

Fall 2019

# JMBC

MAGAZINE

## A Day in the Life of a Student Teacher

Nine current Sherman STEM Teacher Scholars and 13 alumni are learning and leading in classrooms across Baltimore City. We follow along with one of these aspiring educators. — page 22



# 50

## How to Become an American Ninja Warrior

This Mama's Boy and two-time American Ninja Warrior contestant shares the secrets of ninja success: It's more than grip strength—it's a mental game.

*By Kait McCaffrey*



# TABLE OF CONTENTS



## 22

### A Day in the Life of a Student Teacher

What does it take to walk in the shoes of a student teacher for a day? A lot of patience and passion.

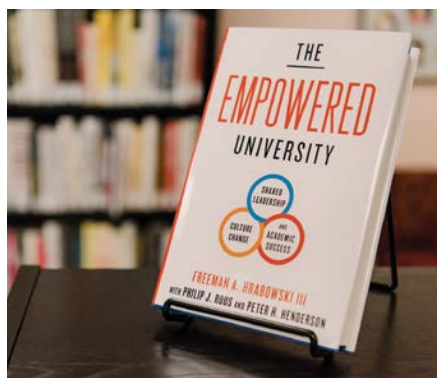
*By Catalina Sofia Dansberger Duque*

## 30

### Unabashedly Aspirational

A new book co-authored by President Freeman Hrabowski showcases the broad history and bold moments and people that have made UMBC what it is today.

*By Jenny O'Grady*



## 36

### Beautiful Dreamer

Stan VanDerBeek, who taught at UMBC for almost a decade, was more than an artist; he was a visionary who thought beyond limits and boundaries.

*By Tom Moore*



## 44

### Climate Shift

A physicist originally from Eritrea, Belay Demoz shifted his goals from cloud seeding to nurturing underrepresented students.

*By Sarah Hansen, M.S. '15*



## DEPARTMENTS

TO YOU	2
UP ON THE ROOF	3
DAWG'S EYE VIEW	4
THE NEWS	6
AT PLAY	10
IMPACT	14
DISCOVERY	18
HOW TO	50
ALUMNI ESSAY	52
CLASS NOTES	54
THEN & NOW	62
WILD CARD	64



## ON THE COVER

This UMBC student teacher starts her day bright and early, so we did too, observing her often taking one-on-one time with the more than 90 students that came through her classroom.

Visit *UMBC Magazine* online year-round at [magazine.umbc.edu](http://magazine.umbc.edu) for plenty of web extras! Thoughts, complaints, or suggestions about *UMBC Magazine*? Get in touch at [magazine@umbc.edu](mailto:magazine@umbc.edu).

# TO YOU



Dear Retrievers,

What gets you up and out the door in the morning? Is it your cat meowing or a child bouncing noisily across the hall? Have you positioned your alarm clock across the room from your bed to force yourself to your feet? Must you pour yourself a steaming cup of ambition—as Dolly Parton put it—before daring to hit the road?

For nearly 15 years now, I have braved a major segment of the Baltimore Beltway to get to work each day. I consider myself a professional commuter, with the mileage and mile-long audiobook list to prove it. People often ask me why I do it, and the answer is easy. My belief in this place, its people, and our work together gives me what I need to stay (mostly) chill amid the gridlock.

But my silly commute is nothing next to some of the stories of true grit we're sharing with you in this new issue. Take Belay Demoz, for example, who found inspiration in the desert conditions of his native Eritrea to pursue the study of climate—and to open up academic experiences for other students of color (page 44). Or, future educator Lydia Coley, whose student teaching with energetic third graders at Maree G. Farring Elementary School in Baltimore is already helping her to make a difference in the classroom. (They clearly adore her, as you'll see on page 22!) And then there's the late Stan VanDerBeek, whose unique vision for film drove him as a creator and a professor—leaving a legacy of inspired students wherever he went (page 36).

I also think of so many of the stories told in *The Empowered University*—the new book co-written by President Freeman Hrabowski, Provost Philip Rous, and senior advisor Peter Henderson—about the people of this university who come together to creatively solve problems big and small and make UMBC the place it is today. You can learn about a few of them on page 30.

We all have people, ideas, and projects in our lives that inspire us to do our best. The triumphs don't always come as often or as quickly as we might like, but that good old UMBC grit does keep us going as we power through. And it's better than any coffee I've ever tasted.

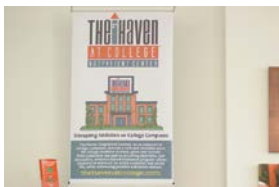
—Jenny O'Grady  
Editor, UMBC Magazine

## WEB FEATURES

See web-only videos, interviews, and more all year long at [magazine.umbc.edu](http://magazine.umbc.edu).



Teaching Kitchen Gets Students Cooking



New "Haven" for Recovery Support at UMBC



The Buzz About OCA Mocha

## OUR STAFF

### Editor

Jenny O'Grady

### Design Director

Jim Lord '99

### Assistant Editor

Randianne Leyshon '09

### News Editor

Dinah Winnick

### Photographer

Marlayna Demond '11

### Video Producer

Corey Jennings '10

### Production Coordinator

Emily Macenko

### Design Team

Layla Thompson-Koch

Dusten Wolff '13

### Contributors

Laura Cech

Catalina Sofia Dansberger Duque

Megan Hanks Mastrola

Sarah Hansen, M.S. '15

Eleanor Lewis

Kait McCaffrey

Tom Moore

Jeff Seidel '85

### Editorial Interns

Johanna Alonso '20

Kennedy Lamb '20

### Photography Intern

Arionna Gonsalves '19

### Founding Editor

Richard Byrne '86

### Administration

Greg Simmons, M.P.P. '04

Vice President, Institutional Advancement

Lisa Akchin

Associate Vice President, Engagement

Miriam Tillman

Assistant Vice President, Marketing & Creative Services

For information on the Alumni Association, please visit [alumni.umbc.edu](http://alumni.umbc.edu) or call 410-455-ALUM.

For information on giving to UMBC, please contact the Annual Fund at 410-455-3377 or visit [giving.umbc.edu](http://giving.umbc.edu).



# UP ON THE ROOF



UMBC educates students and has this approach of inclusive excellence, that's exactly what would allow us to flourish and serve Montgomery County better than all the institutions here in Maryland, I believe.

**UMBC Magazine:** *And what has your experience been like, Meggy?*

**Meggy Kreysa:** Well, in high school it was my dream to go to Montgomery College first, and I was planning on getting a couple of associate's degrees and then transferring to get my bachelor's. I transferred into College Park and I was studying to become a secondary education teacher for social studies...but the classes were so large. It was very difficult for me to network with people, and it was hard to actually understand the information from the instructors because the class sizes were just so large.

So, I went to an open house at Shady Grove, and I went through the psychology program for undergrad. It was such a wonderful experience because the class sizes are so small, and it was so easy to make friends and network with your professors.

**Wayman:** One thing that makes Shady Grove special is that the campus is wholly populated by transfer students. And to underscore what Meggy said, I think there's a level of comfort there. A lot of students are working, and they have various reasons why the traditional four-year institution may not have been the path that they wanted to go. And so, there's just a comfort level. And the services are positioned for the transfer population, so the really hands-on, close connections make it a unique place for students.

**Kreysa:** I have connected with so many people in my program, and it really does feel like we are in a cohort together, working together so that we can bring each other success. With the friends that you make in the program, it seems like they will be lifelong friends, and you'll work together in the future, and you'll always have that connection.

*Learn more about UMBC at the Universities at Shady Grove at [shadygrove.umbc.edu](http://shadygrove.umbc.edu).*

*Pictured (L-R): Wayman, Hrabowski, and Kreysa.*

*For more than 20 years, UMBC and eight other University System of Maryland Schools have offered unique opportunities for transfer and graduate students at the Universities at Shady Grove (USG) in Montgomery County. Today, UMBC's presence at USG is expanding with the opening of a new Biomedical Sciences and Engineering (BSE) Education Facility and the growth of programs that will infuse the state with graduates ready to take on Maryland's most exciting emerging industries. We invited current Shady Grove master's student Meggy Kreysa '16, psychology, who is now studying industrial/organizational psychology, and Annica Wayman '99, mechanical engineering, associate dean for Shady Grove Affairs, who heads the Translational Life Sciences Technology Program and the Professional Master's Program in Biotech, to share the impact of UMBC's programs at Shady Grove.*

**Freeman Hrabowski:** Let me just start broadly. It's important for our alumni and the campus to appreciate the important role that Shady Grove plays in the economy of the State of Maryland. It is in a very powerful county in our state with thousands and thousands of well educated people and others who want to

become well-educated. As a public research university, we have a special responsibility to make sure we are serving the citizens throughout the State of Maryland and beyond.

The other point I would make is that Montgomery College is one of the best community colleges in the country, and Montgomery County Public Schools is among the best school systems. And so, from a selfish point of view, being in Shady Grove allows us to recruit some of the most talented people anywhere. So, whether we're talking about the tech industry or talking about social sciences and policy, we are building programs constantly. And we're excited about new people we are recruiting, both students and phenomenal colleagues.

**UMBC Magazine:** *Dr. Wayman, what are you most excited about at Shady Grove?*

**Annica Wayman:** So, I live in Montgomery County, and what I love about my position is it puts some of my favorite things together—Montgomery County, UMBC, and translational science. Even though I lived really close to Shady Grove, I didn't know much about it. And I actually found out about this program by seeing the billboard about the new building going up, and that's what made me look into it more. And once I learned about the Shady Grove model and UMBC, I thought this is where UMBC really could expand. The way

# DAWG'S EYE VIEW



## TO INFINITY AND BEYOND

Actually, UMBC's first NASA-funded satellite, developed by physics professor **Vanderlei Martins** in collaboration with Space Dynamics Laboratory, is headed to the International Space Station. From there, the breadloaf-sized satellite will be released into Earth's orbit to photograph clouds and aerosols.



@NASA\_Wallops



## RETRIEVER ON THE SILVER SCREEN

**Rahne Jones '09, English**, left her position in the Department of Homeland Security to run for political office...as a high school VP candidate in the Netflix show *The Politician*.



@umbc



## A STRIKING PHOTO

Campus really shines these days, especially with an extra dose of celestial lightning.



@caleb1836\_



## SURGEON GENERAL'S ADVISORY

Just what the doctor ordered, more women in STEM coming right up!



@Surgeon\_General  
Jerome Adams '97, M4



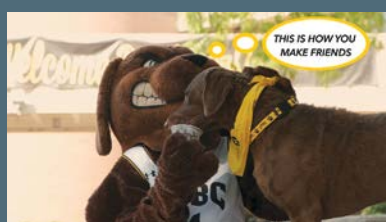
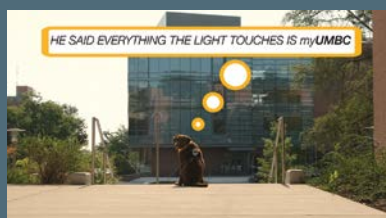
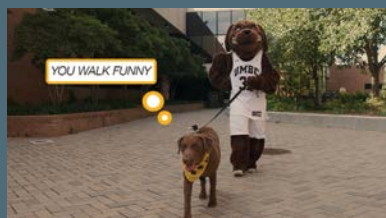
## LOOK, MOM, IT'S ME!

This totally unstaged photo just goes to show the organizational skills of our new students! Welcome to campus, class of 2023!



@UMBCpage





## LITERAL DAWG'S EYE VIEW

What does campus look like from a pup's perspective? We strapped a GoPro on our willing volunteer, Chesapeake Bay Retriever Oyster, to find out!



## CELEBRITY MAGNET

Ryan Odom's 2019 is poised to beat his momentous 2018. Meeting Steph Curry and celebrity baker **Duff Goldman '97, history**—what's next for the basketball coach?



## RISE AND SHINE!

The UMBC Women's softball team was spotted bright and early, volunteering for Baltimore's Love the Hopeful Market, a fresh fruit and produce market that provides the unhoused population with access to free healthy food options.

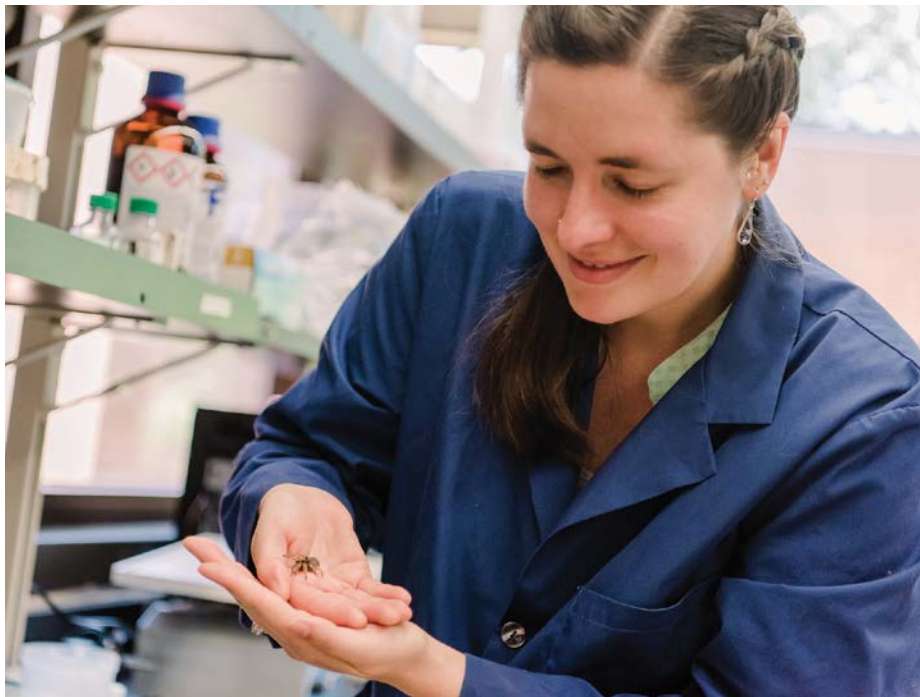


## WHAT'S YOUR VIEW?

Share your Retriever perspective on social media using the hashtag #dawgseyeview, and your image could be included in a future issue of *UMBC Magazine*!

# THE NEWS

## Sticky Situation



This summer, UMBC postdoc **Sarah Stellwagen** and the Army Research Lab's **Rebecca Renberg** published the first-ever complete sequences of two genes for spider glue—a sticky version of spider silk that keeps prey stuck to a web.

The story stuck in the web as well, becoming one of UMBC's most viral stories ever following a Reddit AMA (Ask Me Anything) session

that garnered more than 2.5 million impressions and 50,000 upvotes from scientists and spider lovers of all ages.

The innovative method Stellwagen and Renberg employed could pave the way for others to sequence more silk and glue genes, which is challenging because of the genes' length and repetitive structure. Understanding these genes better could lead to the next big

advance in biomaterials because spider silk is known for its unusual combination of tensile strength and flexibility.

There are more than 45,000 known species of spiders, each of which makes between one and seven types of silk. However, despite many partial sequences, only about 20 complete genes have been sequenced. "Twenty pales in comparison to what's out there," Stellwagen says.

Stellwagen sees great potential for spider glue applications as safe, organic pest control. She imagines it could protect livestock and humans from discomfort and disease and crops from hungry bugs. After all, Stellwagen says, "This stuff evolved to capture insect prey."

At 42,000 base pairs long, the silk gene Stellwagen and Renberg sequenced "ended up being this behemoth of a gene that's more than twice as large as the previous largest silk gene," Stellwagen says. It has many repetitive sections, too, making sequencing it even harder.

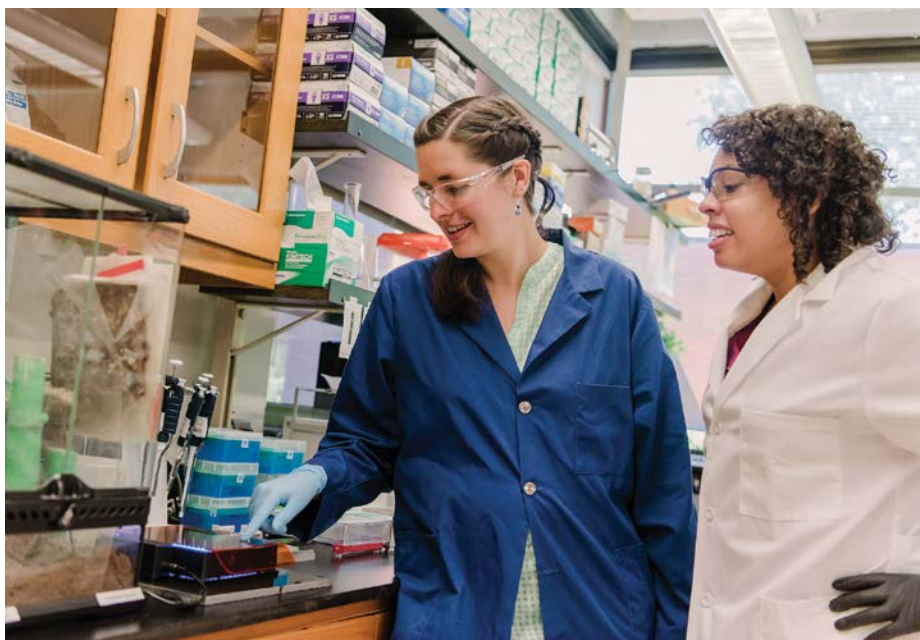
It took more than two years, and taking a risk on a cutting-edge technique, to finally sequence the complete gene.

"Third-generation sequencing" can sequence more consecutive bases (A, T, G, and C) at a time than older techniques, but it produces fewer sequence fragments per experiment. Only by repeating the difficult experiment several times do you have a chance of getting a sequence that extends the entire length of the gene's long repetitive section.

"It's challenging," says Stellwagen. "You're picking a needle from a haystack."

"I'm super excited that I was able to finally figure out the puzzle because it was just so hard," Stellwagen says. While it was a much bigger challenge than she expected, "ultimately we learned a lot, and I am happy to put that out there for the next person who is trying to solve some ridiculous gene."

— Sarah Hansen M.S. '15





## Amazing Alumni

Now in its 31st year, UMBC's annual Alumni Awards honor graduates who have accomplished significant milestones throughout a long career as well as those who inspire us with admirable achievements early on in their fields.

On Wednesday, October 2, the UMBC Alumni Association presented awards to honor these alumni for their professional and personal achievements and service to the university.

