

### CONTENTS

By the Numbers

UD's impact on the state is profound—and growing.

**Teacher Residency** 

UD's Teacher Residency program provides a yearlong teaching experience for teacher candidates, supporting high-need Delaware schools.

**Discovering New Worlds** 

For UD's adult learners, education is lifelong.

Bird's the Word

Here's something worth clucking about: 2023 marks 100 years of the Delaware poultry industry—and 100 years of poultry research at UD.

From Delaware to the World
As UD celebrates the 100-year anniversary of its pioneering study abroad program, it also celebrates those who bring global culture to the classroom.

**Built to Order** 

How UD customizes learning for Delaware businesses.

When Personal Training Meets
Chronic Care

UD's Medical Fitness and Rehabilitation Program caters to those in need.

Not Just Another Brick in the Wall

Blue Hens are bringing the story of DuPont "Colored" Schools to more audiences.

Coastal Squeeze

First State flooding is a first-rate problem. UD is taking action.

302 ProUD

Exposing students to projects and opportunities that may keep them in Delaware long after graduation.

Q&A: Dave Sokola

Over the past three decades, Sokola has represented Delaware's 8th Senate District.

#### UNIVERSITY OF DELAWARE MAGAZINE

Volume 31. Number 4 December 2023

Managing Editor Artika Rangan Casini, ASO5

Associate Editor Diane Stopyra

Art Director Molly Chappell

**Executive Editor** John Brennan

Vice President for

Communications & Marketing Glenn Carter

Creative Director Dave Keen

Designer Bondé Angeline

Senior Photographer Kathy F. Atkinson

Photographer Evan Krape, AS09

Digital Imaging Specialist Kate Dempsey Pfister

The University of Delaware community values both personal and academic freedom. All members of the campus community have the personal responsibility to promote an atmosphere of civility in which the free exchange of ideas and opinions can flourish. We do so by learning from individual and collective differences and respecting every human being.

The University of Delaware Magazine (USPS 01-0743) is published quarterly by the University of Delaware Office of Communications & Marketing, 105 East Main St., Newark, Del. 19716-7201. To remove your name from the mailing list, please email bio-updates@udel.edu. Inquiries should be addressed to Artika Rangan Casini, Managing Editor, Office of Communications & Marketing, at Magazine@udel.edu. For information on advertising, please call (302) 831-2792. Periodical postage paid at Newark, Del. 19711 and at additional mailing offices.

The University of Delaware does not discriminate against any person on the basis of race, color, national origin, sex, gender identity or expression, sexual orientation, genetic information, marital status, disability, religion, age, veteran status or any other characteristic protected by applicable law in its employment, educational programs and activities, admissions policies, and scholarship and loan programs as required by Title IX of the Educational Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and other applicable statutes and University policies. The University of Delaware also prohibits unlawful harassment including sexual harassment and sexual violence. For inquiries or complaints related to non-discrimination policies, please contact: Danica A. Myers, Interim Title IX Coordinator 305 Hullihen Hall Newark DF 19716 302-831-8063 titleixcoordinator@udel.edu. For complaints related to Section 504 of the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act, please contact: Elizabeth Reed, Director, Office of Disability Support Services, Alison Hall, Suite 130, Newark, DE 19716, 302-831-4643, ecreed@ udel.edu OR contact the U.S. Department of Education - Office for Civil Rights (https://www2.ed.gov/about/offices/list/ocr/know.html).

POSTMASTER: Send address changes to University of Delaware Magazine, Academy Building, 105 East Main St., Newark, Del. 19716.

Please share or recycle this magazine.



As we travel throughout Delaware—talking with its people, connecting with its leaders, appreciating its unique history and exciting future—we are always inspired by the strong sense of community we encounter. Delawareans work together and support one another.

This collaborative spirit is at the heart of what makes our state such a wonderful place to live, work and learn. Together, Delawareans have protected the First State's beautiful and fragile environment, built multiple world-leading industries, nurtured a lively and dynamic culture of the arts and so much more. The University of Delaware is immensely proud to be a member of this community.

UD is educating thousands of Delawareans at every stage of life, whether they are getting a head start in their pre-college years, pursuing undergraduate or graduate degrees, seeking professional certifications to build or enhance their careers, or simply engaging in the joy of learning for personal development. With support from the state and generous donors, UD is continually working to keep a top-notch educational experience accessible and affordable.

With multiple opportunities to connect with virtually every person in the state, the impact of our University is limitless. Discoveries from UD research labs become innovations that help spark economic development, shaping the future of the First State and beyond. Businesses turn to UD to strengthen their workforce through customized training. Members of the Delaware community also come together at our arenas and theaters, cheering for our Blue Hen student-athletes, supporting the arts, and engaging with our cultural and educational programming.

As we continue to focus on renewal for our state through the blend of education, discovery and impact, we are proud of the 50,000 Blue Hen alumni who work in Delaware as teachers, entrepreneurs, healthcare providers, business leaders and in every other sector that drives our state's economic wellbeing. They and thousands of UD faculty and staff make their homes in Delaware, strengthening the social fabric of our entire state.

Whatever challenges and opportunities lie ahead, the University of Delaware is fully committed to the First State—an integral part of Delaware's remarkable community, as we have always been.

Vennis & Elens

Dennis and Eleni Assanis, President and First Lady

# BY THE NUMBERS

About **3,000** people now work on UD's STAR Campus, more than the number who worked at the Chrysler plant there when it closed in 2008.

Delaware Sea Grant's oyster hatchery sent

105,000

baby oysters to a commercial aquaculture operation in the Delaware Bay.

The UD Library, Museums and Press donated

219

books to support K-5 students at
West Park Place Elementary
School in Newark.



Project DELITE (Delaware English Learners' Impact on Teacher Education) is a new, five-year program in which

Hola!

60

teachers and

15

paraprofessionals
will take the necessary UD courses
to attain certification as a bilingual
teacher or teacher of English learners.

More than student musicians perform at the annual UD School of Music Spectacular, a 90-minute concert at the Freeman Arts Pavilion featuring different University programs, from the Jazz Band to the UD Chorale.

UD received a record

37,000+

applications from prospective students in every state in the continental U.S. and more than 130 countries for fall 2023.



University of Delaware Magazine

UD's Early Head Start has assisted

3,225

children and

468

pregnant women in its 25-year history. Learn more on page 7.



