ceremony.

Dr. Ogunnaike always dedicated time to his students, even as dean. With a twinkle in his eye, he reminded students and others that he came from a family of educators and that his mother was an English teacher. Upon graduation, he presented each of his doctoral students with an academic family tree, detailing their academic lineage. It was a treasured gift to help students mark their place in history as they pondered their future. “Whatever you do for yourself is gone when you are gone,” Dr. Ogunnaike said. “What you do for others lives on forever.”

—Karen Roberts, AS90, 21M

MORTON COLLINS

Innovator. Mentor. Philanthropist. Pioneer. Mort Collins, EG58, H15, who passed away on Dec. 14, 2021, at age 85, was also a proud Blue Hen whose humble beginnings, down-to-Earth demeanor and dreamer’s mind helped him become a highly successful venture capitalist with a legacy of student support.

Collins’ childhood was marked by tragedy and loss. His mother died when he was 2, his father passed away before his 12th birthday and the aunt who took him in succumbed to cancer only seven months later. As a ward of the state, college was not on Collins’ radar until his grammar school principal, KENNETH FRISBIE, AS30, helped him envision a future at UD.

Collins never forgot the impact of his education and became a major benefactor to the University. He and his family generously supported the building of the Allan P. Colburn Laboratory; he and his wife, Donna, established an engineering fellowship that has supported 33 graduate students to date; and he extended his support to undergraduate engineers through the Class of 1958 Scholarship, which has benefited 91 recipients since 1993.

In 2015, Collins received UD’s highest academic honor, an honorary degree. Hailing him as a loyal alumnus, national leader and champion for next-generation technology, the citation commended Collins for dedicating his “professional life to nurturing and supporting innovation that will change and improve the way we all live.”

—Christine Serio
A CONVERSATION WITH...

Crystal Hayes couldn’t possibly tell you how many greasy pizza boxes or empty containers of macaroni and cheese she’s whisked away during her 32-year tenure cleaning UD’s residence halls and apartment buildings. Those aren’t the moments that resonate. Here, an all-star custodian offers a glimpse at the ones that do—good, bad and messy.

When you started at UD, your mother, two aunts, uncle and cousin also worked in the custodial unit. What’s it like clocking in with family? When we worked side-by-side, my mom was no longer my mom, but my best friend. When she retired 17 years ago, it was extremely hard. But we kept up our lunchtime walks around campus, even after she left. 10,000 steps a day.

Best spot to walk at UD when you need a moment of peace? Laird Campus. It has the best [osage orange] trees.

What do people get wrong about your job? It is so much more than cleaning. When I scrub a stovetop, I’m potentially keeping a grease fire from breaking out. Custodians are the first line of defense. We keep kids safe.

Do you have one especially memorable example? When I worked at Rodney, I noticed the bagged vomit that a student was putting into the trash chute repeatedly. I suspected bulimia, and I filed the report that led to her getting help. Then, because the University really followed up, I noticed the flyers popping up with information for other students who might be struggling. It’s a great feeling being able to help—you want to protect these kids.

Trash can tell you much about an individual, but what does it tell you about how this demographic as a whole has changed over time? When I started, I noticed all the beer cans, but I think students are drinking a lot less now. I see them studying more.

And how have 18- to 22-year olds stayed the same? These kids have been wearing shorts and flip flops in the wintertime ever since I arrived, even in the snow.

Weirdest thing someone has snuck into a dorm? A hamster.

Any other mischief you’ve had to deal with? The students pull pranks on one another—toothpaste on doorknobs, buckets of water over a door frame. I think I still have a picture of the time a couch ended up in an elevator. In Dickinson, students once carried the washer and dryer from the basement laundry room to the third floor.

So many places require the work you do. Why spend three decades at UD? I’ll give you one example: COVID. When it first happened, I felt terrified. But the University made sure I had everything I needed to be comfortable and safe. The higher ups really care.

You have perhaps the most unfiltered view. What’s your impression of the Blue Hen student body? They say thank you, which is very nice. A few don’t know how to turn on a vacuum when they arrive, but they appreciate it when you show them.

How much of your job is relationship building? All of it. If you’re cleaning up after a pipe bursts and soaks through a student’s belongings, that student needs to hear it’s going to be okay. For the kids having a hard time away from home, holding open a door or simply listening as they worry about a test can make a big difference. I’ve stayed in touch with some students after they graduate—it is so nice to see who they become. A couple of years ago, at my tax lady’s office, I ran into a student whose room I cleaned 17 years ago. I didn’t recognize her at first—she is a grown woman now with a husband and children—but she remembered me. That is rewarding.

Any advice for Blue Hens, past or present? Take out your trash.

“CUSTODIANS ARE THE FIRST LINE OF DEFENSE. WE KEEP KIDS SAFE.”
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