- **Kimberly Patrick '08, Music Technology:** Sound Editor, Skywalker Sound, Lucasfilm, Ltd.
- **Jerome Adams '97, M4, Biochemistry & Molecular Biology and Psychology:** Surgeon General, U.S. Department of Health & Human Services
- **Kim Shelsby '85, Geography:** Director, Supply Chain Solutions, Chemonics International
- **Paul Mangus '86, Information Systems Management:** Co-Founder and Chairman of the Board, Bart and Associates, Inc.
- **La Jerne Terry Cornish, Ph.D. '05, Language, Literacy, & Culture:** Provost and Senior Vice President, Ithaca College
- **Kelsey Krach '14, Anthropology:** Product Manager & Designer, Fearless (Rising Star Award)
- **Beverly Bickel, M.A. '94, Instructional Development Systems, Ph.D. '05, Language, Literacy, & Culture:** Clinical Associate Professor, UMBC, Language, Literacy, & Culture; Affiliate Associate Professor, Gender, Women's, and Sexuality Studies (Outstanding Faculty Award)

"This outstanding group of award winners are leading the way for others and making an impact on all facets of our society and on the local, national, and global stages," says **Stanyell Odum**, director of Alumni Engagement.

— Randianne Leyshon '09

## Peace of Mind

Today's 18- to 24-year-old college students are expressing anxiety, depression, suicidal ideation, and other related disorders at rates higher than previous generations, according to recent studies. That's why UMBC takes a holistic approach to its health services with additional preventative and new support resources for its students.

"We've begun integrating health and counseling with the goal of treating the whole person," says **Kim Leisey**, UMBC associate vice president for student affairs. "We know some mental health issues manifest physically and vice versa, so our University Health Services (UHS) and Counseling Center staff work together to help students who may need support from both a physical and emotional perspective."

The integrated approach will continue to expand and be implemented in a new combined health and counseling building, scheduled to open in 2021. In a step beyond the traditional offerings, UMBC also became the fourth U.S. university to add a trained comfort dog to its list of holistic services for students when Chip, a floppy-eared brown Labrador, joined the UMBC Police Department in fall 2019. The University's Community Resource Sergeant, **Jamie Cheatem**, serves as the dog's handler and says that one of Chip's roles is to provide comfort to students during times of crisis



and also during stressful periods during the academic year.

The Haven at UMBC is part of a partnership between the Division of Student Affairs and The Haven at College, the leading national provider of treatment services and recovery support for college students with substance use and co-occurring disorders. At UMBC, Haven includes a recovery residence and outpatient center in separate locations near campus as well as mentoring and monitoring programs.

Student peer health educators also assist in educating fellow students on a variety of physical and mental health issues. "Being able to go into the UMBC community and talk about various behaviors and topics that impact students' health is incredibly meaningful," says **Olivia Hardy '20, health administration and policy**, who works as a peer health educator.

"I love being able to actively contribute in minimizing students' knowledge gaps," Hardy continues. "We're by no means professors or graduate students or staff—and in that, I think that we aren't daunting. We're just people students see in their classes, excited to help in any way we can."

Other campus resources dedicated to supporting students and other community members include the Women's Center, The Mosaic: Center for Culture and Diversity, the Behavioral Risk Assessment and Consultation Team, and Athletics' new #RetrieverProject, which works closely with student-athletes to help break stigmas associated with mental health through education and support.

**Bruce Herman**, UMBC's director of health and counseling, adds that campuswide involvement is critical for the university to address the growing need for student support services. "We have to see this work as not just about treatment but instead about co-creating an environment that supports students and their health, including mental health."

— Eleanor Lewis

# THE NEWS

## Open Space, Open Minds

This fall, Retrievers set foot in UMBC's new Interdisciplinary Life Sciences Building (ILSB) for the first time. There, they may be inspired by the eye-catching art installation, find a quiet nook to study, or work together in open-concept research labs with floor-to-ceiling windows overlooking new pocket gardens and curving pathways. The new facility offers features that set it apart as a space for learning and set up students and faculty for transformative moments of discovery.

At our Shady Grove campus, another new building—the Biomedical Sciences and Engineering (BSE) Education Facility—opened its doors, as well. In the spring it will offer students new opportunities for study in the health care, biosciences, engineering, and computational science fields.

Together, they represent new ways of thinking about how we teach, learn, and explore new ideas.

“The ILSB provides an unprecedented opportunity to have researchers who are intellectually next to each other also be physically next to each other,” shares **Greg Szeto**, associate professor of chemical, biochemical, and environmental engineering (CBEE). “When you share a kitchenette with a biologist, a chemist, an engineer, and somebody from public policy, it's inevitable that new things will brew.”

Szeto is part of the new Translational Center for Age-Related Disease and Disparities, or TCARD2, an initiative led by **Chuck Bieberich**, professor of biological sciences. Bieberich's lab focuses on cancer biology, and Szeto works on cancer therapies that leverage the immune system. “When we bring our two approaches together, hopefully it will lead to new research, new papers, new grants,” and new cancer treatments, Szeto says.

Faculty in the new Interdisciplinary Consortium for Applied Research in Ecology and Evolution, or ICARE2, are also taking up residence in the ILSB. **Tamra Mendelson**, professor of biological sciences, leads the initiative. It also includes faculty in CBEE, geography and environmental systems (GES), and marine biotechnology. The goal is to bring together people with varied expertise “to build a powerful network of people to collaborate on training graduate students, solving environmental problems relevant to Baltimore, and building out UMBC's focus on ecology,” says GES professor **Chris Swan**.

**Bill LaCourse**, dean of the College of Natural and Mathematical Sciences, which administers the building, is thrilled to see it come to life.

The decade-long planning, design, and construction process “really epitomized the ethos of UMBC, involving the input and collaboration of people across the university,” he shares. “To see it evolve from a germ of an idea to the magnificent building we see today is a tribute to UMBC's strength in the life sciences and commitment to student and faculty success.”

— Sarah Hansen, M.S. '15

*Right: Community members gather for the ILSB opening ceremony under Volkan Alkanoglu's brightly-colored artwork INFLIGHT.*

*Left: Attendees gathered in the BSE Education Facility's open atrium to celebrate the opening of the building.*









# AT PLAY

## Coaching Connections



Any new coach at any college will want to make changes. New UMBC women's basketball coach **Johnetta Hayes** hopes to do just that—but not only on the basketball court.

Hayes comes to the Retrievers from Texas Southern, where she posted a 115-73 record in six seasons and led that team to four post-season appearances, including a trip to the NCAA Tournament in 2017. UMBC is coming off a difficult 10-20 season, and Hayes is looking to turn things around on the court while creating a new culture of family within the program.

On the court, the Retrievers under Hayes will play a faster-paced game than in recent years. That is going to be a big difference. Off the court, Hayes wants the student-athletes in the program to feel the team is a family and that they can turn to teammates and others for help in any situation—regarding basketball or life.

"It's really, really important for me," Hayes said. "From the day I walked in here until now, I can see the difference. They had each other already. It's a bond they'll have forever at UMBC, and we want the four seniors to leave here in [the spring] feeling like the way we started and the way we ended was definitely different. Once they leave, they can always come back home."

Hayes said she wants to create an environment where those who played for UMBC in the past can mentor those currently playing at the school. If a student-athlete needs contacts for jobs or career advice upon graduation, they could turn to one of the former players for help in that area.

Building this, though, takes time and effort.

"They are their own sorority, and when they leave here, they [will] feel like they have something to come back to every year," Hayes

said. "I want the four seniors leaving to know every year in October, we come back. We celebrate with our families, and we mentor the young ladies who are on the team."

In an unusual situation for collegiate athletics, all 14 Retrievers are returning from last year's team. So the biggest change for the team is the arrival of Hayes and her coaching staff, who will need to get to know and understand the players.

Acting athletics director **Jessica Hammond-Graf** has noticed Hayes working hard to connect with the student-athletes, not always an easy task for a new coach.

"She's spending a lot of time with them outside of practice to get to know them...to help them grow," Hammond-Graf said. "It's not just about basketball with her. It's the larger picture and helping everybody grow and develop and become future leaders. She had to come in and recruit the players that are already here."

Senior guard **Tyler Moore** said there's no question that Hayes is driving this team and trying to adjust their outlooks on basketball and other things. Moore said the Retrievers definitely appreciate it.

"I think I can speak for my team in saying that we love how she pushes us to be better than we were the day before," Moore said. "Standards are high and we have no choice but to rise to them."

Hayes said her biggest change involved the move from Texas and getting her two young daughters (ages 7 and 4) situated. Now, they often come to where their mother works and are growing comfortable as Retrievers.

So, the new coach, staff, and players all spent the off-season working on changing the way they play and the culture around the team. Hayes wants the student-athletes to understand and deal with change in basketball and life—after all, the games don't go on forever.

"You're going to get a new boss," Hayes said. "Things will change. How do you adjust? How do you adapt? Change is good. It may not feel good at first, [but] it can be [later on]."

—Jeff Seidel '85

*"I think I can speak for my team in saying that we love how she pushes us to be better than we were the day before. Standards are high and we have no choice but to rise to them."*

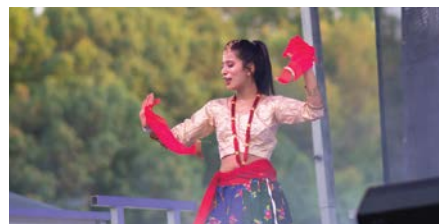
—Tyler Moore, Senior Guard



## Cultural Showcase

In the fourth year of this highly anticipated event, UMBC's cultural and ethnic student organizations rocked the Quad with colorful and energetic performances. Students took to the stage to share traditions and meaningful expressions of cultural creativity. Pangea is a student-led event, designed to help connect new Retrievers while also celebrating the diversity of our campus population.

*Photos by Arianna Gonsalves '19*



## Car Talk

In a chemical engineering lab, students huddle around a bench layering aluminum foil and steel wool together to build a battery. Another group pipettes solutions into a pressure vessel to test various reactions. The end result of the students' experimentations will be two autonomous shoebox-sized vehicles that are powered by chemical reactions. Think of your second-grade volcano project, but the baking soda and vinegar "eruption" is happening inside an enclosed vessel, propelling it forward down a track.

When the UMBC Chem-E-Car chapter launched in early spring 2019, there were 10 students who came together to grow the group. Today, less than one year after they became formally recognized by UMBC and the American Institute of Chemical Engineers, there are about 30 students working together to build vehicles powered by chemical reactions, putting the information and skills they learn in their classes into practice.

Students work in three groups on two vehicle projects. One team focuses on developing the stopping mechanism that uses a color-changing reaction, the second team

works on refining a pressure-generating reaction to propel the car, and the third team develops a battery-driven vehicle.

"One car moves using a chemical reaction that produces a large volume of gas, and the gas is used to move a pneumatic motor, which is kind of like a water wheel for air," explains **Sammie Maygers '20, chemical engineering**, who is leading the group in charge of developing the stopping mechanism. "The second car is powered by a battery. We are experimenting with different chemical reactions to optimize the amount of current and voltage that we can produce to run an electric motor."

As the group was ramping up, the founding students spent the semester learning about the structure of the competitions and attended the regional competition as onlookers. **Alex Von Gunten '20, chemical engineering**, current chair of the Chem-E-Car Project, says that it was helpful for UMBC students to experience the competitions and to take note of the vehicles that other teams built. An additional

layer of pressure for competitors is that no one knows how far their car will need to travel until

a couple of hours before the race, when the judges release the specifications that the car must meet. Just before

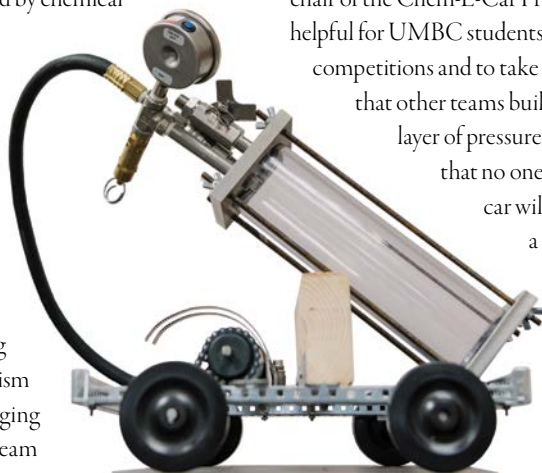
the car is set to race, the students work through a series of calculations to determine the amount of chemicals that are needed to propel the vehicle a specific distance.

**Jason Ewart '20, chemical engineering**, who is a member of the pressure team, explains that safety is a very important component of the Chem-E-Car competitions. The students who are taking part rely on the knowledge they've learned in the courses they have taken at UMBC, including the safety course that all chemical, biochemical, and environmental engineering students must complete.

The Chem-E-Car group joins a rich tradition of student organizations on campus that design and build vehicles based on skills learned in the classroom. On a human scale, UMBC's Baja SAE team builds vehicles that are driven by one student and are designed to withstand challenging terrain and weather while keeping budget, vehicle weight, and agility in mind. In the 2018–2019 season, the Baja team finished with the second highest total points in the program's 30-year history.

The Chem-E-Car team has yet to test the mettle of their designs, but they plan to compete in the regional competition at Virginia Tech in April 2020, with their sights set on advancing to the national competition.

— Megan Hanks Mastrola





# AT PLAY





## Food for Thought

Most students come to college armed with some essential life skills—make a dentist appointment every six months, don't lose your social security card, and never wash a red sock with your whites. But **Tim Dunn**, UMBC's executive chef, and **Adam Sachs**, UMBC's dietician, think we can do a little bit better. Enter: UMBC's new Teaching Kitchen.

"Most students don't have great cooking skills, so we want to help them out and teach them about how to construct a meal," says Dunn.

As part of a Chartwells higher education initiative, UMBC spent the summer of 2019 making updates to True Grit's Dining Hall to incorporate a Teaching Kitchen. Equipped with cameras and screens, the new addition gives students the skills they need to up their culinary game. Students are able to see the chef preparing meals in front of them, utilizing the screens to concentrate on the up-close action of chopping, dicing, and slicing. The scene is set with blazing lights and individual cooking stations so each student has the ability to put their own spin on the recipe.

"The method of using TVs to show the students the cooking process in real time was really helpful. I found it way more effective than if we were just being given verbal directions," says **Johanna Alonso '20, English**, of her first Teaching Kitchen experience. "We were able to look at what the chefs were doing—like how they were cutting the onion and garlic—and imitate it."

The inaugural meal students prepared at the Teaching Kitchen in September was chicken and lentil enchiladas. While the entrée was fairly simple to create, students were able to produce a meal that both looked and felt more elaborate. This was an introduction to lentils for some students, and the nutritional value and cooking process of the legume was a valuable kitchen skill to learn.

"We want to help students create meals that are easy to cook but also well-rounded and full of nutrients," explains Sachs.

Ease and nutritional value are definitely factors that Sachs and Dunn look at when deciding their menu for the Teaching Kitchens. But they also want to incorporate seasonal favorites and support local vendors. The October menu included salsa made with pumpkin, the designated campus superfood and a fall favorite.

Sachs and Dunn both went to culinary school at Johnson & Wales University in Rhode Island, so perhaps their close partnership was destined for success.

"During the Teaching Kitchen, it's a lot of going back and forth. I talk about what ingredients we're using and what the nutritional benefits are, and Tim demonstrates prep techniques and the execution," Sachs explains. "We are helping students in real time as things constantly change."

The duo doesn't expect that students will show up ready to make a "Top Chef" appearance. To lay a proper foundation, they start with the basics—knife skills and technique.

As the program grows, Sachs and Dunn hope to add cooking competitions, visits from professionals in the food industry, and integration with various campus organizations. Students who were part of the pioneer Teaching Kitchen walked away eager to put their newly learned skills to the test—and like any good UMBC student, they were ready to share.

"I'd definitely make these enchiladas for my roommates sometime. And really, I want to try to make some of the other recipes in the cookbook they gave us. I'm already looking forward to the next Teaching Kitchen," says Alonso.

—Kait McCaffrey



# IMPACT

## The Legacy of a Lifetime



Rarely has someone other than a charismatic president, a beloved mascot, or record-breaking athlete left such an impactful legacy on a campus as UMBC's **Jim Milani** did. Known for his gregarious personality and enthusiasm for all things Retriever, Milani poured 45 years of his life into a campus only 53 years old.

When he passed away in June 2019, Milani '73, political science, was the assistant dean of administration and operations in the College of Engineering and Information Technology (COEIT), but that was only the last of many positions he filled on campus over the years: student, donor, lacrosse fan, academic advisor, coach, founding member of the professional staff senate, impromptu tour guide, director of administration.... The list stretches on because Milani devoted an entire lifetime to this institution with special allegiance to the Women's Lacrosse team.

Milani's daughter, **Beth Milani Brundage '02, history**, his sister-in-law **Jacqueline Abendschoen Milani '88, psychology**, and his niece **Meghan Milani '16, psychology**, are all lacrosse alumnae. In 2017, Milani, his wife **Elizabeth**, and his sister **Patrice**, established the Milani Family Endowment. The endowment was established to name the Women's Lacrosse locker room and provide annual support to the UMBC team.

A colleague and friend in COEIT (who has almost been here as long as Milani), **Catherine**

**Bielawski '77, American studies**, says that Milani was always intent on doing the right thing. One of the most common phrases she remembers him using in the four decades that their paths intersected on campus was: "What is the best course of action for everyone involved?"

"Jim was warm and caring," says Bielawski, COEIT assistant dean of undergraduate student services. "He was a great ambassador for the university, and his faithfulness to this place is evident in his legacy."

**Charles "Tor" Woolston** started working at UMBC as director of admissions and registration in 1968, a year before Milani arrived as a student. Although he was unaware of this at the time, Woolston points out that he would have been the final approval on Milani's admission to the university—starting a chain of events that would allow Milani to meet his wife and become an ardent champion of UMBC.

Their tenures at the university would overlap for many decades, and Woolston remembers Milani as relentlessly upbeat. "He was so positive, and so positive about UMBC—it reinforced your belief that this was a really special place."

There is no way to succinctly recap four-and-a-half decades of dedication, but Woolston does his best: "Jim stuck around to make a difference. And you can't have a better legacy than that."

—Randianne Leyshon '09

## Setting the Bar

As a student in Towson High School's Law and Public Policy program, **Randall Ainsworth '19, history and philosophy**, created a peer mentoring program for other young African American men in the predominantly white school. Ainsworth saw the need for a support system for students who were struggling to succeed as they dealt with violence and poverty at home and then were placed in an environment that expected them to conform. The group sought to overcome their circumstances through mentorship, brotherhood, and community service. Their motto, Ainsworth says, was, "Once you've been restored, go back and restore your brother."