#### **SECOND**

university in the country to host Camp Dream. Speak. Live. The free summer camp for children who stutter has an extensive national waitlist.





More than

3,000

pounds of student-grown produce is donated annually to organizations across the state.

#### 28 MILLION

pounds of concrete and

254

pieces of structural steel serve as the foundation for the under-construction Building X, which will prepare students for the science and technology jobs of the future. With partial public funding, Building X will focus on understanding and addressing human disease, neuroscience and human behavior, and quantum science and engineering.

## CREATING AN EQUITABLE FINANCIAL FUTURE

Technology has the power to bring safe, secure financial services to the nation's unbanked. Indeed, that's a central goal of the FinTech Innovation Hub.

Located at UD's Science, Technology and Advanced Research (STAR) Campus, the Hub is home to more than a dozen local, national and global partners from academia, industry, nonprofit and government all working toward the same critical mission: developing an innovation community focused on financial equity.

The 100,000-square-foot collaborative space formally opened Oct. 4, 2023, and aims to build wealth for marginalized communities while growing the number of financial-technology employers in the state. The Hub merges University expertise from more than 40 academic programs in business, engineering, data science and entrepreneurship to strengthen Delaware's financial services workforce, expected to continue growing substantially in the years ahead. Faculty from engineering and business will be based in the new space.

Within two years alone, tenant organizations and outreach programs are estimated to create 10 startups and 300 new jobs for the state. Delaware currently captures 75% of all fintech investments in the Philadelphia region.

Turn to page 6 of *University of Delaware Magazine* Vol.31 No.3 to learn more about Fintech.





# Reimagining Residency

**UD Brings a Medical Model to the Classroom** 

BY JESSICA HENDERSON, AS11M



In August 2023, Anij'ya Wilson, EHD23, brimmed with excitement and confidence as she prepared her first-grade classroom at Evan G. Shortlidge Academy in Wilmington, Delaware. She had just graduated from University of Delaware's elementary teacher education program, but she already had a full year of teaching experience under her belt.

Wilson served as a resident through UD's relatively new Teacher Residency program, housed within the College of Education and Human Development's Center for Excellence and Equity in Teacher Preparation. In partnership with three high-need school districts in Delaware and funded by the Delaware Department of Education, the program adapts the medical model of residency by allowing early childhood education, elementary teacher education and secondary STEM education students to pursue yearlong, paid placements in Delaware schools in lieu of a traditional student teaching experience.

The innovative model gives UD students like Wilson an immersive, comprehensive teaching experience, offering opportunities for guided practice in the classroom and a gradual increase in teaching responsibility. It also allows them to forge meaningful connections.

"You learn how to build relationships, you learn how to maintain them, and you start to figure out who you are as a teacher and your teaching style," Wilson says.

Importantly, the residency program also addresses critical issues in education across the state.

#### Addressing Delaware's teacher shortage

Wilson's experience illustrates the profound impact one teacher can have on a child's development and underscores the critical need for more highly qualified teachers.

The COVID-19 pandemic exacerbated a national teacher shortage, as school districts have struggled to staff their schools for nearly 15 years. Between 2010 and 2018, student enrollment in teacher preparation programs declined 35% nationally, and 60% in Delaware.

But, by requiring residents to teach in a high-need Delaware district for three years after the completion of their tenure,

UD's Teacher Residency Program helps to alleviate the issue. Since 2021, when the program launched, UD has graduated 52 residents, all of whom now teach in Delaware schools.

"I'm extremely happy because all of the residents that we had last year are now members of the Appoquinimink School District as teachers of record," says Dominic Banks, director of talent acquisition and strategic staffing for the district. "We're looking at the residency program as one of our pipelines, allowing participants to go from teacher resident to teacher of record."

And, as noted by Kristina Najera, director of UD's Center for Excellence and Equity in Teacher Preparation, residency may contribute to retention. "Because our residents have had such an intensive, comprehensive experience, we think they're more likely to be the individuals that advance in the profession and rise to the teacher leadership role."

Moreover, Delaware's teacher workforce has struggled to reflect the increasing diversity of the state's student body. In 2023, more than 59% of the pre-K through 12th-grade demographic identified as members of historically underrepresented groups, but only about 19% of Delaware teachers identified similarly.

But, in the coming years, UD plans to reserve half of its residency placements for students from historically underrepresented groups. So far, 24% of UD's former residents identify as members of underrepresented groups.

The program complements other UD initiatives to diversify the education workforce, like the signature Teachers of Tomorrow (TOT) program, which introduces underrepresented, Delaware high schoolers to the field of education through a two-week summer institute where they can learn about degree programs and future careers. Wilson was a participant and the very first TOT student to earn her bachelor's degree.

"A great deal of research shows that teachers prepared in such teacher preparation programs stay in the teaching profession longer and that their students have better outcomes," says Gary T. Henry, dean of UD's College of Education and Human Development. "The TOT and residency programs are key components of this preparation, especially for students from underrepresented backgrounds. Our residents are uniquely ready to enter their own classrooms with the skills and confidence to develop the relationships that support student learning and wellbeing."

#### POP QUIZ

#### True or false. Circle your Answers.

1. The UD Teacher Residency Program offers a paid, yearlong stipend.

TRUE

**FALSE** 

2. Teacher residencies provide the same educational experiences as student teaching.

TRUE

3. Teachers prepare for careers in high-need schools and subjects.

TRUE

**FALSE** 

4. Pre-pandemic, student enrollment in teacher preparation programs declined 60% in Delaware.

TRUE

**FALSE** 

5. The Teacher Residency
Program is UD's only initiative
to diversify and strengthen
the teaching workforce.

TRUE FALSE

 Graduates of teacher residency programs are equipped to become leaders in their districts. TRUE

**FALSE** 

#### An immersive, comprehensive experience

The residency program differs significantly from a traditional student teaching experience. That more traditional model, which typically includes two 7- to 14-week placements, may land one student in multiple schools and districts.

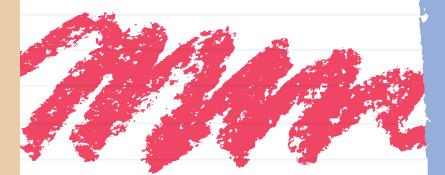
In contrast, the residency program offers a yearlong experience within one classroom. Students gradually accept teaching responsibilities as they work closely with a UD coach and an experienced mentor teacher, who provide guidance throughout the year. Residents also receive feedback from district personnel and UD staff, and they're invited to participate in the school's biweekly professional learning communities. At Red Clay Consolidated School District's Forest Oak Elementary School, Wilson "felt such a community with my faculty members."

She also honed critical skills in lesson planning, classroom management and more.

"If I didn't have this whole year of relationshipbuilding and classroom experience, I would be thinking, 'Oh my gosh, how am I going to set up a classroom? I've never done this before.' Whereas, because of my residency, I've already been through that process," Wilson says.

She also remembers an especially poignant moment when a reserved child who came to her class with traumatic experiences told her that he would miss her at the end of the year.

"It was in that moment that I realized: I built this relationship, I did a good job and this child gave me [their] trust," Wilson says. "That gave me a lot of encouragement. I know now that I can build relationships. It's going to take time, but I did it with one. Imagine all the children I could reach now, each school year."





# Giving Kids a Head Start



In 1998, when she learned she was pregnant, Nicole Smith was 17. Her parents—especially her pastor father—were devastated. Classmates gave her sideways glances in the hallway. "I was absolutely terrified," Smith recalls.

Luckily, she discovered New Directions Early Head Start (NDEHS) at the University of Delaware. The program helped the teen through her pregnancy and early years of motherhood, providing everything from breastfeeding quidance to childcare resources to cooking lessons.

"I'm a firm believer that it takes a village, and this was the beginning of mine," says Smith, who went on to earn a master's degree and work in the Brandywine School District as a behavioral technician. "My entire journey—the education I was able to receive, the career path I've chosen now—that was all shaped by NDEHS."

This is one of thousands of testimonials to come out of the landmark program, which serves about 200 families per year and celebrates its 25th anniversary in 2023. A branch of the federal Early Head Start initiative (the only of its kind at a college or university in Delaware), UD's program nurtures healthy attachments between parents and children ages 1–3, a crucial time for brain development.

"This period sets the trajectory for the future," says Heidi Beck, program director. "We cannot do enough to support this demographic."

Specialists visit caregivers in their homes to assess developmental delays in infants or provide training on myriad topics, from introducing solid foods to taming sibling jealousy. And they connect families with resources—for obtaining better housing, continuing an education or promoting the cognitive, physical and social wellbeing of a child. NDEHS specialists also work hand-in-hand with childcare providers at various facilities throughout the state. The goal is to marry the child development expertise on UD's campus with the community expertise abundant within these organizations.

"When we started this, programs at other universities were often going into a place to do work *for* a community," Beck says. "We collaborate in partnership *with* a community, and that has made all the difference."

Case in point: NDEHS relies on a policy council and a board of directors comprising participating parents, past and present. Members help shape the curriculum, the budget and the very mission of the organization. All these years later, Smith is still actively involved: "I've always felt like my voice mattered," she says. "The care and compassion within NDEHS is genuine."

Today, Smith's son, Sayvon Willis, HS22, is a recent graduate of UD, working to establish greater youth programming in Wilmington as part of the Public Allies AmeriCorps program. Her two younger children, also NDEHS participants, are enrolled in college and set on their own paths to success—a reality Smith is unlikely to ever take for granted.

"Without NDEHS, my children and I might have ended up statistics," she says. "My overwhelming feeling is gratitude."

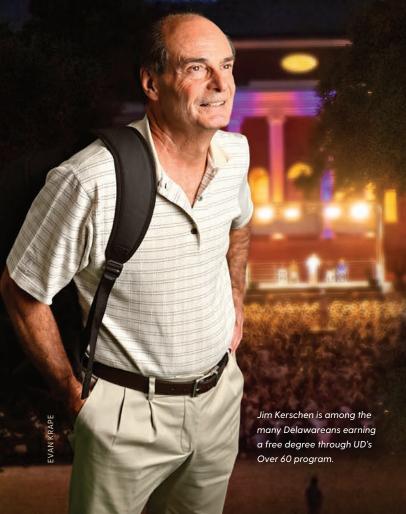
"Without NDEHS, my children and I might have ended up statistics. My overwhelming feeling is gratitude."



# DISCOVERING NEW WORLDS

### FOR UD'S ADULT LEARNERS, EDUCATION IS LIFELONG

BY MIKE CHALMERS, AS20M



Growing up on a central Missouri farm, Jim Kerschen loved taking a blanket out to the cornfield at night and staring up at the stars.

"I had no idea which star was which, but it whetted my appetite to learn more," Kerschen says. When he enrolled at the University of Missouri, though, he saw that a focus in chemistry would provide a more stable career path, so he put astronomy aside. Indeed, he went on to earn a master's and a doctoral degree in chemistry, then enjoyed a successful 40-year career in that industry.

"It's been a great ride," said Kerschen, 70, "and now I want to return to my first love."

This fall—as a first-year astronomy major at the University of Delaware—Kerschen is back in the classroom to pursue his passion. He is among the Delawareans who come to UD for an education when they're retired or close to it. For those like Kerschen, that means taking for-credit courses—and doing all of the homework, term papers and final exams that come with them—in pursuit of a degree. UD's Over 60 tuition benefit lets them take courses at no cost if there is space in the class and they meet the academic requirements, enrolling about 100 Delawareans annually.

Kerschen is now taking Calculus I and a couple of entrylevel physics courses alongside classmates who weren't even born when he was already more than halfway through his career.

"I can't tell you how exciting it is to hear about all of this cutting-edge research," he says. "It gives me the shivers. I didn't think that reading a few books and articles about astronomy was going to be enough for me. That's why I'm going to charge ahead and see what a degree in astronomy can do."

Jeff Illes, 66, used the Over 60 benefit to complete his bachelor's degree in English in May 2023, an accomplishment that had been postponed since the mid-1970s as he built a career in sales. He is now enrolled as a graduate student in the Master of Arts in Liberal Studies program.

"The benefit makes it possible for me to immerse myself in the courses," Illes says, crediting family and friends for supporting his pursuit. "I was delightfully surprised that people were so accepting, and I didn't feel out of place at all."

When Lucille Fagan retired from the insurance industry a few years ago, UD's Over 60 tuition benefit was one reason she moved to Delaware from Pennsylvania. At age 67, she's now taking online classes to earn her associate in arts degree.