After a four-semester internship with Chief Judge **Wanda Keyes Heard '79, political science**, of the Circuit Court for Baltimore City, 8th Judicial Circuit of Maryland, Ainsworth has wrestled with what restoration might look like for each person making their way through the criminal justice system. In his first semester, Heard handed him a thick file for someone in prison. His task was to review a request to have a sentence reduced.



"Just so you know, this is a real person. You have to look through here, see what his record is, and tell me what to do," the judge told Ainsworth, he recalls.

These types of hands-on tasks with real-life application are par for the course for an internship with Heard. In her 20-year career as a judge, she's mentored 26 interns from UMBC alone.

Ainsworth says that Heard has been instrumental in holding open the door for the next generation of lawyers and judges. "She has, like, an army of little children, just all over the place, doing good work."

Read more of Ainsworth's story at [magazine.umbc.edu/setting-the-bar](http://magazine.umbc.edu/setting-the-bar).

—Randianne Leyshon '09



## Baltimore Bonds



If you had the chance to interview someone you look up to, what would you ask? **Sydney Frye '22, psychology**, had the opportunity this fall when she sat down for a chat with fellow Sondheim Scholar **Alicia Wilson '04, political science**. (The Sondheim program is celebrating its 20th anniversary this year, by the way!) Fryer came ready to find out more about Wilson and her trajectory from growing up in Baltimore city to being a Retriever (and winning a prestigious Truman Scholarship), to becoming vice president for economic development at Johns Hopkins University.

***Sydney Fryer:** I, like you, am a Baltimore girl. The city has changed a lot since I was a child. What is your view about all the development that happened over the years in Baltimore?*

**Alicia Wilson:** Growing up in Baltimore, I'd hear about development projects at Harbor East, but I didn't have any real concept of what it meant other than brick and mortar. Development is complicated; historically, development has been about the building of buildings rather than the building of community.

But the reality is, there are local people living adjacent to those developments, and they should be part of the calculation of how we design, create, and impact the existing landscape. As we think about development in the city, we always need to keep an eye on what is good for the people.

I think everyone agrees vacant homes need to be developed. Life needs to be developed. Things need to be developed. Even if they were great at their time, things evolve. Cities evolve. The needs of people evolve.

***Fryer:** What are some things college students can do to help the state of things when we find they are not up to code in our city?*

**Wilson:** Students have the luxury of time, passion, and resources. You're in a place that allows you to look at a problem, learn about it, and have a great amount of time to figure out how to solve it. Students have a huge role in changing things and shaking it up. Don't diminish the power your youth and ability have to bring forth a new, fresh perspective on things people have been looking at for years.

Pick the problem you are passionate about and apply what you are learning about. Make the uncomfortable statements. Learn through the process. Take a position and advocate; be open to having your position challenged and shifted to get the results you want.

***Fryer:** Is being a public servant hard?*

**Wilson:** There are enormous challenges out there, but I find joy in serving. You have to take the time to replenish yourself. Many times you will want to solve everything with a sense of urgency because you believe the work demands it. But the reality is, you need to be a soldier in that fight for a long time. You can't burn yourself out at the expense of a cause. You have to pace yourself.

***Fryer:** How did being a Truman Scholar shape your journey?*

**Wilson:** Being a Truman Scholar really opened me up to thinking about how I see issues in my community on a much more national/global scale. Food deserts aren't just about being very neighborhood-centric. It's about what happens on the national scale and what happens on the global stage that allows food deserts to happen in Baltimore. We have to see the interconnectedness between our plight here and the plight of people in rural America and across the world. The Truman Scholarship gave me a big platform to work on these issues and help create positive change for all people in our country.

***Fryer:** What was the greatest takeaway from all of your education?*

**Wilson:** My time at UMBC was blessed because I was able to be friends with and be mentored by Walter Sondheim. He was vibrant with passion, vigor, and intellect. Walter was thoughtful about how he was going to contribute to the city and the world in a way, I think, which would ignite young people today. He didn't have a self-serving agenda. He was pure about being effective in the world.

I think understanding how to live with purity in service to others was something that gelled at UMBC, which I think has been helpful.

— Catalina Sofia Dansberger-Duque

### Campaign Corner

To date, UMBC's Grit & Greatness Campaign has raised more than **83% of the total goal\*** to Make Big Breakthroughs, Forge True Partnerships, and Transform Lives.

Raised through October: **\$123.9 million**

Total goal: **\$150 million**

Learn more at **giving.umbc.edu**

*\* As of October 31, 2019*

# IMPACT

## High-Tech Gift Harnesses Data for Athletes

When UMBC Men's Soccer Coach **Anthony Adams** traveled to Canada for a former player's wedding, he didn't expect to come away from the trip with a significant donation to the team. But then again, he wasn't all that surprised; his players usually find ways to give back.

The gift came from **Liam Paddock '12, psychology and sociology**, who played soccer at UMBC from 2009 to 2012. After catching up with Adams at the wedding of teammate **Milovan Kapor '13, economics**, Paddock asked if there was anything the team needed—after all, UMBC Men's Soccer had made a huge impact on his life. “They backed me in hard times, connected me with the right people, and continued to give me opportunities throughout my years there,” he says. “So, now that I'm in a position to, giving back to UMBC Men's Soccer makes sense.”

Adams immediately thought of the VX System, a wearable piece of technology that helps players track their movements and their heart rates. Adams hoped to get his hands on the technology to better train his athletes.

“As much as we can, we want to be on the cutting edge. Science is a big part of sports, and this is information we didn't have in the past,” Adams explains. “Monitoring systems [were] just the next logical step for us.”

The VX System, and others like it, has become invaluable to many soccer teams because it can be used to foresee possible injuries, says Adams. This technology, which players don under their jerseys during practice and games, lets coaches see important pieces of performance data, all of which are presented via simple, comprehensive metrics on the system's custom software. An unusually high heart rate, for example, can indicate that a player may be fatigued and at greater risk for a muscular injury.

**Ryan Becher '23**, a midfielder, used the VX System as a part of another team, prior to coming to UMBC. “The training staff noticed my numbers were getting lower, so they started

to talk to me,” he remembers. He ended up having some back problems and being unable to play for two months, but he believes the situation could have gotten much worse if his coaches hadn't known to intervene so early.

On top of aiding with injury prevention, the VX System also helps players improve their gameplay. Though the UMBC team has only been using the technology since the start of this season, Ryan's brother and fellow teammate, **Jackson Becher '22, psychology**, has already found these functions useful. “We get my max heart rate, how fast I'm sprinting, how often I'm sprinting, and how far I'm running,” he says. “So being able to look at that makes it easier for me to understand where I need to be and what I need to do to improve.”

Adams says that giving back is part of the soccer team's DNA, and the coach doesn't shy away from asking alumni to pitch in. This past season, the team needed a new couch for their locker room but didn't have the money to buy one. Adams sent out an email to soccer team alumni and, within 30 minutes, three alumni had replied, collectively donating enough to cover the cost of the couch.

But this relationship with alumni goes far beyond donations. For Paddock, the friendships he made while playing for UMBC became some of the most important in his life. “There is a genuine sense of family,” he explains. “And while I think that term gets thrown around, I feel it every time I go back to Baltimore.”

—Johanna Alonso '20

*Ryan Becher, 21, drives the ball up the field during the season's opening game against Incarnate Word.  
Photo courtesy of UMBC Athletics.*









# DISCOVERY

## 50-Foot Woman Tells All



If art is life, then **Rahne Alexander** is living hers as a collage of towering technicolor.

On stage with her bands Santa Librada and 50'♀, she conjures her musical muses—think Stevie Nicks or the Wilson sisters from Heart—leaning into the lyrics while shredding her guitar. Her hair glows purple in the spotlight.

In quieter moments, in her studio at UMBC's Lion Brothers Building downtown, she carefully de-archives her collection of hundreds of decades-old cassette tapes. (Among them is a copy of Billy Idol's 1981 *Don't Stop* she stole from a Woolworths, she says, smiling.)

She works on short films like the Marcel Duchamp/Brett Kavanaugh/Atomic Blonde-inspired "Dude Descending a Staircase" that earned her "best creative award" at an international conference of computer-human interaction in China last year. And she never seems to rest.

"I maintain a pretty high performance and art schedule, and have for a long time," says Alexander, who is pursuing an MFA in UMBC's intermedia and digital arts program as much for the community and the push to produce as anything else. "But I love making work, I love being on stage. It's exhausting, but this is what I'm here for."

All along the way—as she has for the last 16 years, at least—Alexander also writes. And

nowhere is she quite more herself than in *Heretic to Housewife*, a collection of essays now in its second run from publisher Neon Hemlock Press. Described as "the trans\* Marcel Proust," by one critic, the 10 collected essays delve into what drives Alexander as an artist.

In the first essay, "A Meditation," which she originally performed as a sort of love letter to herself at the D.C. Women in Comedy show, and later as the opener when author/actress Amber Tamblyn spoke in Baltimore, Alexander dives deeply into her personal story. In others, she un-buries the echos of traumas experienced throughout her life up to age 50. The doors haven't always been as open to her, and life has not always been as safe. But, "fear is never revolutionary," she writes, so she does not give in.

But even with the most serious topics, Alexander's wit and warmth shine through. "It was easier for me to come out as a transsexual lesbian than it was for me to come out as a witch," she jokes in a monologue about the artist Paulina Peavy.

"[She] brings a multi-faceted body of work that often touches on artists of the past in ways that mine their works for tips on how to move into the future in more critical and equitable ways," says **Kathy O'Dell**, associate professor of visual arts, art history, and museum studies. "And she does so with motivational humor—meaning, humor with edges of seriousness that prod us as viewers/participants to make decisions about where we stand on a variety of topics, from humor itself to domesticity, self-care, politics, LGBTQ issues, and many more."

If her social media following—and the fact that the first run of her book sold out in two weeks—is any indication, Alexander has amassed a dedicated fan base who can't wait to see what she does next. So, instead of resting, she presses on.

"It's a lot, but this is why I moved to Baltimore in the first place—to have an art career and to put it all out there," she says. "So these are all great problems to have."

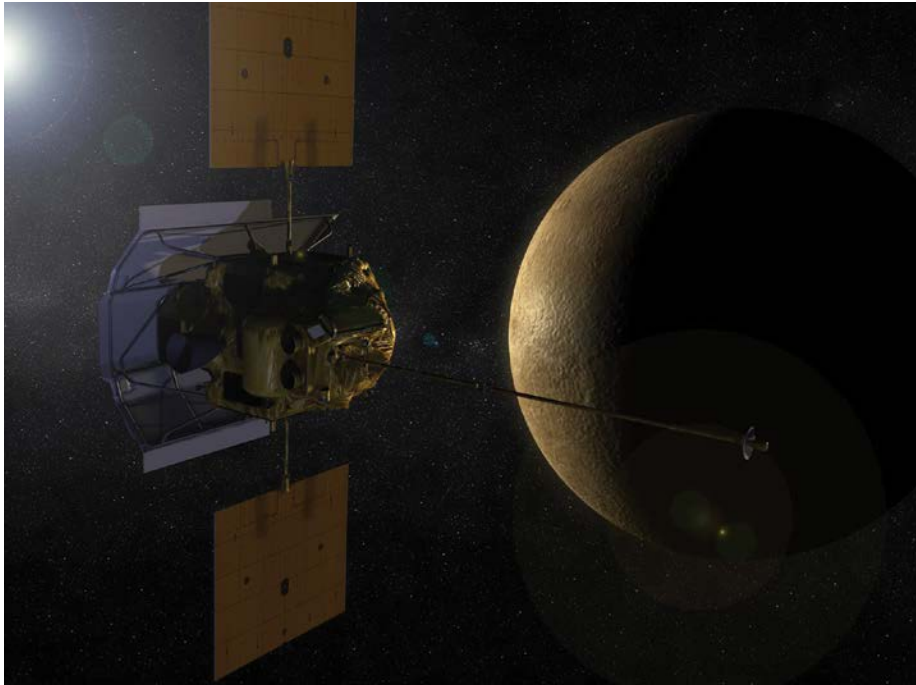
—Jenny O'Grady

*Below: Still from "Dude Descending a Staircase"*





## Unlocking Planetary Secrets



UMBC's **Sander Goossens** designed and implemented code that's helping NASA scientists better understand the evolution of planets, starting with Mercury.

He's part of a research team applying sophisticated new computer programs to data collected by NASA's MESSENGER mission, which orbited Mercury between 2011 and 2015. They've "put together a self-consistent model of the interior of Mercury," including its inner core, outer core, mantle, and other layers, explains Goossens, associate research scientist at UMBC's Center for Space Science and Technology.

The study initially sought to confirm scientists' understanding of Mercury's gravity and spin. Instruments on the MESSENGER satellite detected variations in the planet's density as they passed over its surface, to better understand its gravity. By tracking MESSENGER's location compared to the planet's surface, the scientists were also able to precisely locate its poles, which determine the axis along which the planet rotates.

Instruments on Earth had suggested measurements for Mercury's spin state—the combination of how long it takes the planet to rotate on its axis (how long each day is on the

planet—and the orientation of that axis. The Earth-based measurements confirmed that the relationship between Mercury's angles of rotation and orbit were very close to an equilibrium state but couldn't say for sure if the planet's spin was exactly in equilibrium. So when Goossens and his team's new analysis of the MESSENGER data showed that the planet is exactly in the equilibrium state, "We thought, 'Wow, this is really good!,'" Goossens says. "To be able to confirm it really is in that state was pretty exciting."

Confirming Mercury's spin and gravity opened up an opportunity to take the study to the next level. Goossens says that the team decided to "interpret the data to see if there was anything we could say about the planet's deep interior that people hadn't been able to say before because the measurements weren't good enough."

To do that, Goossens had to design new code to analyze the data in a fresh way and get at the underlying core structure of Mercury. The team was particularly curious to know how much molten metal was in the planet's core, which contributes to its magnetic field and influences how it spins.

Before this study, scientists already knew that Mercury's core occupies 85 percent of the planet's total volume and that the core was at least partly molten metal, as opposed to solid. The new analysis determined that the core was about 52 percent solid. Earth's core is only about one-third solid.

Learning more about Mercury "gives you a clue about the evolution of the planet," Goossens says. Much of the study of outer space is limited by the data we are able to collect on planets, other bodies, and events that happen extraordinarily far from Earth. So adding just one more set of observations can powerfully inform future work.

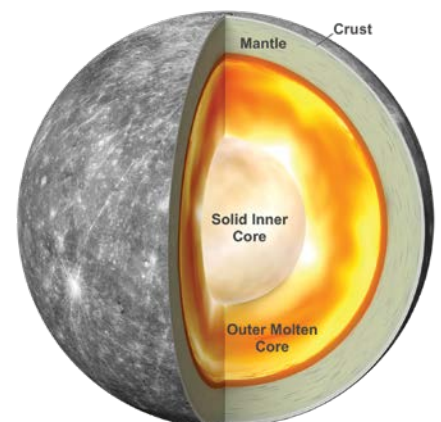
Goossens is now excited for future work that builds on previous research and takes advantage of the new findings and the new code. For example, the method has been applied to Mars before, and in fact some of the efforts of Goossens' team were based on that work. Now, Goossens would love to see the method applied to new, more accurate Mars data coming in from the InSight lander, a mission currently on the surface of Mars.

"Getting clues to Mercury's structure will help people modeling the evolution of planets," Goossens says. "It will give them better constraints to test their models and see what kind of predictions they can now make."

— Sarah Hansen, M.S. '15

*Main image: An artist's depiction of the MESSENGER spacecraft approaching Mercury. Image courtesy of NASA.*

*Below: A representation of Mercury's layers. Image courtesy of NASA Goddard Space Flight Center*



# DISCOVERY

## Keeping Pace with Theatrical Intimacy

If you've ever watched a movie with anything higher than a PG rating, chances are you've seen two actors perform an on-screen kiss. Perhaps at the time, you didn't think much about what went into staging that kiss. But in reality, staging intimacy—which includes everything from holding hands to simulated sex—can be one of the most challenging parts of producing a play.

"There seems to be a lot of opportunity for miscommunication, misunderstanding, and, in the very worst cases, abuses of power," **Chelsea Pace**, assistant professor of theatre, explains. Pace is one of the founding members of Theatrical Intimacy Education (TIE), a consulting group that helps theatre and film companies develop their best practices for staging intimacy.

"If we can make the people who are already in the room better at being in the room," Pace says, "then we're actually working towards a cultural change in our industry."

Pace originally took an interest in how intimacy was directed when she noticed directors shying away from staging intimate scenes, leaving it up to the actors to figure out for themselves. It seemed to be the only part of the creative process that didn't have a designated designer or director.

That lack of direction impacts the performance, says Pace. "Directors would just ask two actors, 'okay, do the kiss, do the make-out,'" Pace says. "And if the actors didn't know how to do that, or they did something weird, you were stuck with it."

Pace has now studied theatrical intimacy for over 10 years and has helped the UMBC Theatre Department develop their own best practices for staging intimacy since she began working here in 2017. Not only has she conducted trainings and workshops with theatre students and faculty, but she also worked with the department to develop their new Theatrical Intimacy and Instructional Touch Policy.

The policy aims to set standards for touch in the classroom, including obtaining consent and making it clear that there are alternative practices

for students who don't want to be touched.

In theatre, "there's a lot of contact," Pace says, explaining the necessity for such policies. "We have a lot of needs in this department because of what we do that you may not necessarily discover in a physics department."

One of the four UMBC shows Pace worked on last year, *She Like Girls*, featured a young woman discovering her sexuality. The show handled both moments of intimacy as well as instances of sexual violence; in one scene, a character named Andre, played by **Lloyd Ekpe '20, acting**, attempts to coerce his friend into having sex.

According to Ekpe, Pace's methods made staging such a dark moment infinitely easier. "The initial meeting with Chelsea at rehearsal was going through the best practices for touching and initiating contact, and with that comes the language of contact—the distance, the levels of touch, the lines and shapes," he explains. When it came time to stage the assault, "one thing [Pace] kept hammering into my head was: It's just choreography. It's just choreography. You're just closing the distance, you're just lifting her up here, you're just putting her down there."

Divorcing the motions of the scene from the feelings of the actor are an important part of Pace's practices for staging intimacy. "In stage combat, it's very clear that I'm not punching my scene partner in the face. When you're staging a kiss? Your faces actually go on each others faces," Pace says. "And that creates a lot of muddiness between what is real and what's just real in the scene."

Carefully choreographed intimacy helps to clear up that muddiness by creating what she calls a "container of technique" that separates the movements of the scene from real-life emotions.

All of the best practices Pace has developed with TIE and as part of her own research will soon be catalogued for others in her upcoming book, *Staging Sex*, forthcoming from Routledge Publishing. Like TIE's workshops or the Theatre Department's new theatrical intimacy policy, *Staging Sex* is yet another step in changing the theatre industry to be a more ethical and consent-driven space.

"We can do a lot [of] good if every undergraduate coming out of a BFA program across the country comes out knowing how to establish their boundaries with a scene partner...and every student director coming out of these programs starts asking actors questions about their boundaries," Pace says. "That's going to create a cultural change a lot faster than just insisting every production needs an intimacy choreographer."

—*Johanna Alonso '20*

*UMBC Alumnae Sanjana Taskar '19, acting and sociology, and Hannah Kelly '17, acting, pose for the cover of Staging Sex. Image courtesy of Shealyn Jae.*





# A DAY IN THE LIFE OF A Student Teacher

story by Catalina Sofia Dansberger Duque  
photography by Marlayna Demond '11

**“In the Sherman STEM Teacher Scholars Program, we drive home two points. One: we teach children. Two: children are people, too. It sounds simple, but we tend to forget that children are younger versions of us. Sometimes in a “STEM” program, we become fixated on the math or biology, when what belongs at the center of all we do is the students.” — Rehana Shafi, director, Sherman STEM Teacher Scholars Program**

Lydia Coley '20, American studies, has started a new adventure this semester. Twice a week she wakes up by 5:30 a.m., crosses Baltimore City, and arrives at Maree G. Farring Elementary/Middle School by 7 a.m. to do what she has been preparing for over the last three years—be a student teacher. As a scholar in the Sherman STEM program, Coley is among a group of future mathematics and science teachers who will eventually work throughout the Baltimore region and across the state, focusing on high-need schools.

She listens, observes, supports, and learns from her mentor teacher. Sometimes, this means she's in the front of the classroom or leading small groups as she begins to transition into next semester's role as a full-time lead student teacher. But what we found, when *UMBC Magazine* followed Coley for a day, was not a student but a natural leader.

Coley smiles at the beginning of the day and enthusiastically welcomes each of the ninety students she is there to support. “This is a collaborative effort. I am here to learn from my mentor and to support students, but really most of the learning comes from what students are willing to share with me. They are also my teachers.”

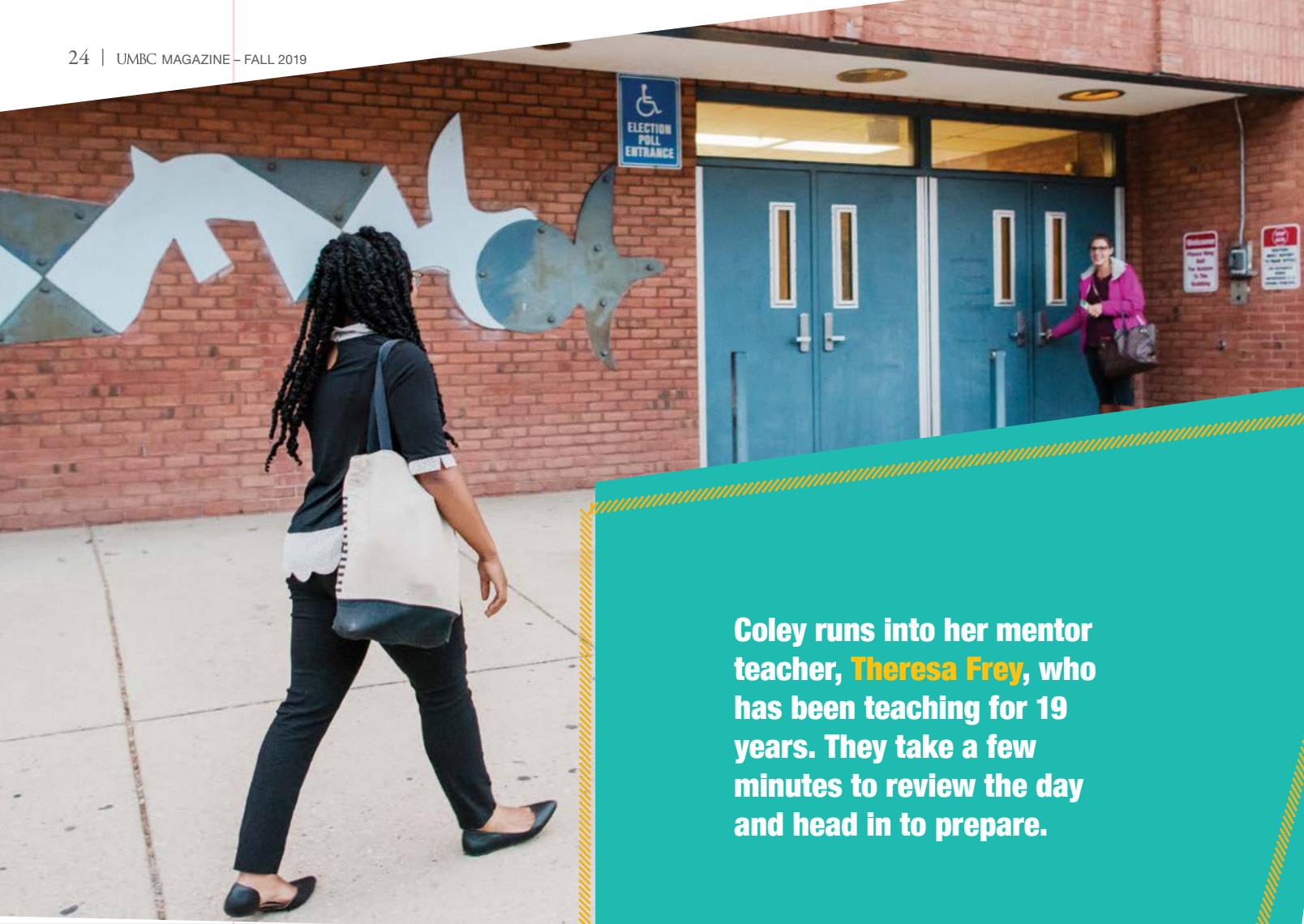


7 a.m.





It is 7 a.m. and **Lydia Coley '20, American studies**, a first semester student teacher at Maree G. Farring Elementary/Middle School, smiles at her day ahead. Her duties include supporting students while her mentor teacher leads lessons and, when possible, leading parts of lessons in small groups.



Coley runs into her mentor teacher, **Theresa Frey**, who has been teaching for 19 years. They take a few minutes to review the day and head in to prepare.



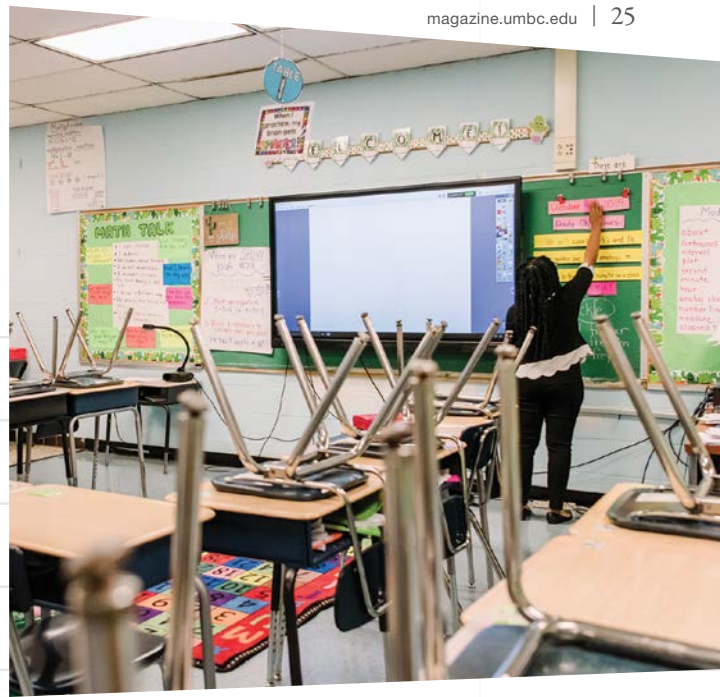
## SIGN-IN

Coley signs in at the office and makes her way to her classroom. Marce G. Farring is 23% English language learners. Many students' first language is Spanish.



## PREP TIME

It's preparation time! Coley finalizes the details as she changes the date and takes note of the objective for the day. The cactus theme of the classroom encourages students with signs like "Looking Sharp" and "We Are on Point." Coley's classroom has about 30 students in each of the three blocks throughout the day. She helps the first mod by putting all the chairs down for them because soon the students will come in with breakfast baskets and books.



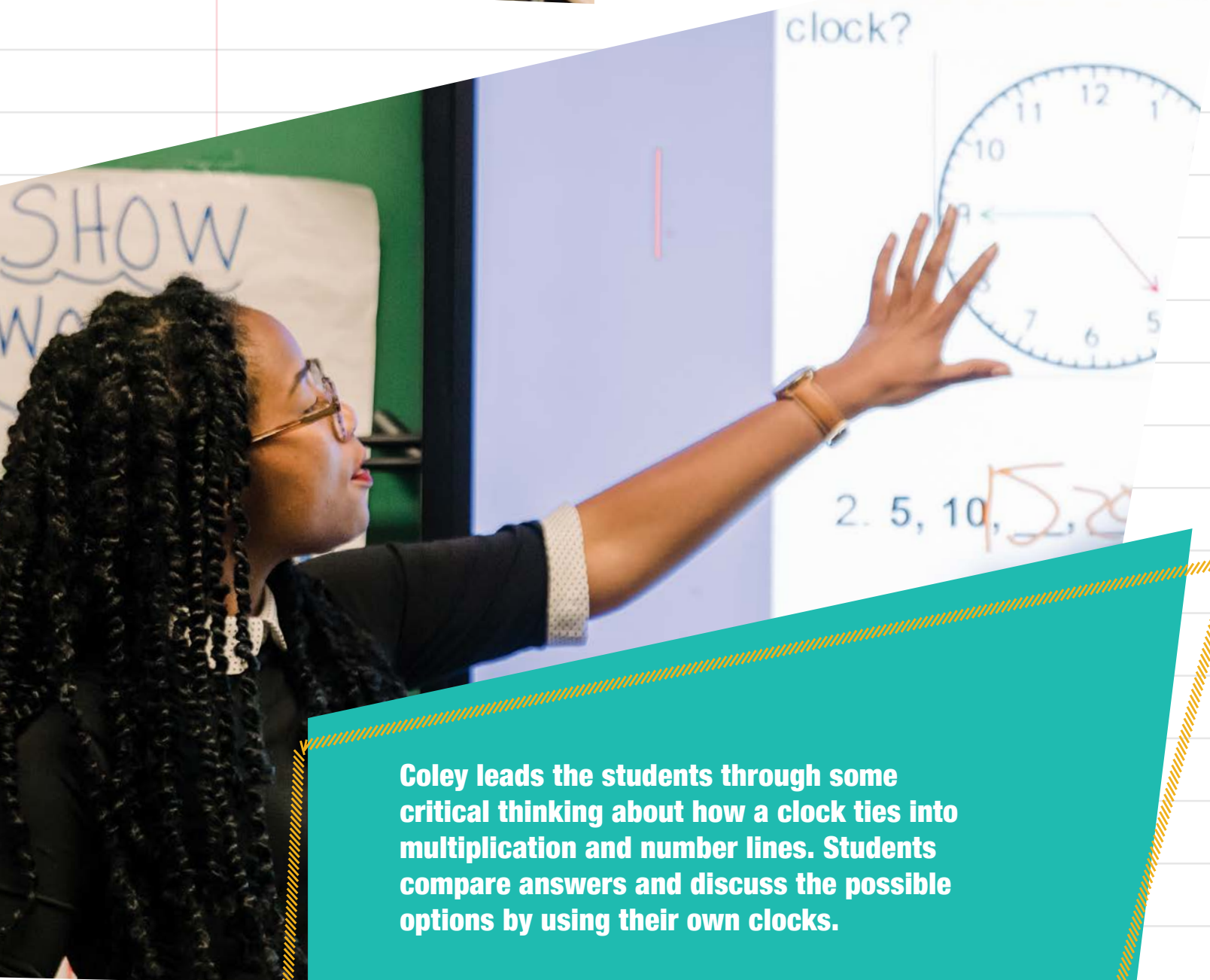
8 a.m.

**The day starts quickly. Frey and Coley go over the materials for today's lesson—telling time counting by fives and a number line. Every minute literally counts!**



## FOOD IS FUEL

Students begin to arrive, but there is no time to waste. Coley goes over last night's homework with a student while she finishes her breakfast. One-on-one time is precious, and Coley is happy to provide it. She is also passionate about students eating fresh food as she studies the correlation between nutrition and academic behavior. She wants them to have time to eat so that students have time to think.



**Coley leads the students through some critical thinking about how a clock ties into multiplication and number lines. Students compare answers and discuss the possible options by using their own clocks.**





9:15 a.m.

**It's time to delve deeper. Coley engages students to identify parts of a clock and determine the correct time using a variety of strategies. When she asks what time is shown on the clock (2:30 p.m.) one student smartly calls out "dismissal time!"**

**The rest of the students show their work on whiteboards and raise them for a quick check.**

## STUDENT TEACHER

Coley becomes a student as she quietly observes her mentor teacher think out loud about the various ways to solve a word problem. "I became a teacher because I love learning. The classroom is full of ideas. It's not only a place for academics but a place to build empathy," she explains. "It is important for students to experience someone that respects, supports, and has a positive influence over them." Coley looks forward to transitioning into a lead student teacher for third grade mathematics and sixth grade social science in the spring.





## ONE-ON-ONE CONNECTIONS

Each student requires a different type of support. Coley takes time to help a student think through the connection between her diagram and her multiplication process. “One of the greatest challenges in teaching math is that many students don’t feel they are good at math,” she explains. “It is my job to help them believe in themselves by showing them how these skills are connected to their lives.”



## MATH, SCIENCE, MATH, REPEAT

The first block of math is done. Students follow Coley to computer science for more applied math. Two more 90-minute blocks of math follow with two other classes of students to support before calling it a day.



## DISMISSAL

The bell rings. It’s 2:30 p.m. and raining, but students don’t mind. It is time to head home. Coley helps a student trying to keep their hood on as they rush out the door. Smiles all around.

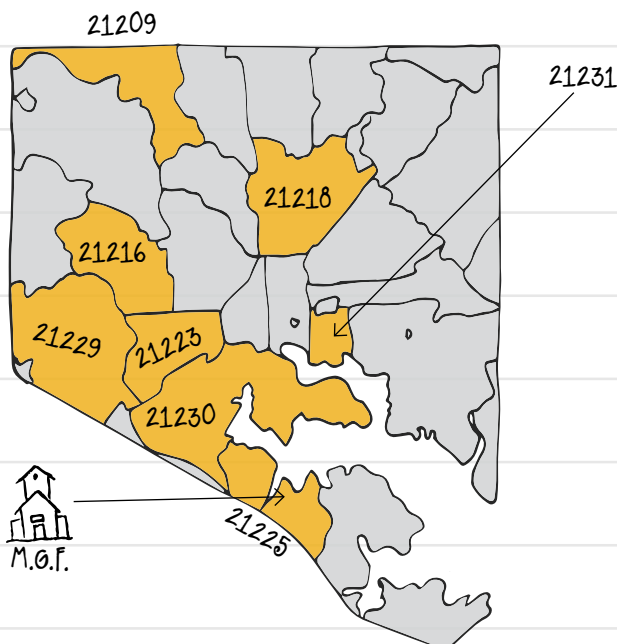




3:15 p.m.

Quiet fills the classrooms and the hallways. It is the perfect time to catch up with a fellow alumna, **Olivia Grimes '19, individualized study and early childhood education**, a first-year teacher at Maree G. Farring. They exchange stories and Grimes gives advice.

It's 3:15 p.m. and the day is done. Grimes and Coley head home with thoughts of equations, stories, and fun ways to educate their students tomorrow.



## SHERMAN STEM TEACHER SCHOLARS

Since its inception 12 years ago, thanks to the founding gift of George and Betsy Sherman, the Sherman STEM has supported more than 150 students in becoming culturally responsive and compassionate STEM educators by collaborating with UMBC faculty and local, high-need schools. Currently, nine students and 13 alumni of the program are leading and learning in zip codes across Baltimore City.



## A large, vibrant collage of various photographs representing different aspects of student life. The collage includes images of students in graduation gowns, a basketball team in yellow uniforms, a group of students posing together, a soccer player with the number 6, students in a classroom setting, a student holding a guitar, a student with a megaphone, a student holding a book titled 'LET'S GO FRANCE', a student with a water bottle, a student with a sign that says 'RETRIEVER BELIEVER', a student with a sign that says 'GO UMB', and a student with a sign that says 'Umbc'. The collage is set against a background with the word 'UNIVERSITY' in large, bold, white letters on a dark blue background.



Throughout its history, UMBC has encouraged community members to take risks and make lasting changes to guide our institution to become *The Empowered University* it is today.

UMBC is nothing if not unapologetically aspirational. From its earliest days, Retrievers have dreamed big dreams and punched far above their weight at every turn. We have grit to spare—and we'll share it with anyone who wants to be a part of it.

So, how do we do it? Well, aspiration is nothing without follow through. At UMBC, that means digging into the details, thinking creatively, and working together as a community to make things actually happen—then digging in again to measure the results. As they write in *The Empowered University*, published by Johns Hopkins University Press in November, co-authors UMBC President Freeman Hrabowski, Provost Philip Rous, and senior advisor to the president Peter Henderson, a broad history of people and bold moments have made UMBC what it is today.

As Hrabowski often tells his Commencement audiences, “It’s choice, not chance” that defines us. At a place like UMBC—where our community strives to make choice a possibility for all—those moments have made all the difference.

— Jenny O’Grady

## STANDING UP FOR THE SHOULD

The year UMBC adopted the tagline “An Honors University in Maryland,”

**Diane Lee**—then an associate professor of education—wrote UMBC President Freeman Hrabowski an honest letter. In order to live up to the moniker, she argued, the university would need to focus extra attention on underserved students. Without that effort, the tagline would be an empty promise.

Thanks to this initiative, Lee, former vice provost and dean of Undergraduate Academic Affairs, would soon found UMBC’s Office of Undergraduate Education, and spend the rest of her career focusing on student success—and what *should* be the academic experience for our students. Together with faculty and staff, the office has helped raise UMBC’s six-year graduation rate and lower the number of students transferring

to other schools. With win-wins all around, the work continues to evolve under current Vice Provost and Dean **Katharine H. Cole**.