"I've always liked learning, and it wasn't available to me as a young person," says Fagan, who'd like to pursue a bachelor's degree next but isn't planning to return to full-time work. "It's really for the love and challenge of learning. It's just to get a degree and to say I've got it."

That's the question older students say they hear often: What are you going to do with your education? Everyone has a different answer. As a volunteer at Mount Cuba Astronomical Observatory, Kerschen wants to share his knowledge of the stars with others. Illes is writing mystery novels.

For some, UD courses provide a job-related education. Melissa Bordley, 66, earned her Paralegal Certificate-through UD's Professional and Continuing Studies (PCS), which isn't eligible for the Over 60 benefit—so she'd be more efficient and capable in her job at a civil law firm. Her criminal justice courses fascinated her, though, so she's now considering a bachelor's in that field. "I'm only 66, so I can do four years," she says.

Rob McKennett, 70, retired from the healthcare industry several years ago and is now earning a PCS certificate in Instructional Design, which is helping him develop the science courses he teaches at Delaware State University.

"Learning is my hobby," says McKennett, who has three master's degrees and has taken hundreds of courses over the years, mostly because they just interested him. "If I had enough time left in my life, I'd go back and get another master's in the science of learning."

Simply the joy of learning—and doing so with others—is what brings many older students to the classroom. That's the motivation for the roughly 2,400 members of UD's Osher Lifelong Learning Institute, who can teach or take courses in everything from American art to thermodynamics and myriad other topics. UD's program-offered online and in person in Wilmington, Dover, Lewes and Ocean View-is one of the largest among the 125 Osher institutes at colleges and universities nationwide.

"I'm a passionately curious individual," says Claire Sullivan, 94, a long-time OLLI member who has taken or taught courses in a variety of topics, such as immigration, the Founding Fathers and recent Supreme Court decisions. "Ever since I could talk, I've always asked, 'Why?'"

Helping students find answers is UD's mission, no matter the age of the person asking the guestions.

#### **EXPLORE YOUR OPTIONS**

#### **OVER 60 TUITION** BENEFIT

Delaware residents aged 60+ must apply and be admitted to an undergraduate or graduate program at UD.

NO. OF STUDENTS: About 100 each year

COST: Free! Students must cover cost of textbooks and supplies

pcs.udel.edu/60-tuition-free-degree

#### **OSHER LIFELONG LEARNING INSTITUTE** (OLLI)

OLLI programs are open to adults aged 50+ to take and teach classes together, with no grades, exams or educational prerequisites.

NO. OF STUDENTS: About 2,100

COST: \$260/semester for unlimited courses

olli.udel.edu

#### **NONCREDIT COURSES**

UD offers career-related courses to provide resume-building credentials, often leading to a certificate and a digital badge.

NO. OF STUDENTS: About 800

**COST**: Varies

pcs.udel.edu



# BIRD'S THE VVORD

BY DIANE STOPYRA

Here's something worth clucking about: 2023 marks 100 years of the Delaware poultry industry—and 100 years of poultry research at UD. As international demand for safe and affordable fowl has exploded, Blue Hen experts have been hard at work—developing strategies for sustainable production; conducting disease surveillance, diagnosis and control; and training top scientists and producers around the globe in the fine art of avian bioscience. Due largely to these efforts, poultry remains a cultural and economic juggernaut—last year marked the most productive year on record for the Delmarva industry. Read on for a behind-the-scenes... peep.

#### **IM-PECK-ABLE STATS**

50: 1

Ratio of chickens to people in Delaware

1.334

Farm families on Delmarva

18,317

Chicken company employees on Delmarva

3,500

Chicken industry jobs in Delaware

#### \$5 BILLION

Wholesale value of chicken produced by Delmarva in 2022

#### 89 MILLION

Bushels of corn primarily from Delaware, Maryland and Virginia grain farmers purchased by chicken companies in 2022. They also bought 39 million bushels of soybeans and 428,482 bushels of wheat.

#### \$891 MILLION

Wages earned by employees of the big poultry houses on Delmarva (excluding benefits). Meanwhile, family farmers who contract with these companies earned \$349 million.

#### \$3.3 BILLION

Poultry-related economic activity throughout the state

#### **FOWL MISCONCEPTIONS**

- **1.** *Chickens are on 'roids:* It's not steroids or hormones—your birds are bigger because of genetics, improved nutrition and housing conditions.
- **2.** Chickens are chock full of antibiotics: Nope. All commercially raised chickens are free of these at the time of processing, and more than 60% are antibiotic-free their entire lives.
- **3.** *Factories rule the day:* Most poultry farms are family owned. If they look like factories, it's likely due to the industrial fans that provide a better bird environment.



### EGG-CELLENT EXPERTISE

#### **POULTRY PRODUCTION ORIGINATES IN DELAWARE**

In 1923, Cecile Steele of Sussex County accidentally received a shipment of 500 broiler chickens (the kind typically for sale in a grocery store), becoming the first person to raise the birds commercially for meat in America. Today, Sussex County is still a leader, producing more broiler chickens than any other county in the U.S.

#### THE FUTURE (OF POULTRY) IS FEMALE

UD Cooperative Extension participates in Annie's Project, a national nonprofit that empowers women via training on farm management.

#### POULTRY RESEARCH HELPED DURING THE PANDEMIC

Decades before COVID-19 changed the world, UD experts were studying avian coronaviruses. When the pandemic occurred, scientists applied their training, equipment and infrastructure to conduct more than 1,000 (human) tests per day.

#### **SOMETIMES RESEARCH GOES TO...**

The darkling beetle thrives in chicken poop—a problem, since the insect carries diseases devastating for a flock. UD experts are collecting insect samples across the U.S. and in Europe as part of an ongoing effort to improve pest management techniques.

#### **BLUE HENS CONVENE WHEN DISASTER STRIKES**

The 2022–2023 outbreak of avian flu marked the largest animal disease disaster in history—ravaging flocks and spreading to humans—and Blue Hen experts are still on the front lines. UD labs have handled 3,000 samples collected as part of surveillance and response efforts, supporting continuity of business.

#### **ALLEVIATING AMMONIA EMISSIONS**

UD experts are working to reduce the amount of ammonia in emissions from poultry houses, which will improve not only a bird's immediate environment, but watershed quality for all Delawareans.