When Lee retired in 2017, she re-focused her question of “should” to another group in need of attention—her fellow retired faculty and staff. Today, she helps lead the Wisdom Institute, organizing lunches, lectures, and volunteer opportunities to keep this special group in “the loop,” so to speak. The cohort has made a splash beyond Catonsville, too, attracting attention from other schools who hope to re-engage their own communities of retirees.

“The goal is to embrace this familial experience and let it live beyond retirement,” says Lee on a recent visit back to campus. “It’s the UMBC way.”

## EXCERPT: THE EMPOWERED UNIVERSITY

It is challenging to understand fully the culture of an institution. It is even more challenging to change that culture. At UMBC, we have focused our attention and resources on work that is critical to improving our administrative operations, building our research, and supporting student learning and achievement. We were guided in this work by questions that reflected our shared values: Are we putting

people first? Are we providing students who come to our campus with the best experience possible? Are we doing the very best we can in all aspects of institutional operations given our mission and resources? Are we then taking that extra step, “above and beyond,” to do more, to do things differently, and to do our work better?







**“If my students can take what they learned...  
and positively change the course of one life  
in one community, I am happy.”**

– TYSON KING-MEADOWS

## SEEING “PROBLEMS” AS OPPORTUNITIES

As diverse as UMBC is on paper, many students come to school never having stepped foot in an urban area. That’s where experiential learning opportunities like **Tyson King-Meadows’** Problem-Solving in the Urban Black Community class come in. It’s a course where students can engage a subject from their own vantage point in conversation with partnering community organizations in ways that traditional classes cannot.

Experiential learning gives students a chance to engage in a subject in very personal ways. Students bring their own vantage points to the table but walk away having deeply considered topics as varied

as loitering and vagrancy laws, public transportation policy, and crime in a way that forces them to examine their own blind spots and connects them to the world around them.

“UMBC students and community groups see their destinies linked rather than separate” and develop a deeper appreciation for the power of social science research and teaching in action, says King-Meadows, associate professor of political science. “If my students can take what they learned...and positively change the course of one life in one community, I am happy.”

**W**hen I started at UMBC as vice provost in the late 1980s, our chancellor [Michael Hooker] had just articulated a new vision that asked us to improve our academics, grow our research, and be a more engaged partner with our community. Hooker had set UMBC on a new trajectory toward a new future. Yet, in my first years, if something went wrong, people would often say, “That’s UMBC.”

That’s just the way it is, and the way it is just isn’t so great. It is unlikely that an institution with such a negative prevailing attitude could encourage and enable behavior that would lead to sustained excellence. To move toward the vision articulated by our leadership, something had to change. But how?

The larger vision that Hooker articulated was important, yet there was also a new and different feel at a more granular level. We began to take ourselves much more seriously. We created the Meyerhoff program, and it was a success. We became known as a destination for talented students. We built a research park, without which the state would not have taken us seriously as a research university. We evolved rapidly from a commuter school to a residential research university. We upgraded our admissions standards. We looked carefully at our performance on state audits and how to improve our financial and administrative structures. We celebrated as a community our commitment, hard work, and accomplishments (what we now call “grit and greatness”).

It is a cliché, but every journey does begin with a single step and a single success that can demonstrate for others what could be. With each success and subsequent success, more and more members of the community began to look at our goals, values, and work in a different way. Culture change can be imperceptible at times, yet at other times one can recognize that the institution has reached a tipping point. One day, you realize that your campus has changed, the paradigm has shifted, the culture is now perceptibly different. It was in this manner that our campus transformed itself from “That’s UMBC” to “unabashedly aspirational.”



## THE CLUES ARE IN THE DATA

Even under the best circumstances, it isn't always easy to tell when students are struggling with school. Some may stay after class to speak to a professor; others may fall through the cracks. That's why, in 2016, UMBC added a new tool for uncovering the mystery of student success: data.

By using information already being collected—predictive analytics such as attendance, grades, tutoring use, test scores, etc.—members of a team in UMBC's Department of Information Technology led by **Bob Carpenter** began identifying which students could benefit most from extra support and testing out possible solutions in the form of strategic digital nudges.

"The philosophy we're using is trying to get the right information to the right person at the right time," says Carpenter, associate provost and deputy CIO. In other words, early enough so that students can make adjustments.

For example, students who miss more than three classes are likely to have major trouble, so those students get emails reminding them to attend. Since one out of two students who re-take a math class fail it, but those who take advantage of tutoring while doing so are nearly 20 percent more likely to pass, those students get targeted messages reminding them of tutoring dates.

In the end, of course, the students choose how to use the information. But, with student success rates going up in a variety of instances, Carpenter finds the results encouraging, and he's already looking for additional paths to pursue.

"Like everybody else here, I want to help people get across the finish line," he says. "We want people to finish because we want them to have not just the keys to a higher salary, but the tools to a richer, more vibrant life."

**"Like everybody else here, I want to help people get across the finish line. We want people to finish because we want them to have not just the keys to a higher salary, but the tools to a richer, more vibrant life."**

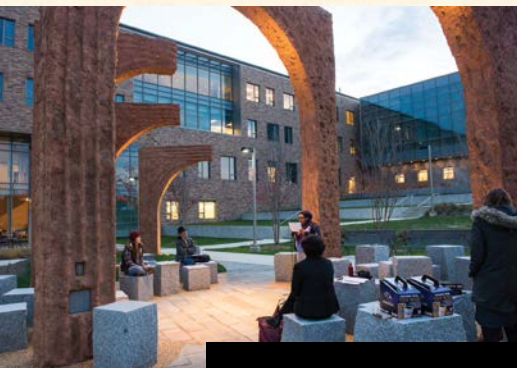
**— BOB CARPENTER**

In 2017, our campus was named one of the nation's top academic workplaces in *Great Colleges to Work For* by the *Chronicle of Higher Education* for the ninth year in a row. We were just one of ten four-year institutions with more than 10,000 students featured on an "honor roll" of those with outstanding marks across nearly every measured category.

During this same period, when we went from "That's UMBC" to "great college to work for," our six-year graduation rate also climbed from 35 percent to more than

65 percent (more if you include the 10% who transfer out of UMBC and earn a degree at another institution and the 10% still enrolled after six years). So, how did we get from being perceived by some as mediocre to "unabashedly aspirational"? We'll talk about particular programs and initiatives [later in the book]. Here it suffices to say that small innovations and initiatives can lead to big changes. Eventually, over a period of time, the organization is transformed.





**“The study of antiquity reminds students that both human ingenuity and human frailty have long histories. I want students at UMBC to know that.”**

– TIM PHIN '04

## UPENDING MYTHS OF THE SURVEY COURSE

For years, Classical Mythology students gathered hundreds at a time for stadium lecture classes, quickly memorizing materials, then using Scantrons to measure their understanding of Greek and Latin. Not surprising, when it came to truly understanding the building blocks of Western Civilization, they were missing the mark.

That's how **Tim Phin '04, ancient studies**, learned it when he was a student at UMBC—and that's exactly why he jumped at the chance to flip the format on its head as senior lecturer in ancient studies.

Today, in his hybridized course, the work happens both in class and online. There's much less lecturing, with Phin

instead breaking difficult material into chunks and giving students ways to discuss in small groups together online. Not only does this make the work digestible—and get the students to actually read and write about the ancient texts—but it allows Phin to see in real-time whether they're getting it or not.

“We live in a world that moves at a blistering pace. I believe that classics can slow us down, provide us with an opportunity for reflection, for introspection,” says Phin. “The study of antiquity reminds students that both human ingenuity and human frailty have long histories. I want students at UMBC to know that.”

**S**erious, sustainable change is hard work. It is often far harder than we would like to think it will be. When the change we want to see involves race, diversity, differences, and inclusion, it can be even more challenging, as these are topics most Americans are not comfortable discussing. But when change is the right thing to do, we must nevertheless engage and persist.

At UMBC, we are hungry for change. The imperative to evolve rapidly arises from our collective commitment to do all we can to better serve our students and their families; support student learning, persistence, and completion; connect our students and faculty to opportunities in the Baltimore-Washington region; and work to address our region's social and economic needs. At just over fifty years of age, we are yet a young, growing institution, and to advance these goals, we must innovate, continually addressing new needs as they arise while simultaneously laying the foundation of a new model of the public university. Our mantra is “success is never final.”

As a campus, we are also a healthy community. This quality is expressed in our ability to be reflective; we can look in the mirror and be honest about what we see, good, bad, or challenging. When issues arise, our culture of reflection leads us to collect data that can inform our decision-making and to have respectful conversations that identify problems and possible solutions. We can acknowledge openly both our strengths and weaknesses, recognize the challenges we face and opportunities we can embrace, and understand how a well-considered response can lead to the desired outcomes. We structure our conversations so that they are inclusive and open to differing perspectives,



using our shared governance structures or focus groups with stakeholders for a specific issue.

Change requires grit—commitment and resilience—because it does not happen overnight. Change that matters only succeeds because of long, organized, and sometimes expensive commitments. It requires the engagement of many individuals as leaders and change agents in order to persuade others, and that can require, from time to time, difficult conversations. This can be daunting for some.

Change requires courage because it requires us to see things differently from the way they are at present. It requires us to recognize our failures as well as successes. For change to be possible, you first have to see the world and the lens through which you view it. Only then can you observe what could be and understand what the

possibilities are. To make progress, you need to ask different and often difficult questions of yourself and others and then set different expectations so that others begin to see the world from a different perspective too.

Change necessitates courage because, so often, it requires a leap of faith and an acceptance of substantial risk—believing that a goal is achievable even if the outcome is, as yet, unseen: “No one believed it could be done, because it hadn’t been done before. And then we did it.”

*Note: This excerpt is from chapter three of The Empowered University, co-written by UMBC President Freeman Hrabowski, Provost Philip Rous, and Peter Henderson, in Hrabowski’s voice. The excerpt has been modified for length and clarity.*

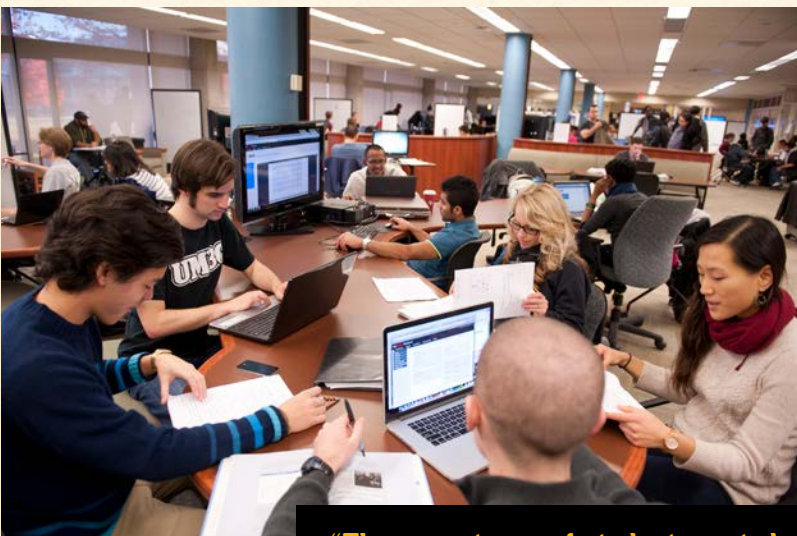
## STUDENT-BUILT SPACES

UMBC’s students have a long history of charting their own territory. The grit goes all the way back to 1970, for example, when the newly formed Student Union voted to establish a free and unscheduled hour three times a week for student assembly, organization, and advising. Today, it’s still a cherished part of students’ days and an indelible change to the official campus schedule.

So, when members of the Student Government Association came up with the idea of a 24-7, all-access study space, campus partners sat up and took notice. Opened in 2011, the Retriever Learning Center (RLC) is now one of the hottest spots on campus—a sea of movable seating and tables filled with students, laptops, whiteboard markers, and a buzz of ideas.

And it wouldn’t have happened without intense student work.

“This project taught me about the power of a small group of friends inspired to mold the architectural landscape in their intimate college neighborhood,” said **Simmi Singh ’12, biological sciences**, one of several student senators who spearheaded the project. “The importance of student-created spaces and initiatives at UMBC is the life-altering experience of holding fast to dreams, actualizing them, and being a positive agent for change for generations of the UMBC family in the years to follow.”



**“The importance of student-created spaces and initiatives at UMBC is the life-altering experience of holding fast to dreams, actualizing them, and being a positive agent for change for generations of the UMBC family in the years to follow.”**

– SIMMI SINGH '12



# BEAUTIFUL DREAMER

Stan VanDerBeek, who taught at UMBC for almost a decade, was more than an artist; he was a visionary who thought beyond limits and boundaries.

BY TOM MOORE





VanDerBeek's award-winning 1963 film "Breathdeath" was described by the filmmaker as "a film experiment that deals with the photo reality and the surrealism of life...a black comedy, a fantasy that mocks at death."

The film begins, a fast-moving montage of seemingly unrelated images: eyes, people dancing, an airplane landing, artillery, President Kennedy, wrestlers, a woman applying hairspray, all interspersed with wacky cartoon-like animated images.

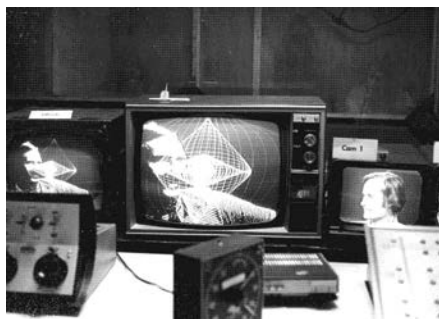
It's the start of *Breathdeath*, **Stan VanDerBeek's** experimental 1963 masterpiece that would influence a generation of artists, including Monty

Python's Terry Gilliam. VanDerBeek's genius and visionary thinking—not only as a filmmaker, but also as a video artist, computer animator, and futurist—would earn him worldwide fame and, in 1975, a full professorship at UMBC, where he taught until his untimely death in 1984.

VanDerBeek's vision can still be seen in the programs he helped found and the alumni he inspired at UMBC.

## UNDERGROUND ARTIST

Born in 1927 in New York to immigrant parents, VanDerBeek's early interest in painting, architecture, and design led him to Black Mountain College, where he befriended pioneering composer John Cage, choreographer Merce Cunningham, and inventor Buckminster Fuller, all of whom were to prove deeply influential on the artist. In the early 1950s, working as a designer on the CBS children's program *Winky Dink and You*—which featured plastic screens children could apply to the television and draw on with special crayons—VanDerBeek learned basic animation skills and, by 1955, began to create his own animated films. In 1959, he organized a New York film festival entitled "Films from the Underground," and the term "underground film" was born.



VanDerBeek's early computer art may seem simplistic by current standards but was groundbreaking and revolutionary in its time.



Throughout his 30-year career, VanDerBeek was more than an artist; he became a visionary who thought beyond limits and boundaries, often dreaming up fascinating ideas that couldn't be executed—at least in his lifetime. In 1980, midway through his tenure at UMBC, he imagined, "You'll sit in your backyard and look up at beautiful paintings I and other artists will do for you on a 10,000-square-mile screen of clouds. The strokes and colors will be images projected by laser beams. I call it 'painting with light' or optical painting."

At UMBC, recalls **Ellsworth Snyder '82, visual arts**, the cloud projections were realized on a smaller scale. "A good friend of mine, Ed Hopf, with whom I've made films with since we were 13, helped Stan on his multimedia presentations. He would have film projected on the 'smoke' created by melting dry ice. At one point there wasn't enough 'smoke' and Stan was in a hurry trying to coordinate some other aspect of the production so he grabbed the dry ice with his bare hands and threw it in the container to melt!"

For VanDerBeek, moving images weren't only material for his artwork—they had the power to facilitate global understanding and to help the world move toward peace. In a manifesto, "CULTURE: Intercom and Expanded Cinema," he wrote, "I propose the following: that immediate research begin on the possibility of a picture-language based on motion pictures; that we combine audio-visual devices into an educational tool: an experience machine or 'culture-intercom'; that audio-visual research centers be established on an international scale to explore the existing audio-visual devices and procedures, develop new image-making devices, and store and transfer image materials, motion pictures, television, computers,





video-tape, etc.; that artists be trained on an international basis in the use of these image tools..." He set forth ideas with the certainty that they could be accomplished and even needed to be accomplished.

To facilitate that vision of global communication, VanDerBeek forged what was perhaps his best-known creation, the Movie-Drome. Located at Stony Point, New York, at the Gate Hill Cooperative (populated by the young VanDerBeek family in addition to others who had migrated from Black Mountain College,

including John Cage, pianist David Tudor, and potter M.C. Richards), the Movie-Drome was the top of a grain silo dome. Guests were invited inside, asked to lie down, and, looking up, watched a mosaic of continually changing films and slides that were concurrently projected across the dome's interior. VanDerBeek imagined a network of Movie-Dromes operating internationally, linked by satellite, presaging the internet.

A frequent collaborator across artistic disciplines, VanDerBeek worked in 1965 on the Merce Cunningham Dance Company's *Variations V* with John Cage, Nam June Paik, and others. (Pictured: composers David Tudor and Gordon Mumma, dancer Carolyn Brown.)



VanDerBeek's experiments included attempts to project images onto steam. Next page: The computer-generated Poemfield series, created between 1965 and 1969, were the artist's exploration of "image-based poetry language."

## ENDLESS POSSIBILITIES

By the time VanDerBeek arrived at UMBC in 1975, he was already in the international limelight—a filmmaker whose works had won awards at festivals worldwide and who had received support from the Guggenheim Foundation, the Ford Foundation, the National Endowment for the Arts, and the Rockefeller Foundation. He had taught, lectured, or been in residence at Columbia University, MIT, the Walker Arts Center, the Smithsonian Institution, WGBH (Boston), NASA, and dozens of other institutions and had enjoyed a 1968 retrospective at the Museum of Modern Art. Ever fascinated by the possibilities of emerging technologies, VanDerBeek had branched out from film to embrace videography and computer animation, which seemed to offer endless possibilities. (His early computer-generated films were produced at MIT and at Bell Labs, where he was in residence and assisted by computer art

pioneer Ken Knowlton.) An exhibition of VanDerBeek's work *Machine Art: An Exhibit of "Inter-Graphics"* was presented in UMBC's Library Gallery in spring 1976.

"It was a dynamic time," remembers **Ferdinand Maisel**, who studied at UMBC and also worked in the department of dance, "and Stan was maybe among the first interdisciplinary/collaborative artists of the 20th century. He was fascinated with how other people would think and solve problems. I met Stan via my work with **Liz Walton**—I worked for the dance department back then as a composer. Stan immediately had me push his shopping cart of films (which he was known to walk around campus) to a Steenbeck film machine, where I watched, with amazement, some of the films for which he wanted music." VanDerBeek tapped Maisel to help run his Image Lab, a precursor to UMBC's present-day Imaging Research Center.

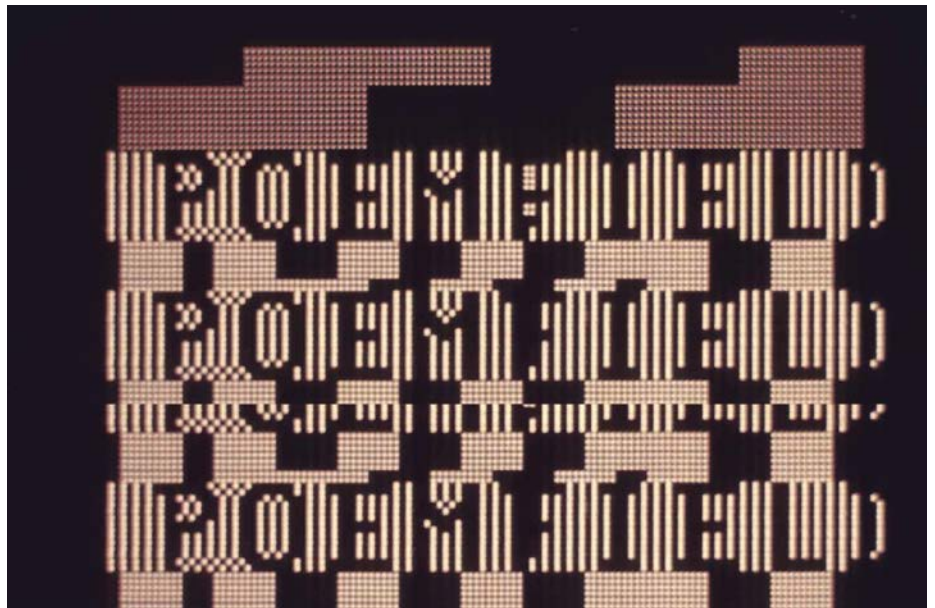
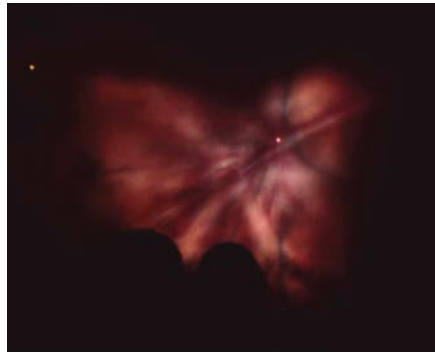


While at UMBC, VanDerBeek recreated the Movie-Drome. Baltimore newscaster **Denise Koch**, who taught acting and theatre performance at UMBC, recalled, “Stan built a geodesic dome in the center of a large field and projected clouds and nighttime sky-lines, and had people come and lay on the floor for the experience.” (He had planned to erect on campus a 70-foot dome housing a 40-foot planetarium screen.)

Koch also stars in a 1979 VanDerBeek film, *Mirrored Reason*. “He came to me and told me he’d been given a studio at the Voice of America for a day and wanted to play with some of the equipment and asked if I’d participate as his actor—how could I refuse! We went to the studio, and he placed me in a room and just asked me to do an improvisation. I think I used a Kafka story to fall into a state of paranoia as Stan fooled around with my image. At one point my head splits in two and then I’m facing myself—thus, I believe, *Mirrored Reason*. Stan and our theatre company, Kraken, collaborated a number of times. Once, he took video of each actor’s head in the exact same position and then had us bleeding or melting into and out of each other as if we were a company made up of one face that held the persona of eight different people. It’s hard to explain, but I remember I was stunned!”

Ellsworth Snyder remembers that VanDerBeek’s “office was rather messy with stacks of magazines, books, and film cans, but he knew where everything was!” Always encouraging his students to branch out with novel techniques, “In Experimental Film class Stan would have us put objects directly on unexposed film and then move them and expose each frame so as to create a direct animation on the emulsion. Very unusual technique, but it resulted in some interesting images.”

**Steve Estes**, who studied film at UMBC as an undergraduate and



then returned to earn an MFA in 1997, remembers VanDerBeek as an encouraging, supportive force. “He was very open, and very open to whatever you really wanted to do. Stan was the kind of guy who was helpful by basically just being there, and letting you do what you did, and providing whatever assistance he could. He had suggestions about this or that, but he was pretty much, ‘Go for it! Freedom, man, just go ahead and do it. Explore! Play!’”

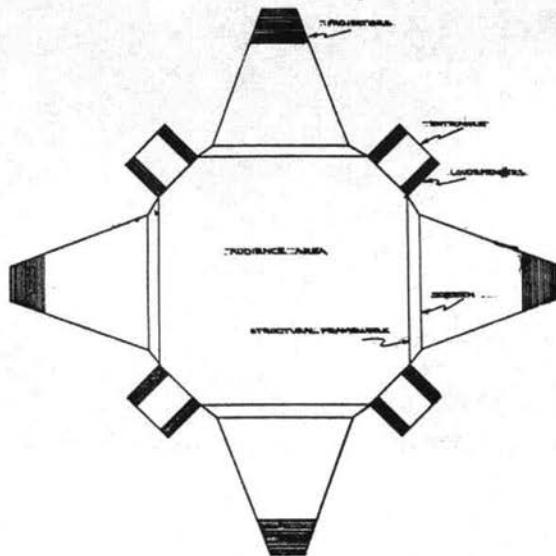
Filmmaker **Richard Chis olm ’82**, **interdisciplinary studies**, recalls VanDerBeek as a character whose mind was sometimes racing so quickly that he wasn’t always focused on teaching, but says, “This dreamer personality, this charming dreamer, is kind of by definition boundary-less, and wild, and expressive. We need Stan

VanDerBeeks to challenge our otherwise concrete, boring, structured way of looking at the arts. True art is extremely messy. It requires taking risks, and it requires trying things that are going to fail, and losing money, and losing time during those failures, and people like Stan are just fearless and have no regard for whether this dream is going to come true or be doable or not. It’s the old cliché about throwing things at the wall and seeing what sticks—that’s definitely how he looked at ideas. He got ideas every day, and every week, and he tried to contagiously get people to jump in with him, and sometimes they would. He was going super fast every day, always walking and talking fast and could never sit still.”

## MEMBRAIN THEATER/1980

The “Membrain Theater,” my present work at the University of Maryland in Baltimore County, features live performers acting inside of a projected film. The actors move in a large open dark space; their actions match or fit into movie images projected onto transparent screens that can be raised and lowered, confusing the eye between “real” and projected “real” images. This matching is not unlike the scenes in Buster Keaton’s great inspirational film *Sherlock Junior*. This transference of real world actors and their superimposed selves interests me as a borderline between the shadow and substance of dream theater.

As holography comes more into play, the performance will be more intriguing, raising contradictions about the real and apparent. In my early work with Hart Perry and the Cabin Creek Foundation in New York, I used their system called “Intergrams”—in which they took 16mm film clips to be turned into 3-D holographic illusions. The use of this and other forms of 3-D systems will create systems for more complex “dream theaters” in the future. I don’t know why I am driven to explore this complex relationship between the real world and its projected image, but I intuitively feel the need to externalize the dream process and to test the edges of “the real world image.”



“Mem-Brain Theater” is a multi-media portable theater space conceived and designed by Rob Fisher during the 1960s. He donated the theater to VanDerBeek to continue his research in multi-media.

At UMBC, VanDerBeek continued to explore “the complex relationship between the real world and its projected image” in his Membrain Theater.



## DREAMING AT UMBC

VanDerBeek’s “dreamer” personality was, in fact, fascinated by dreams. He posted a note in a 1970s-era publication, *Dreamworks*, encouraging readers to send him brief written descriptions of their dreams, saying, “I am seeking this material for developing my ‘dream theater’ and for other futuristic dream-related media projects.... I am convinced that movies are the visual enactment of the dream state. I do not know how specific this function of pre-visualizing and making tangible the dream state is in our lives. But my own instincts move me further into experimenting with such illusory systems, such as freedom of metamorphosis to create ‘meta’ images that can approximate the geometry and forms of dreams.”

UMBC’s connections to the VanDerBeek family run deep. Two of his sons—**August VanDerBeek** and **Max VanDerBeek**—studied briefly at UMBC, and his daughter **Julie VanDerBeek** graduated in 2003 with a degree in theatre. Max returned in the 1990s to teach for the department of music; his son **Clay VanDerBeek** was a Linehan Artist Scholar who graduated in 2017 with a degree in theatre. Another of Stan’s daughters, artist **Sara VanDerBeek**, has exhibited and spoken at UMBC’s Center for Art, Design, and Visual Culture. Stan VanDerBeek’s second wife, **Louise**, graduated in 1976 with a degree in interdisciplinary studies and an arts emphasis and then returned to earn a master’s in 1995 in instructional development systems.



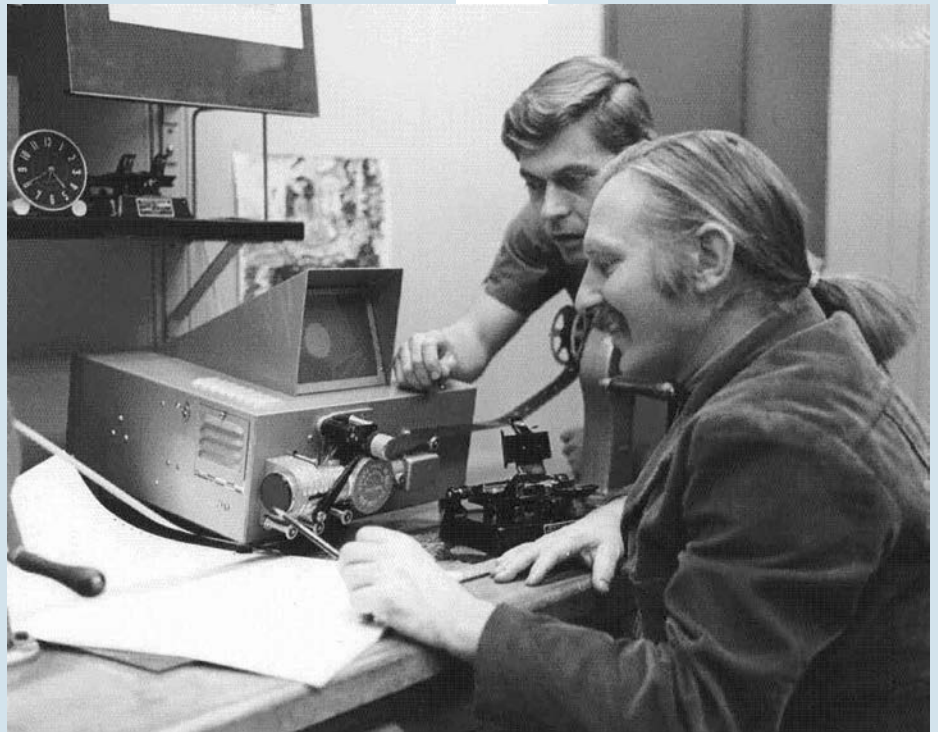
“If I had to draw a cartoon for *The New Yorker* that was about Stan VanDerBeek?” says Richard Chisolm. “It would be Stan VanDerBeek buys furniture at IKEA, and then you see him in a room with the boxes, and then in the next frame you would see something that didn’t look at all like furniture, and the instructions would be curled up in the corner, and what he built would be this anarchistic mound of panels and windows that was not at all what the IKEA people were telling you to build.”

VanDerBeek served as chair of UMBC’s department of visual arts for only a short time in 1983 and 1984 before becoming ill. Several days before his death in September 1984, he received a poignant good-bye letter from fellow experimental filmmaker Stan Brakhage, who wrote, “I grow more sure of what we’ve done, and that someday... our works and lives will be fully known to the ears and minds of human beings....”

//

*To learn more about Stan VanDerBeek’s work, visit [stanvanderbeek.com](http://stanvanderbeek.com). An exhibition, VanDerBeek + VanDerBeek, which presents artwork by Stan VanDerBeek alongside work by Sara VanDerBeek, is on display at the Black Mountain College Museum + Arts Center through January 4, 2020.*

*Thanks to Max VanDerBeek, August VanDerBeek, Chelsea Spengemann, the Stan VanDerBeek Archives, and Judy Taylor. Images courtesy of the Estate of Stan VanDerBeek.*



VanDerBeek and UMBC visual arts colleague Fred Stern shared a common fascination with early computer-generated imagery.

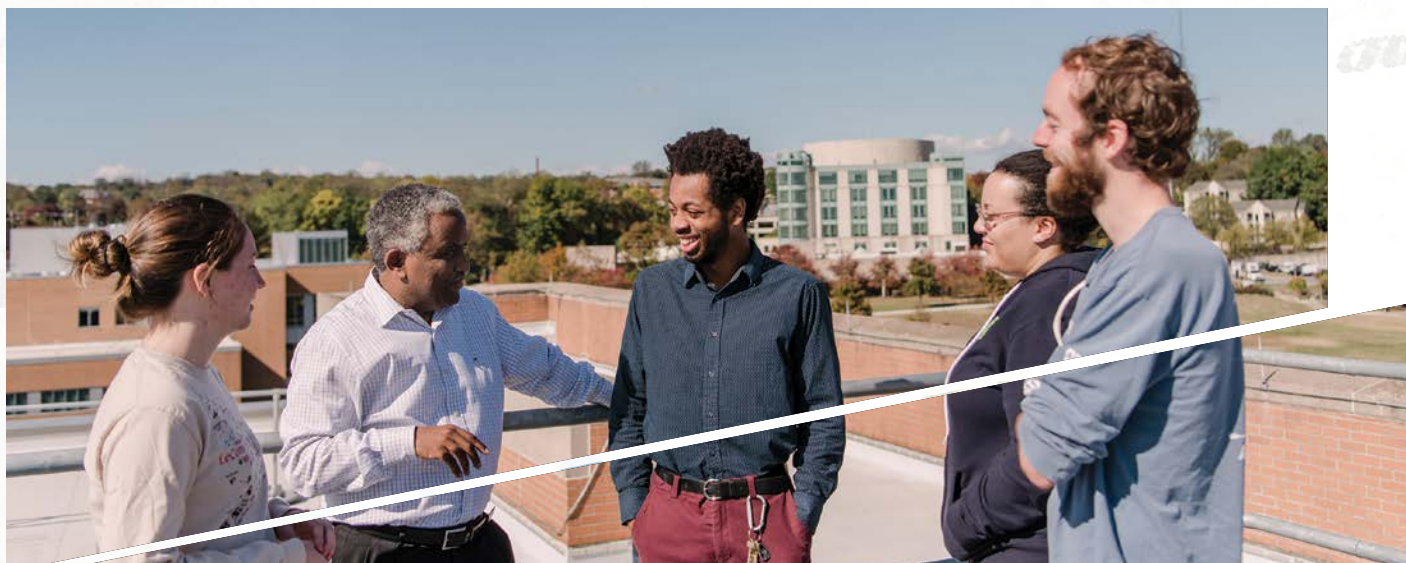


# CLIMATE SHIFT

**FROM ERITREA TO UMBC:** Cultivating a diverse generation of climate scientists

**BY SARAH HANSEN, M.S. '15**





**It's a nearly cloudless afternoon at UMBC in early October. A group of physics students and their two faculty advisors, **Belay Demoz** and **Ruben Delgado**, make their way to the roof of the physics building to continue their conversation about atmospheric research. Earlier, gathered in a small, dimmed lecture hall, the students engaged their advisors and each other in robust discussions about their research while practicing their presentation skills.**

In that session, **Amanze Ejiogu '22, physics**, had the chance to explain his findings on the Bay Breeze. Rather than an adult beverage, it refers to breezes coming in off the Chesapeake Bay that redirect back to land air masses (and the pollutants they contain) that would otherwise blow offshore.

The Bay Breeze effect is a complicated phenomenon. Many factors contribute to it, from precipitation to wind speed to the overall quality of the air. Understanding it is a multidisciplinary effort, requiring chemistry, fluid dynamics, statistics, and meteorology skills. That's exactly the kind of challenge that Demoz, physics professor and director of UMBC's Joint Center for Earth Systems Technology (JCET), likes to help his students tackle.

After Ejiogu's presentation, Demoz asks questions. His elbow leaning casually against a railing, he breaks into a grin—he is in his element. Of a certain result, he asks, "Is that expected?" And a minute later, "That's for you to figure out," his Eritrean accent inflecting his speech.

Climate change and other environmental issues like air and water quality disproportionately affect people of color. Today, Demoz sees his role at UMBC as empowering students, especially students from underrepresented backgrounds, to take ownership of their research and contribute to their communities. Eventually, he hopes his graduates will also become mentors and advocates for their own students and colleagues—behaviors he models for them every day.

This wasn't always Demoz's idea of what his life's work would be. After a challenging childhood in what is now the East African country of Eritrea, Demoz came to the United States for graduate school in the 1980s. His original goal was to learn how to seed clouds—to bring rain to his drought-stricken homeland. He's still doing climate research, but his focus has shifted. His experiences as a youth in Eritrea and his years as an African in the United States have shaped who he has become and what he seeks to achieve.

Graduates from all backgrounds have left Demoz's lab and taken roles at places like NASA, the National Oceanic and Atmospheric Administration (NOAA), the Environmental Protection Agency, and other research institutions. These alumni create a ripple effect that will continue to enhance diversity in atmospheric research and answer questions that have the potential to change the lives of people around the globe, in part because of Belay Demoz.

**Maurice Roots**, a graduate student in atmospheric physics, has already felt the effects of Demoz's efforts. Roots, who graduated from Hampton University, only applied to UMBC for graduate school because Demoz approached him at a conference. "Belay has a great set of stories to tell," Roots says. "His journey shows that perseverance is possible."

## A CHANGING HOMELAND

**“It’s where the desert and the green are always fighting.”**

That’s how Demoz describes the location of Eritrea. It’s a small African country on the Red Sea, sandwiched between Sudan and Ethiopia, right where the Sahara Desert and the jungles of central Africa meet. Many people there are subsistence farmers, including generations of the physicist’s family.

It used to be that when drought or floods hit, Eritrean farmers moved to where the grass was literally greener. But that changed after their land was colonized by the Italians and later the British. Strict political borders limited movement. “Once you put a wall, that valve of mitigating drought disappears,” Demoz says.

His childhood and youth in Eritrea, in the 1960s and ’70s, was one of the most volatile times for the region, when an internal resistance movement was fighting the British to gain independence. “My time was a time of coups, a time of drought, a time of war,” Demoz says. “Those are the times when a lot of heartache happened.”