# WORKING AROUND THE CLUCK AND ACROSS THE GLOBE

#### **IRAQ**

Representatives of Iraq's Ministry of Agriculture have visited UD facilities to learn about poultry disease control.

#### **BRAZIL**

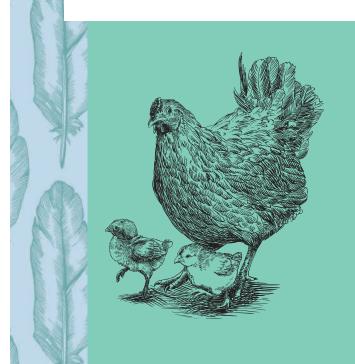
Blue Hens have traveled to Brazil (as well as Tanzania, Uganda, Kenya and Rwanda) to study the heat tolerance of various chickens on a warming planet.

#### **PHILIPPINES**

UD has trained representatives from the Bureau of Animal Industry in the Philippines on the threats live bird markets pose to the industry.

#### THE WORLD

Through its Emergency Poultry Disease Response Certificate Course, UD trains members of industry from around the world on preparedness planning, biosecurity and rapid response techniques and technology.







As UD celebrates the 100-year anniversary of its pioneering study abroad program, it also celebrates those who bring global culture to the classroom. This summer, 11 Spanish-language teachers from across the state spent two unforgettable weeks in Spain, absorbing the literature, art, food, music and culture to strengthen their own schools and school districts.

The experience, taught by UD Spanish Profs. Julia Dominguez and Basia Moltchanov and funded by a grant from the Delaware Department of Education, allowed the participants to earn three graduate credits from UD while increasing their language proficiency, cultural knowledge and intercultural competence.

"At the end of the day, we want to promote global citizenship," says Angela Trani, ASO1, a Spanish teacher at Olive B. Loss Elementary School in Bear. "Yes, we want to teach the language, but we want our students to also have an appreciation and understanding—and hopefully a celebration—of other languages, people, countries and cultures."

-Amy Wolf

# Built to

WHEN COMPANIES NEED **EDUCATION, UD DELIVERS** 

BY ERIC RUTH, AS93

Not too long ago, in the earnestly businesslike offices of JPMorgan Chase, the bank's executives put down their spreadsheets, picked up their notebooks and waited for the college lecture to begin.

Class was in session, without a campus in sight.

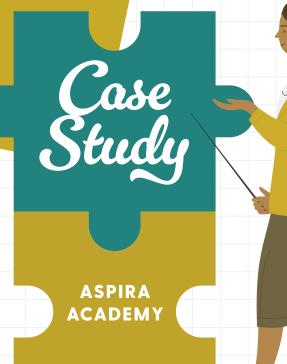
Over at biopharma innovator Incyte, where next-gen science is in the corporate DNA, a group of up-and-coming leaders discovered a new sort of tech magic: professors who leaped across the internet and into the pharma company's offices in Wilmington and California.

Graduate-level Blue Hen coursework had gone coast-tocoast, at the speed of light.

At business after business—schools, construction firms, hospitals—the University of Delaware is ambitiously aiming to become Delaware's vendor of choice for corporate human development training, designing and delivering custom classes at a moment's notice—"our place or yours."

It's aptly called the Customized Learning program, UD's answer to the growing demand for practical, pain-free, personalized employee training. Each year, businesses, nonprofits and even government agencies from various industry sectors enlist the kind of instruction usually studied by backpack-wearing, degree-chasing college students. Utilizing more than 1,500 faculty experts across UD, the program blends the University's service mission with immediate community application.

"We are nimble, we are flexible, we are responsive. And





Las Américas ASPIRA Academy, administrators want to provide staff training in team communication and leadership, but aren't sure it can be done, or who

At Newark's could do it.

we can make it Delaware–specific, something that bigger outside consultants can't offer," says Monica Browne, program coordinator for Customized Learning, one of many open–to–the–public educational opportunities offered by UD's Division of Professional and Continuing Studies.

#### Deep resources, nimble response

The list of clients tapping into UD's Customized Learning services includes some of the state's elite bodies: financial powerhouse JPMorgan Chase, health provider Christiana Care, the Wilmington VA Medical Center.

As they juggle shifting workforce dynamics and evolving needs, UD's teams take a deep dive into their individual

priorities, weaving together a course of instruction that can be customized at a near-cellular organizational level.

"We try to approach it in a team fashion and think of ourselves as being a thought partner to these organizations," says Laura Valadakis, UD's Customized Learning solutions manager. "We don't just go in and sell a product, we try to identify their needs and work together."

Some Customized Learning courses serve up the meatand-potato topics that are perennial concerns to any organization—leadership skills, DEI, intro-level Excel. Other courses have evolved as global needs evolve: There's now a Design Thinking course, Data Analysis programming and Advanced Telehealth Coordinator training.

#### THE CHALLENGE

Somehow, UD's Customized
Learning team must find a
way to accommodate
learners who work day and
night shifts, on two separate
campuses, miles apart.

ONE MORE THING



At a chance meeting at a local conference, ASPIRA hears about UD's Customized Learning program, and reaches out for help.





The training also needs to be conducted in two languages, Spanish and English.

Administrators hope to teach everyone as a team but worry that two separate classes are inevitable.

A SOLUTION EMERGES

"UD came back to us and said, 'We'd love to offer training, but why not keep everyone together?"

–ELI ORIOL, director of operations for ASPIRA, where 1,500 K-12 students learn in a Spanish immersion format. No matter the need or goal, UD can swiftly tap resources across its 10 colleges and schools to design practically any course, in any format: in person or online; recorded or live. In some cases, the program enlists external industry experts who bring an even sharper "real world" practicality to coursework.

Two of the program's core offerings are the Pocket MBA (a 9-month mini-course in business leadership) and the Patient Experience Academy (which applies hospitality practices to hospitals, helping providers view patients as "guests"). Multiple instructors from inside and outside of campus are often required for such extended training, and UD's team sometimes works for months in advance to align course material with company needs.

At other times, speed and agility are paramount. Just this year, UD's team received a training request on the 5th of April from the International Fresh Produce Association to develop an Executive Presence and Extemporaneous Speaking program. By April 25, the plan was ready.

#### More than facts

At Incyte, a boundary-pushing biopharmaceutical firm with headquarters in Wilmington, managers were aiming to support their up-and-coming leaders, but recognized that few had time to take on a full Master of Business Administration degree.

UD's Pocket MBA fit Incyte's need, especially since the training had to be delivered on opposite sides of the country, in distant time zones. Once delivered, it became clear that some of the most significant takeaways weren't just "textbook" facts, but the soft skills that typically take years to foster.

"Our employees really valued the business acumen and the management skills they could leverage from day to day," says Danette Conley, Incyte's director for employee development. "The one thing that was universal was how it helped them connect to each other. As a result of that they felt confident

reaching out to other employees to collaborate."

Expertise in teaching those interpersonal skills runs deep at UD, where associate professor Dustin Sleesman is a leading scholar in organizational behavior at the Alfred Lerner College of Business and Economics. Sleesman prides himself on giving his Customized Learning students an experience every bit as rigorous and memorable as the one his undergraduates get.

Before that can happen, he researches the organization itself, working with clients to identify their needs and observe the company's culture. "It's hard for people to articulate what the challenges are, what the pain points are, and often they merely say there's a 'communication' problem," he says.

"When I hear that, I want to dig deeper."

#### Where teachers learn

Rita Landgraf is surely no stranger to the byzantine complexities of healthcare policies, but the former Delaware Health and Social Services secretary says she ends up learning a lot herself while teaching the topic to industry pros.

"It gives me insight into the diversity of thought within the industry," says Landgraf, a professor in UD's Health Behavior and Nutrition Sciences department. "I love my undergraduate work, but it's great being with the professionals who can translate this into practice."



After classes are held, UD routinely solicits feedback, seeking ways to improve the process for custom-fitting coursework. "I felt like it was very authentic, like they were creating the program just for us," Oriol says.

UD searches its extensive roster of professors and instructors, finding the bilingual solution ASPIRA needs. "This program just blew away anything else we had in front of us," says Greg Panchisin, COO at ASPIRA.

HAPPY

ASPIRA's staffers meet the UD team and hear they are about to get schoolsponsored bilingual training. "They said to us, 'Thank you for caring," Oriol says.

DEBRIEF & IMPROVE

# Positive Feedback

PARTNERS SPEAK OUT

"Because we're a nonprofit, we are not in the business of making money from these courses. We can do it faster, at a lower cost."

-LAURA VALADAKIS, UD's customized learning solutions manager

UD's instructors agree that teaching in a corporate setting helps them align their college classes with industry advances, bringing the transfer of knowledge full circle. By lending their time and helping Delaware's businesses, they get a refreshing bounce back of good karma, a feeling that they are helping to make a difference in the communities

On a higher, holistic level, the program also helps fulfill UD's aspirations for deeper community connections. "These are the leaders," Landgraf says of UD's ever-growing partner organizations. "If we're all rowing in the same direction, Delaware will be a stronger state because of it.

"We sometimes can take a relationship to a different level in one or two hours."

-ADAM FOLEY, UD's interim assistant vice president of institutional equity for student life, on how the DEI principles he teaches can break down barriers between employees

"We felt supported through the process. The UD professors had excellent academic knowledge of their field, but practical business knowledge, as well."

\_DANETTE CONLEY, Incyte's director for employee development

> "UD felt like the right partner for us because we want to provide our employees the highest level of resources that compete with even the biggest companies in our industry."

-UD'S BRIAN DISABATINO, CEO, EDIS



### WHEN **PERSONAL TRAINING MEETS** CHRONIC CARE

BY AMY CHERRY

When Michelle Babiarz walks into UD's Exercise and Functional Training Lab, she's greeted with beaming smiles. The positive atmosphere keeps her coming to the lab in the Tower at STAR for thrice-a-week rehabilitation workouts.

Diagnosed with multiple sclerosis four years ago, Babiarz found the prospect of working out on her own daunting. Her doctor had successfully benefited from UD's one-of-a-kind Medical Fitness and Rehabilitation Program and referred Babiarz for the same service: an individualized treatment plan that includes consistent monitoring (a clinical exercise physiologist takes Babiarz's blood pressure and checks her heart rate before the hour-long workout begins), personalized training, adaptive equipment and unfettered support.

As Babiarz steps on the NuStep recumbent cross trainer for high-intensity interval training, she is cheered on by exercise physiology graduate student Robin Collura, HS24M, who yells, "Go, go, go, Michelle!" The consistent motivation fuels Babiarz to push harder. "I want to get to 260 steps per minute," she says, and before she knows it, the workout has ended.

"This program has made a huge difference in reteaching my muscles how to work," says Babiarz, "but the positivity and the camaraderie keep me coming back."

Consistency matters. Research from UD's College of Health Sciences identified a clear need for rehabilitative programs that serve Delawareans with chronic health conditions. Brittany Overstreet, assistant professor of kinesiology and applied physiology, developed UD's now-flourishing Medical Fitness and Rehabilitation Program to meet this critical need. The program also offers hands-on clinical experience to graduate students in exercise physiology, who are uniquely trained to work with individuals with chronic health conditions.

"There are very few programs like this across the entire country," says Overstreet. "After cardiac or pulmonary rehab, most people stop exercising, or they join a gym and try to exercise on their own, but usually that's short-lived. Additionally, only a few health conditions are currently covered by insurance for this type of service.

Patients with qualifying chronic health conditions (including diabetes, cardiovascular and pulmonary diseases, long COVID, kidney disease, multiple sclerosis, and Parkinson's) can attend UD's medical rehabilitation and fitness program with 36 free sessions. Then, they can opt-in and pay for services just like they would a monthly gym membership. Overstreet's ultimate goal is to secure medical reimbursement.

The program currently serves just under 100 people per week. "We've proven the demand is there and that we can fill the void," Overstreet says. 🖢

To learn more, visit udel.edu/nmhc/our-services/ exercise-counseling





# Not Just Another Brick in the Wall

by Amy Wolf

You know the buildings—or at least you know them *now*. They are churches, museums, community centers. But long before these neighborhood landmarks assumed such roles, many served the state's Black student population. Formerly DuPont "Colored" schools, they tell a complicated, oft-hidden story about education and equity, pride and shame. A story that is, thanks to UD, finding new audiences.