Many people died because they weren’t allowed to migrate. Their crops failed in the drought, and some starved. Some died when they attempted to migrate and met violence along the way. Demoz’s older brother and many of his friends perished fighting in the resistance.

## AN UNLIKELY ADVOCATE

Belay Demoz knew the challenges his people were facing. So in 1980, when he finished high school and was assigned to study physics as an undergraduate at the University of Asmara in what was to become Eritrea, he knew he wanted to find a way to use his education to make things better for his family.

At first, he struggled. He failed his first three exams. And then the first of several major turning points in his life happened, the first time help came from where he least expected it.

Demoz and his roommate frequently played soccer together. Both were highly talented but knew there was no career for them in the sport. So, after Demoz failed his third physics exam, his roommate decided it was time for an intervention.

“You can play soccer so well, but you’re going to let physics twist you?” he asked Demoz. “No, you study with me.” So he did. And by the next semester, Demoz was at the top of his class. “Part of me was afraid,” Demoz admits. Why? His roommate had recently been released from prison on a murder conviction. But “if I didn’t find him, I don’t think I would have made it.”

As his undergraduate career was coming to a close in 1984, another severe drought hit Eritrea. Demoz wanted to do something, but he didn’t know how his nuclear physics degree could help the situation. Then, he learned about cloud seeding in a *Physics Today* article.

In the 1980s, cloud seeding seemed like the next big revolution in weather modification. In order for clouds to

produce rain, the water molecules they contain need to condense into liquid form. That happens around tiny solid particles inside the cloud. Cloud seeding adds these particles, creating more opportunities for raindrops to form.

**“That’s when I switched from nuclear to atmospheric physics,” Demoz says. “I wanted to help make it rain.”**

He applied and was accepted to the atmospheric physics program at the University of Nevada, Reno, but to leave Eritrea, he had to promise that he would come back. Without the required funds to guarantee that promise, his parents had to put their family home on the line so that he could study in the U.S.

“I was given \$50 and a plane ticket,” Demoz remembers. “My dad didn’t blink. He just said, ‘Go. We will find a way.’”





## PEAKS AND VALLEYS

**In Nevada, everything was new and different. “At 22, it was my first time to see snow,” Demoz says. And not just through his dorm room window —his courses and research involved spending ample time in the Sierra Nevada Mountains. After replacing his dress shoes with snow boots and skis, Demoz began to learn his way around the mountains.**

In addition to the new climate, there were other steep learning curves for Demoz in graduate school. One of the core courses required computer programming skills. One day, Professor Jim Telford—Demoz refers to him as a “cloud giant”—called Demoz into his office.

Telford devised the stochastic rain theory when he was a master’s student in the 1960s, which describes why and predicts when clouds will produce rain. Today there is still no better theory. Demoz describes him as an arrogant, brilliant Australian scientist, who also went to great lengths to ensure his students’ success. Demoz remembers their first conversation going something like this:

“You must be pretty good in programming,” Telford says.

“No, I’m not,” Demoz replies.

“Well, have you used a computer?” Telford asks.

“No.”

“Have you touched a computer?”

“No.”

As Demoz recalls, Telford roared with laughter and rushed to another room to share with a colleague the ridiculousness of a Ph.D. student in physics who had never touched a computer.

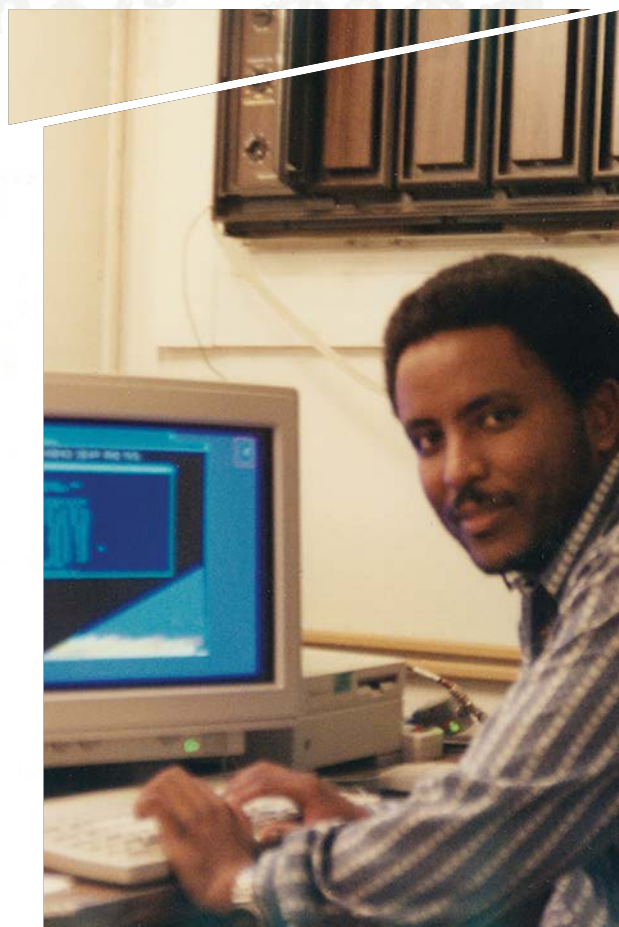
“At this point, I’m thinking, I’m doomed!” Demoz remembers. “But there’s something inside me saying, I am an Eritrean, and others are fighting for independence. There’s something instilled in me. And so I stood there.” And instead of throwing him out, Telford agreed to give Demoz a crash course in computing.

For two weeks, Demoz sat with a clunky 1985 desktop and a pile of Fortran books in Telford’s office, learning how to program. Today, Demoz tells his students, “If you cannot compute, you cannot compete. Everyone who has achieved something in our field is good in programming.” But his experience with Telford was about more than programming. It was about a mentor making a special effort to help a student succeed. Demoz carries that memory with him today and strives to pay it forward to his own students.

In addition to learning all about clouds and weather modification, and completing a dissertation titled, “Sierra Nevada Winter Storms Using Microwave Radiometry, Ice Crystal, and Isotopic Techniques,” Demoz learned something else important in Reno—what it felt like to be black in the United States, especially in higher education and especially in physics.

He noticed it right away in his courses (he was the only black person) and in the city. “It takes a toll,” he says. “Reno had a very tough police force.” He was stopped on many occasions as he drove home late from doing research in the mountains, seemingly for nothing. “I tend to be an outlier,” he reflects. “You don’t see a lot of black people doing cloud seeding and working with snow.”

Only later would he find out that the graduate program had accepted him as a “test case”—he was the first African accepted to the program and the first to graduate with a Ph.D. He remembers John Hallett (another “cloud giant” and another of Demoz’s important mentors) telling him, years later, “We wanted to see if those schools [in East Africa] were any good. That’s why we admitted you.” That, of course, didn’t sit well with Demoz and stayed with him as his future in physics unfolded.



## SHIFTING THE LANDSCAPE

Once he finished his Ph.D., Demoz pursued postdoctoral studies at the University of Illinois in cloud chemistry. In 1997, UMBC finally entered his experience. He completed a second postdoc with UMBC at the NASA Goddard Space Flight Center in Greenbelt, Maryland.

Demoz continued his work at NASA after his postdoc ended. Then, another life-changing moment: He got a call from Howard University to help create a new atmospheric research center there in 2006. “The whole reason I studied this field was to go back and seed clouds,” Demoz reflects. “That wasn’t happening, but I realized, there is plenty to be done here.” So Demoz jumped at the chance to contribute to the historically black university while continuing his research program at NASA.

“It was around that time that I started to be conscious of my status as a minority in the field,” Demoz remembers. “It bothered me, being one of the only ones.”

At a conference around then, Demoz and a handful of other atmospheric researchers of color met in the lobby. “And we asked, OK, what is our part?” Their first step was to join efforts in developing the Howard research center together.

In 2005, Demoz was awarded a NASA Administrators Fellowship—a two-year sabbatical during which recipients are expected to build up a program at a minority-serving institution. The fellowship allowed Demoz to focus full time on building up the research center in Beltsville, which is administered by AA. When the two years were up, Demoz didn’t go back to his research program at NASA, choosing instead to commit himself permanently to the work of increasing the success of minorities in atmospheric science.

**“Most people thought I was crazy because NASA is a stable job for life,” Demoz says. “But thinking about all the support that I had growing up, I decided my place was there.”**

## BUILDING THE PIPELINE

Over the next several years, Demoz and colleagues built up the NOAA Center for Atmospheric Science (NCAS) at Howard University’s campus in Beltsville, Maryland. The NCAS is a “super-site” among the Global Climate Observing System (GCOS) Reference Upper Air Network (GRUAN), a set of sites worldwide that looks at air and cloud chemistry. People around the world rely on the data it collects and the analyses the Beltsville researchers (including many students) conduct for their own work. The Beltsville GRUAN site contributes powerfully to science and also to increasing the diversity of scientists. It is the only GRUAN site in the world operated by a university, which is a source of pride for Demoz.

Students who’ve studied at the GRUAN site from Howard, UMBC, and elsewhere—many of them from underrepresented backgrounds—have gone on to careers at at preeminent government and private research organizations.

**“You can involve students no matter how specialized and difficult your science is,” Demoz says. “The Beltsville site has made quite a number of important scientific advances and also brought diversity to the federal agencies.”**

At the same time, the small group of African and African-American climate researchers who had met at the conference in the early 1990s started to formalize their lobby conversations into an official event at other meetings. “It paid off. We used to meet in a bar in the hotel lobby at the American Meteorological Society conferences. Right now, Colour of Weather is perhaps the biggest minority-focused group in atmospheric sciences, and it is what we started,” Demoz says with pride. “It’s held in a ballroom. I look at that and I think, I didn’t go back to Eritrea and seed clouds, but I’m making a difference here.”

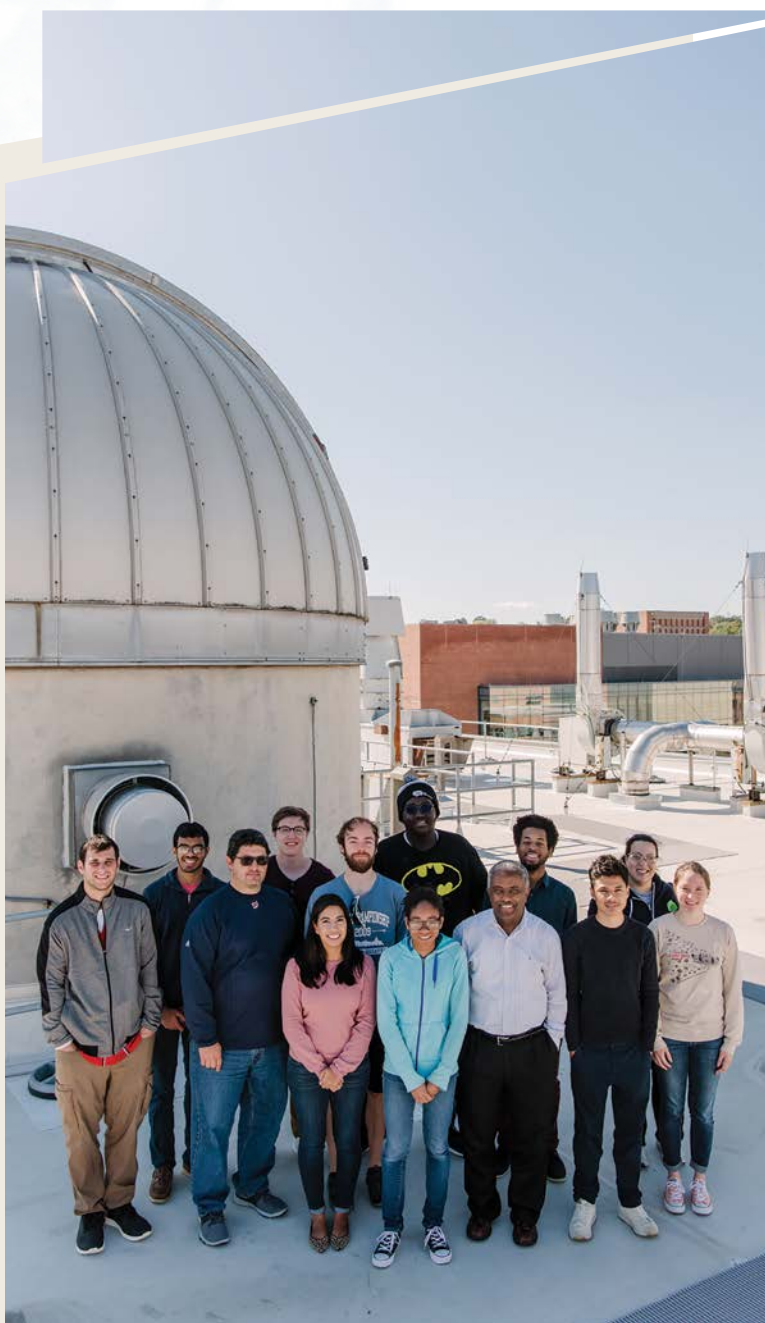


## BRINGING A MEANINGFUL VISION TO LIFE

With his experience at NASA and as a professor of physics at Howard, and his commitment to mentoring students from all backgrounds, Demoz was a perfect fit to serve as the next director of UMBC's JCET, a partnership with NASA formed in 1995, when the position opened up in 2014.

As JCET director, Demoz has clear ideas about what he wants to accomplish. "If I can get a really strong, diverse graduate program here, that would be great. And I think that's possible here." In addition to recruiting and mentoring students from diverse backgrounds, Demoz says continuing to diversify the faculty is also a worthy goal. The UMBC physics department is already off to a strong start, with faculty members from Brazil, Eritrea, China, Hungary, Greece, and Puerto Rico.

**Students are noticing the changes Demoz has modeled. "He really cares about his students and wants them to succeed," adds Kylie Hoffman, a third year graduate student. "He wants to help you do what you want to do."**



He supports graduate and undergraduate students alike. After giving his presentation at the lab meeting, Ejiogu expected that "a seasoned atmospheric science veteran would pull it apart like cotton candy," he says. But Demoz didn't. "He was very respectful and asked genuine, thoughtful questions that will help me take my research forward."

"Belay has been a great mentor for teaching lessons that are never covered in a classroom," says **Brian Carroll**, a fifth-year Ph.D. candidate. "I'm proud to be part of such a diverse research group," Carroll adds. "Thanks to my experiences with the group, I will pursue and highlight diversity in my own workplaces and the community at large as I progress in my own career."

When asked about Demoz's mentoring, Maurice Roots is more straightforward: "He's good at it," Roots replied. "So I'm taking notes."

Demoz himself benefited from support and mentoring—sometimes from unlikely places. "Help will come from the place you least expect it, so be open," Demoz says, maybe remembering the time a convicted murderer got him through his nuclear physics degree or an arrogant scientist made sure he was ready for programming class. Or maybe even the time he got the green light from Howard University to start the Beltsville Climate program or the call from UMBC to apply for the JCET directorship.

It's all part of Demoz's story. Now he's taken it as his mission to help students create their own stories, with a strong start at UMBC.

"By seeing us," he says, "I hope that students say, 'I belong here.'"

# HOW TO BECOME AN AMERICAN NINJA WARRIOR

With Dan Eiskant '19, media and communication studies



*Faster than a speeding bullet! More powerful than a locomotive! Able to leap tall buildings at a single bound! It's....a Mama's Boy? (More on that later.)*

*Most of us are guilty of saying "I could do that" while watching feats of strength on TV from the comfort of the couch (possibly with a snack in hand). But **Dan Eiskant '19, media and communication studies**, took the challenge head-on and competed for a spot on American Ninja Warrior in April 2019.*

*American Ninja Warrior is a competition where athletes race against the clock to conquer various obstacles. At each qualifying stage, the playing field is whittled down and competitors (often with larger-than-life personas) advance as they complete increasingly grueling courses. The pinnacle for any American Ninja Warrior is making it the final stage—a rope climb. But this is not your gym class rope climb. Competitors must claw their way to the top of a 75-foot rope within 30 seconds to take home the cash prize and bragging rights. So how do you even begin to train for something like this? We decided to ask the expert.*

## Tools of the Trade

1. Determination and humility
2. Several gym memberships
3. Ability to rest
4. Vocal fans to cheer you on
5. Camera to capture those gravity-defying feats

## Step 1

### FIND SOMEONE WHO WILL CATCH YOU WHEN YOU FALL

Even though *American Ninja Warrior* is a solo competition, it's impossible to do well without support from the sidelines. "It's important to surround yourself with friends who will encourage you and push you to be your very best," says Eiskant, whose entourage includes some pint-sized fans and campus crooners.

Eiskant works at a local "ninja" gym teaching school-aged kids the ropes...and jumps...and

climbs. "When I came back after the episode aired, I had a bunch of my students coming up saying they watched me on TV and they were so excited," he says. "I love helping them develop these techniques early on because they're good at it! They have no fear."

In addition to this legion of little fans, Eiskant relies heavily on the friends he made as part of UMBC's all-male capella group, the Mama's Boys. On air, the group joined Eiskant at the starting line, sending him off with their own rendition of "Danny Boy."







"I actually had stage fright before I joined the group and they helped me get over that, so getting to sing with them like we normally do, but at the starting line of the qualifiers, just helped me get rid of all of my nerves," says Eiskant.

## Step 2

### MAKE THE WORLD YOUR JUNGLE GYM

A lot of hard work goes a little way when it comes to training for *American Ninja Warrior*. Eiskant is in the gym up to six days a week training—all to run a course about the length of a commercial break. But you still have to give it your all to get there, and that means thinking outside the box for fitness.

"More so than grip strength and finger strength, it's a mental game," explains Eiskant. "Rock climbing provides a lot of real-time problem solving skills that you don't get in other workouts. It helps when you're tackling a course you're not familiar with."

Since competitors don't see the course until they qualify, Eiskant suggests that *American Ninja Warrior* hopefuls check out different gyms, pursue other athletic hobbies, and familiarize themselves with various challenges to improve their odds on the ever-changing course.

## Step 3

### SING FOR YOUR SUPPER

Now that you have the skills to run up a nearly vertical Warped Wall and propel your body up a Salmon Ladder, what do you do with them? Time to put it all in action and apply for *American Ninja Warrior*.

Eiskant has been a fan of the show since he was 15, but the rules require all contestants to be a certain age. He took his cues and started working out with an eye toward landing on a spot. He started rock climbing with a group and, once he turned 21, he felt like he was ready to compete.

It's a highly selective process to be chosen to run on *American Ninja Warrior*. All hopefuls have to fill out an extensive questionnaire and submit a video showing their personality and what sets them apart. Eiskant kept it in the family and leaned on the Mama's Boys to help out.