From 2020 through 2022, the University's Center for Historic Architecture and Design (CHAD), in partnership with the Delaware Division of Historical and Cultural Affairs and the statewide nonprofit Preservation Delaware Inc., documented the significance of these schools in two reports—an architectural survey and an oral history of the student experience. Of the original 90 sites, researchers located 84, including 48 buildings still standing.

"Segregation is a painful chapter of American history, but there's a lot of positive feelings about these buildings and the memories there," says Michael Emmons, CHAD assistant director. "That's why these are important to preserve—because they really were points of pride for the communities that surrounded them.

At the turn of the 20th century, a vast majority of Delaware's school buildings were dark, dilapidated and poorly resourced. This was especially true of the state's Black schools—until Pierre Samuel du Pont stepped in. Between 1920 and 1931, the Delaware philanthropist funded a campaign to rebuild 90 buildings, in all three counties, specifically for Black and Native American students.

Many of the DuPont "Colored" Schools hold national significance. Two played a role in the landmark 1954 Supreme Court case, Brown v. Board of Education, which ruled separate education unconstitutional. The DuPont Schools also mirror the Rosenwald School project, which built more than 5,000 schools in the south during the early 20th century.

Of the surviving Delaware buildings, eight are listed in the National Register of Historic Places, but more than half could be eligible—noteworthy, since fewer than 8% of National Register sites are associated with minorities.

To preserve these structures, more work is on the horizon, including the installation of historical markers and other public outreach. It's an important mission, experts attest, because these buildings reveal "a broader picture and story," says Kimberley Showell, CHAD historic preservation specialist. "It's not just Black history," she says. "This is everyone's."



"It's not just
Black history.
This is
everyone's."

—Kimberley Showell, CHAD historic preservation specialist

# CASTAL SUBEZE

BY DIANE STOPYRA

People come to Delaware for postcard-worthy beaches and serene natural experiences. But this beauty is under threat. That's where the Coastal Resilience Design Studio comes in.



BELOW AND NEXT PAGE: After Hurricane Ida hit the East Coast in 2021, Wilmington's Brandywine Creek reached record water levels of 23.1 feet. Several residents were evacuated and numerous cars were destroyed.

Among researchers, it's referred to as "coastal squeeze." If you live in Delaware, you likely know it as a nightmare.

Think of the phenomenon as a one-two punch: Sea level rise on one side, land development—and more water—on the other. Coastal wetlands are drowning. The state's low-lying neighborhoods and commercial districts (ahem, all of them) are increasingly vulnerable to the tide.

First State flooding has become a first-rate emergency.

Enter Delaware Sea Grant's Coastal Resilience Design Studio, or CRDS, which tackles this and other major crises facing Delaware's coastal communities. Housed within the University of Delaware's landscape architecture degree program, the effort enlists undergraduate and graduate students—not yet hardened by years of regulatory hurdle jumping—to innovate fresh solutions for Delaware's environmental, social and economic problems.

"They bring an open-mindedness that goes beyond limits and boundaries," says Ed Lewandowski, a coastal communities development specialist with Delaware Sea Grant and a co-founder/principal with CRDS. "Anything is on the table. They come up with things that might make you say: 'Well, that's just crazy.' But why not go crazy? We cannot settle for the status quo."

The Studio became a twinkle in the eye of UD experts in 2018, the year Laurel got a makeover. Located along a tributary of the Nanticoke River, the Sussex County town had long struggled with flooding. So Jules Bruck, then a professor of landscape architecture at UD, designed a constructed wetland and other green infrastructure to mitigate the problem, and the plans helped Laurel secure much needed grant money from outside sources. Once these designs were implemented, Bruck turned to Lewandowski, her partner on the initiative.



"If we can do this for Laurel," she told him, "we can do this for other small towns."

After collecting input from a variety of stakeholders, the colleagues curated an interdisciplinary team of Blue Hen student designers, researchers and engineers, and CRDS was born. To date, the group has completed designs for eight Delaware projects, ranging from a riverfront park in Claymont—recently awarded \$1.5 million from the Bezos Earth Fund to support enactment—to new dune vegetation in Fenwick Island State Park. Each has proven catalytic in securing necessary funding, and all are in various stages of implementation.

"We are looking at things extremely holistically," says Zachery Hammaker, senior instructor of landscape architecture at UD as well as incoming director and principal with CRDS. "We analyze a problem from a social, geological, physical, cultural, historical—you name it—standpoint. We want to ensure our designs are dynamic in their solution."

Consider the town of Frederica, where residents had been struggling to find outlets for recreation and healthy food. The CRDS team conceived of the municipality's now robust farmers' market featuring musical performances and wellness programming. In 18 weeks, the Tidal Market netted more than \$46,000.

"The projects are real, and they have value," says Emma Ruggiero,

ANR18, 21M, former participant in CRDS. "It's an amazing learning experience."

CRDS students commit to 40 hours per week during their summer and winter breaks and, during this time, the Studio thrusts them into greater identification with on-the-ground challenges of a real-world setting—from navigating permitting issues to dealing with potentially difficult clients or peers.

"This goes way beyond a hypothetical classroom experience," says Eric Bardenhagen, associate professor of landscape architecture and director of the landscape architecture program. "When we bring together students from a variety of disciplines, they cross-learn. They may not become experts in those other fields, but they learn how to speak to experts in those fields, and this mimics what happens in the profession."

One recent project that required much collaboration centered on Little Creek in Kent County. For this underserved riverfront community, CRDS created a master plan to bolster the safety, economic security and outdoor enjoyment of residents. Then, they worked with policy scientists from UD's Institute for Public Administration to amend the town's code book to allow for such upgrades.

The vision, still being implemented, includes crosswalks, a dog park, micro retail village and, to mitigate flooding, a new park system underpinned by restored wetlands. When researching the





latter, the team discovered a previously unknown—and extremely problematic—tile drainage system.

"So we played the part of private investigators as well as designers, which was really fun," says Leigh Muldrow, AS01, ANR22PHD, a former participant in CRDS. "It was also really hard. You have to be willing to go to the town meetings, to stand for the tough questions. The experience is a roller coaster and, for me, it solidified: Yes, this type of holistic design is the direction I want to take my career."

But it's not just the students who benefit from this type of partnership. The towns receive professional-grade designs that can solidify a community's vision for their future. This jump starts their ability to apply for grants or to use their limited resources to hire professional firms.

Take the Kent County fishing village known as Bowers Beach. Members of CRDS spent three days visiting the site, speaking with members of the community about its most pressing problems. These include the loss of critical dunes and beachfront, a dying protective marsh, flooding, a town center in need of revitalization and the ever-decreasing depth of the MurderKill River, a crisis for area fishermen. Then, the students completed hundreds of hours of research: dredging up aerial photographs to track topography changes over time, conducting water flow analyses using specialty software.

In the end, they conceived of a comprehensive plan involving strategies both big (dune and marsh restoration) and small (new bathhouses).

The work, which took home a national award for excellence from the American Planning Association Sustainable Communities Division, will now undergo a technical review from state agencies.

"I would have the students back in a heartbeat," says Ada Puzzo, ANR99, Bowers Beach mayor. "I prefer them to the professionals. I wasn't looking for limitations—I wanted someone willing to hear us and come up with something new, and that's what they offered."

According to Puzzo, the work has probably saved her fishing village around \$75,000, but, in a way, the financial piece is secondary to another unlikely outcome. Even more important for the residents of this small town—and so many others like it—is the validation that they haven't been forgotten. That their problems are crucial. That someone is listening.

Lifting the spirit of a community? That can't be quantified.

"We all understand that we're not going to fix these issues tomorrow," Puzzo says. "But now we know it can happen. Now, at least, we have something to look forward to."



# 302 PROUI

The gravitas of the Delaware jersey—with the name of the First State emblazoned across the hearts of 700 student athletes—is not lost on Athletic Director Chrissi Rawak.

"I've always believed that there's nothing bigger, nothing more important than the team," she says. "So much of what we do is for the 302. That's the beauty of athletics. We bring people into our community in ways that foster connection and pride."

So, when the Fightin' Blue Hens appear on local, regional and national stages, from lacrosse championships to NCAA basketball tournaments, Rawak wants each player to know exactly what they represent.

In 2023, athletics, admissions, government relations and alumni relations partnered with 22 Delaware businesses and organizations to launch the 302 Tour. The annual, immersive, three-day excursion included 21 statewide stops connecting UD's student-athletes with the wonders that exist beyond campus walls: oyster breeding in Lewes, an aquaponics farm in Dover, visits to agricultural and healthcare industries in Sussex County, a clean-up along the Wilmington Riverfront. In one of the most impactful stops, students even walked the hallowed grounds of Dover Air Force Base, where American service members are flown after perishing overseas.

It's an enriching education into all things Delaware, with the goal of exposing students to projects and opportunities that may keep them in the 302 long after graduation. It's also a way to form partnerships that ultimately strengthen and enhance the state.

That could mean Avelo, the state's new airline, awarding more than 60 free flight tickets at UD games, with more to come in 2024. Or it could mean anchoring the 302 Tour with an only-in-Delaware "Chicken Chase 5k," held at Dewey Beach's perennial happy place, the Starboard.

For Rawak, the 302 Tour represents a larger responsibility to ask fellow Delawareans, "What are you working on? What are you trying to solve? How can we win together?"

That unified approach attracted the partnership of REACH Riverside, a nonprofit leading an unprecedented effort to transform the Wilmington neighborhood.

"Relationships are about mutual benefit," says CEO Logan Herring, who also serves as executive director for the Kingswood Community Center. "The 302 Tour flips the paradigm of how to partner, collaborate and bring the campus to the community rather than the community to campus. I love the energy."

-Artika Rangan Casini, AS05





# Q+A DAVE SOKOLA

DAVE SOKOLA, HS77, played soccer and studied physical education at UD. He worked as a avm teacher, steelworker and longtime lab technician for DuPont before finding his calling in politics. Over the past three decades, Sokola has represented Delaware's 8th Senate District (which includes Newark), and in 2021, he was elected by his peers to serve as President Pro Tempore of the Senate. Here, the parttime beekeeper and indoor spin instructor discusses his full-time interest in Delaware legislation.

#### As a novice beekeeper, do you find any parallels between your hobby and profession?

There's a lot of teamwork in the political arena, and bees are the ultimate team. So many different things must be done in the hive to keep it strong and defend against diseases and predators.

#### What did playing soccer at UD teach you about teamwork?

A good team has good offense, good defense, good goaltending. You use the strengths of each individual where it benefits the team the most. And so, I never made decisions alone. I've always done it with the rest of leadership, including leadership across the aisle.

#### What was the bigger rush: winning record senior year or passing the Clean Water Act?

Success in sports is a real rush. The Clean Water Act is incredibly important [legislation], but we knew it was going to happen. Sometimes those close-vote bills are the bigger rush, like my bill to add sexual orientation to our non-discrimination clause. It took six or seven general assemblies.

#### What got you interested in politics?

There was a high-profile race in my district, and I got to know both candidates. I ended up campaigning door-to-door and making phone calls for Vince Meconi, BSPA83. I guess you could say the bug bit.

#### Do constituents ever attend your spin classes to air grievances?

If there was a high-profile issue like the marijuana bill, people would ask about it, but it's not like they would pressure you. There was one exception: Medicare Advantage and whether or not the state should adopt the plan. People I'd never seen before came to my class specifically to voice their views. They're welcome to, and I appreciate input from anyone.

#### What haven't you done yet that keeps you up at night?

Having chaired education for 26 years, I've always felt Delaware needed a

far more comprehensive system of funding to get children the services and opportunities they deserve.

#### As a Blue Hen who represents the city of Newark, what are your thoughts on campus today?

I'm jealous of the soccer field! I toured the new athletics facilities, and they're amazing. I could have really benefited from it, especially the academic support. The resources are better, the programs are newer, but there's still the old charm. I'm glad to have UD in my district—it wasn't always.

#### How did you meet your wife, Kathy [HS78]?

At Kent Dining Hall in the fall of 1975. She caught my eye and still does. We just hit our 45th wedding anniversary.

#### What gives you hope for Delaware, and more broadly, the country?

To most Delawareans, facts matter. A lot of what we're trying to do are things you need to be able to defend, and you do that with evidence.

#### What advice would you give the graduating class?

Always be ready for change. Kids born today will work in jobs that don't yet exist. Be ready and willing to adapt your skills and interests to what's out there.