"I focused on my music and singing and being part of the Mama's Boys. You have to be interesting and engaging and be sure you have a story to tell."

## Step 4

### DON'T LET THE ODDS DETER YOU

Anyone applying for *American Ninja Warrior* has to be prepared for failure. Only a handful of athletes advance during each stage of the show and only two have walked away with the \$1 million prize.

Eiskant was one of the lucky ones selected the very first year he submitted in 2018 to run in Philadelphia. Even though he was eliminated, he tried out again and had his run featured in our own Baltimore backyard in 2019. He advanced to city finals and fell short but hasn't let that discourage him.

"Watching everyone compete, you realize this person is no better than me just because they can do that. Anything can happen, you just have to keep pushing at it," he reflects.

The Ninja community is a supportive one, and Eiskant emphasizes that, even though it's a competition, "it's more like a family environment. Everyone is just helping each other be better versions of themselves."

In fact, Eiskant has been so encouraging and determined, he's even inspired someone very close to him to try out next year—his dad.

— Kait McCaffrey

Photo courtesy of Dan Eiskant



# ALUMNI ESSAY

## Creating Community Through Food

*If you've ever searched online for a place to eat in Baltimore, chances are Ekiben has popped up as a top destination again and again. Or, if you followed along with this year's fried chicken sandwich feud between two fast food joints, you'll have seen plenty of Baltimoreans resolving the issue by pointing to Ekiben's classic Neighborhood Bird steamed bun. Yelp, BuzzFeed, and other national outlets reaffirm that this small storefront serving eclectic pan-Asian fare is worth the trip to Fells Point (with a second location in Hampden to open soon). Steve Chu '12, economics, co-owner of the restaurant along with two other UMBC alumni, writes how the store owes its origins to UMBC and Baltimore City and why these Retriever chefs care so much about the communities they serve.*

Food has always been about community to me. My father worked endless hours running his Chinese restaurant, but on Mondays, he closed the restaurant and the whole family—aunts, uncles, grandparents—would go out to eat dim sum for breakfast. There'd be like 50 plates on the table. My relatives would urge me, eat, eat, try everything.

When **Ephrem Abebe '13, web development and information systems;** **Nikhil Yesurpriya '13, M.S., '16, biological science;** and I started Ekiben in 2013, we wanted other people to enjoy food together, specifically this weird combination of Chinese/Taiwanese/Indian/Ethiopian cuisine. It was completely natural to us, coming from the food-focused cultures we came from, that food could unite disparate groups of people. The fact that Ekiben has been such a hit in Baltimore blows our minds but is exactly what we hoped would happen.

When we met at UMBC—Nikhil and I through suitemates and Ephrem and I while volunteering for Habitat for Humanity in Baltimore City—I was

studying financial economics, but it was so heavily focused on crunching numbers. I switched to a straight economics major early on after I realized that I wanted to learn more about how people thought and behaved with money, and yeah, my background from UMBC helped me tremendously in my career.

An entrepreneurship course with **Gib Mason '95, economics**, gave me the confidence that we could take this leap, buy a hot dog cart, and sell meatballs or spicy tofu at farmer's markets, which is how we started out. He steered the class away from traditional homework assignments and asked us for our reasoning behind our answers instead. That still resonates with me as a business owner.

Gathering community around us has come as naturally as combining our love of food into affordable and delicious dishes. Fells Point has been like home to us, and Baltimore has supported us every step of the way. Even in unusual ways—getting the original food licence for the hot dog cart as a couple of 20-somethings was so much easier than we anticipated. The licensing board was



so supportive after we explained our vision, but that came as a complete surprise to us.

What came next could be surprising to some in the restaurant business, but in Baltimore, this seems par for the course. After struggling with our hot dog cart—turned eclectic Asian fare cart for about a year, we got invaluable support from other local chefs. Ekiben wouldn't exist without the guys behind Black Sauce, Damian Mosley and Michael Singleton, and Ben Lefenfeld from La Cuchara. Our friendships with other local chefs led naturally into collaboration and guest chef takeovers.

The best example of that communal approach to food in the city is the Charm City Night Market—think of an Asian open air market, tons of people, and amazing food—organized by Stephanie Hsu and the rest of the local Chinatown Collective. We were really proud to be a part of the inaugural year and subsequent events. It does what we want for the city. It brings people of all demographics together, and it's always so densely packed, and there's so much great energy in it.



We've partnered with so many excellent chefs from Baltimore and beyond, and this is another way we get to cross-pollinate with talented craftspeople. There's this push for food to be "traditional" or "authentic" but at its best, food is art. And ultimately, we just want to make food that tastes good and build up the community while doing so. We start that goal in the restaurant, investing a lot of energy into developing leaders in the company. We have staff that's been with us since the beginning. I hope the supportive culture that we built really just kind of oozes out, and it spreads.

And Baltimore has supported us every step of the way. Baltimore has raised us. Literally, this restaurant was built on every \$7 meal we served at any market that would let us sell there. We didn't have a Kickstarter page, we just had Baltimore showing up to buy our food.

At those family dim sum breakfasts, as communal as they were, my relatives were not encouraging me to start my

own restaurant. They actually loudly and emphatically (to put it politely) tried to steer me in the opposite direction. They, like so many other immigrants, had come here with very little and worked so hard to break away from that poverty. They didn't want to see me take that same road, I guess.

But in the end, their harsh words really spurred me to succeed. How could I fail when they had given so much to make a successful life here?



Opposite: Steve Chu and Ephrem Abebe take a moment to pause in their Fells Point storefront. Nikhil Yesupriya mostly works behind the scenes now on the restaurant's social media. Clockwise from top: Abebe and Chu work together in the small prep space where customers can watch their orders being created; Some of the tantalizing menu options include the spicy tofu bun and lightly fried broccoli; Abebe chats with a regular customer who brought some out-of-town friends.

# CLASS NOTES

UMBC Class Notes is compiled by *UMBC Magazine* staff from items submitted online and by mail by alumni as well as from news articles and press releases received by the University. This edition of Class Notes contains information processed by October 24, 2019.

## How to Submit Class Notes

The deadline for submitting Class Notes for the next print issue of *UMBC Magazine* is April 15, 2020. Notes and photos may be submitted via email at [magazine@umbc.edu](mailto:magazine@umbc.edu), online at [magazine.umbc.edu](http://magazine.umbc.edu), or by mail at: UMBC Magazine – Class Notes, Alumni House, 1000 Hilltop Circle, Baltimore, MD 21250.

## Photo Guidelines

Digital photos should be taken on the highest-quality setting. They should be 4 x 6 inches or larger and 300 ppi. Save the attachment as a TIFF or JPEG. Questions? Please email [magazine@umbc.edu](mailto:magazine@umbc.edu).

## 1971

Over the course of 21 hours and 11 minutes, **Daniel Shub, sociology**, a partner at the design firm of SDYM, swam the 25-mile length of Lake Memphremagog, which lies between Newport, Vermont, and Magog, Quebec. He is the 36th person to complete this swim as well as the oldest person to do so, at age 70.

## 1972

**Leslie Grollman, theatre**, begins matriculation at the University of Edinburgh. She will receive an MSc in Creative Writing. Her focus is poetry, poetic prose, and experimental writing.

## 1975

**James Wiggins, political science**, and his wife Evangeline Wiggins met up with lifelong friends and fellow Retrievers **Michael Gambrill '75, English**, Carol Gambrill, and Berneda and the Hon. **David Young '74, sociology**, at the Montreal Jazz Festival.

## 1976

**Blair Grubb, biological sciences**, a distinguished university professor of medicine and pediatrics at the University of Toledo, was awarded the Revolutionary Research Award by the Dysautonomia Support Network, for his work with autonomic nervous system disorders. Grubb's recent research includes a study indicating that postural orthostatic tachycardia syndrome (POTS) may be an autoimmune disorder.

**Harry S. Johnson, political science**, a lawyer whose practice focuses on complex litigation, was honored by *The Daily Record* as a 2019 Leader Over 60.

**Adrienne Jones, psychology**, appeared on *The Baltimore Sun's* list of 25 Women to Watch in 2019. Jones is the Speaker of the Maryland House of Delegates, a role she assumed in May. She is both the first woman and the first person of color to ever hold this position.

## 1977

Among the eight people being inducted into the University of Miami Sports Hall of Fame this year is **Mike Ward, interdisciplinary studies**. Ward served as an assistant cross-country and track and field coach at the University of Miami for six years before becoming the head coach for the men's track and field team in 1997.

## 1979

**Wanda Keyes Heard, political science**, Baltimore City's Circuit Court's chief judge, was honored by *The Daily Record* as a 2019 Leader Over 60.

**Sabina Kelly, economics**, appeared on *The Baltimore Sun's* list of 25 Women to Watch in 2019. As president of Bank of America's Greater Maryland Market, Kelly has prioritized developing deeper connections between employees and the communities they serve.

## 1981

**Kevin Bress, economics**, has launched a podcast with a colleague at Pessin Katz Law in Towson that will cover a wide range of estate planning,



Desi Tubb Conway '07, political science, and her husband, Tim Conway '07, English, welcomed their child Juliette Ann Conway into the world on August 2, 2019.

wealth preservation, and elder care issues. "Ultimate Planning" is available on Spotify and iTunes.

**Thomas Herpel, economics**, has been appointed president and chief operating officer of Arundel Federal Savings Bank. He has worked at Arundel Federal since 1991, when he began as a controller.

## 1984

**Robert Marrero, biological sciences**, has retired after 10 years at the Centers for Disease Control and Prevention, Division of Select Agents and Toxins, in Atlanta, Georgia, where he most recently served as a senior service fellow and team lead. He thanks UMBC's biological sciences department for the education, training, and experience that allowed him to help many others throughout his career.

(L-R) Michael Gambrill '75, James '75 and Evangeline Wiggins, Carol Gambrill, and Berneda and the Hon. David Young '74.





# A DOCTOR'S DILEMMA

**Matthew Loftus '07, chemistry**



Decentering whiteness while working as a doctor abroad has made alumnus **Matthew Loftus** examine his medical methods and motivations again and again. Working as the program coordinator for a family medicine residency in Kenya, Loftus often asks himself: Am I using my medical skills to equip the next generation of local doctors? Am I letting local leadership guide my steps?

But these questions actually started before the medical license, before the move with his family to South Sudan, before getting displaced by a civil war that made its way to the hospital's doorsteps, before relocating to Litein, Kenya, with his wife—a nurse—and three children to a small house across the street from the hospital where he is still asking those questions.

"This is a continuous conversation," Loftus says. There is the way things have been done previously in medicine or in mission settings or in low-income American neighborhoods: "A sort of a very top-down, you know, people from outside making all the decisions," says Loftus. "And that, that is ultimately unsustainable."

## RETRIEVER ROOTS

It was his time at UMBC that helped prepare him for many aspects of his life in Kenya, says Loftus. His Arabic classes and semester abroad in Egypt helped in exposing him to new aspects of international life, and UMBC's Office of Pre-Professional Advising played a significant role in helping him get into medical school and graduate

debt-free. His involvement with UMBC's chapter of InterVarsity Christian Fellowship gave Loftus lasting ties to other Retrievers but also taught him the importance of spiritual guidance and encouraged him to examine his motivations for going into medical missions.

"When I was at UMBC, I knew I wanted to do medicine. I wanted to serve people through health care," says Loftus. But in thinking about ways to best use his skills, Loftus realized the answer was to get involved in health care education.

This discovery happened under the guidance of **Lisa Kelly** in the Department of Chemistry and Biochemistry, "who was very patient with me," says Loftus, "despite the fact that it was while working in her lab that I realized I was not cut out for a life of research."

## ATTENDING TO GROWING NEEDS

Phillip Blasto, a general surgeon who has worked closely with Loftus for the past two years in Litein, says that foreign attendings have lifted a significant load from Blasto and the other local physicians.

"He took a lot of weight," Blasto says, taking care of "patients of mine and patients of the ICU...with Matthew here, the care of patients has improved, particularly in intensive care because he and the other consultants are available. If there was one biggest change, that would be that our intensive care patients now have someone to call and to see them anytime day or night or weekends."

Ultimately, this elevates the reputation of Litein's hospital and builds long-term trust

between the patients and medical practitioners, which has allowed the practice to grow, creating a new set of problems to manage. "We've grown in terms of patient numbers and people who trust us, which is significant," says Blasto. "Nowadays bed space is an issue and theater space is an issue, so depending on some days, we have to put people in the corridors to be seen."

"That availability and the humbleness that people have seen have increased people's faith in the facility," Blasto concludes.

## A CONTINUOUS CONVERSATION

"I think, because there is still a default way that we think and talk about interventions in impoverished communities, oftentimes it does take a moment of 'oh, I need to be doing it differently than the way that I would normally, as a white, privileged, you know, wealthy outsider,'" says Loftus.

"But then once you get to that point, you have to be continuously assessing it and asking yourself and asking the people around you, like, 'Are we doing this well? Are we involving the people that are, you know, that are most affected by this?'" Loftus trails off as the list of relevant questions mount.

"So I think a really big part of it is the fact that that process is never done."

— *Randianne Leyshon '09*  
Photo by *Dixie Gaultney*

# CLASS NOTES

## 1985

**David Oros, mathematics**, is board chair of Gemstone Biotherapeutics, a Baltimore-based company currently developing skin regeneration treatments. The company recently received a \$250,000 investment from the Maryland Momentum Fund.

## 1990

**Gustavo Matheus, biological sciences**, director of Anderson & Quinn, LLC's health law practice, has been selected to join Leadership Montgomery's flagship CORE class for 2020.

## 1992

A biography of a prospector, *Joe Quigley, Alaska Pioneer*, by **Cheryl Fair, visual and performing arts**, will be published in 2020 through McFarland, an independent publisher of academic nonfiction.

## 1993

After four years as vice chair of the board of the Parks & People Foundation, **Franklin Lance, information systems**, has been appointed president and CEO. The Parks & People Foundation is dedicated to creating access to outdoor spaces for the people of Baltimore.

## 1994

**Adam Glazer, political science**, was named senior advisor to the director of the Division of Investment Management at the Securities and Exchange Commission. He has been at the SEC since 2000, first serving as an attorney, then as counsel to SEC commissioners.

## 1995

**Amy Much, political science**, has been hired by Protenus, a health care analytics platform, as vice president of legal.

**Yoram Unguru, M.A., history**, a faculty member at the Johns Hopkins Berman Institute of Bioethics and a pediatric hematologist-oncologist at the Herman and Walter Samuelson Children's Hospital at Sinai Hospital of Baltimore, recently appeared on WYPR to discuss the increasing frequency of shortages of life-saving medicines.

## 1997

**Tiffany Robinson, political science**, was appointed secretary of the Department of Labor by Governor Larry Hogan. She will oversee financial regulation, licenses, workforce development, unemployment insurance, and the Maryland Racing Commission.

## 2000

**Dawn Rock, social work**, was listed among the Most Powerful Women in Corporate America in the January–March 2019 edition of *Black Enterprise Magazine*. The chief compliance officer for Encompass Health, this is Rock's third such honor from the publication, having been named one of the Most Powerful Women in Business in 2017 and one of the Most Powerful Executives in Corporate America in 2018. She was also recognized by *Savoy Magazine* as one of the Most Influential Black Lawyers in 2018.

## 2001

**Gargi Dasgupta M.S., Ph.D. '03, computer science**, was listed among *Fortune India's* 2019 Top 50 Business Women in India for her work as director for IBM Research India and chief technology officer for IBM India/South Asia. She is noted for her work with artificial intelligence technology.

**Lisa Nitsch, psychology**, was elected to the board of directors of the National Resource Center on Domestic Violence, a national technical assistance provider and leader in the effort to end domestic violence.

**Amy Starosciak, biology**, was promoted to director of outcomes at Baptist Health South Florida and oversees research operations in neuroscience, orthopedics, NICU, and robotic surgery.

**Benjamin Strong, emergency health services**, was named chair of the Arctic Council Emergency Prevention, Preparedness, and Response Search and Rescue Experts Group.

## 2003

**Letitia Dzirasa, M11, biological sciences**, appeared on *The Baltimore Sun's* list of 25 Women to Watch in 2019. Dzirasa plans to bring her background in technology into her work as Baltimore's new health commissioner, a position she began in March 2019.

## 2004

**Kyle Bates, M.S., emergency health services**, has returned to UMBC's EHS department as its new paramedic program director.

**Alicia Wilson, political science**, has been appointed vice president of economic development at the Johns Hopkins University and Johns Hopkins Health System, overseeing the Office of Economic Development. She will focus on directing and developing programs and initiatives that Johns Hopkins has implemented in Baltimore City. Wilson was also listed as one of *Savoy Magazine's* Most Influential Women in Corporate America in the summer 2019 issue.

## 2006

**Joseph Howley, ancient studies**, is an associate professor of classics at Columbia University. His first book, *Aulus Gellius and Roman Reading Culture: Text, Presence, and Imperial Knowledge in the Noctes Atticae*, was published in 2018 through Cambridge University Press. Currently, he is working on a second book, to be entitled *Slavery and the Roman Book*. His wife, **Skylar Neil, '06, ancient studies**, works as a senior content developer for Smartly, a mobile learning company based in Georgetown. Together, they have a daughter who turned two on July 1.

**Steve Sharkey, M.P.P.**, became director for the Department of Transportation for Baltimore City on July 8. Sharkey has worked for the city government for 14 years, starting as a fellow in CitiStat. He served for seven years as director of the Department of General Services.



## LEADERS IN TEACHING

**La Jerne Terry Cornish Ph.D. '05**, language, literacy, and culture, and  
**Beverly Bickel M.A. '94**, instructional development systems, Ph.D. '05, LLC



When **La Jerne Terry Cornish** first started classes at UMBC, her son was two years old, she was teaching full time, and she had to drive 45 minutes to get to campus.

The journey was never easy. But in the seven years it took to finish her Ph.D., the discussions hit home and the supportive community around her made all the difference, she says.

"The language, literacy, and culture (LLC) program allowed me to dream a dream I didn't dream," says Cornish, Ph.D. '05, who now serves as provost and senior vice president of Ithaca College, following a long career in teaching and administration at Goucher College.

"I never thought I would end up where I am, but the preparation I received as a result of that program and the support of the faculty, staff, and students prepared me for my next steps."

### TEACHING OUR TEACHERS

Like Cornish, fellow LLC alumna **Beverly Bickel, M.A. '94, Ph.D. '05**, found a community she loved dearly at UMBC. After starting her career in early childhood education and earning her master's at UMBC, Bickel took on the position of directing the English Language Center.

Bickel found herself drawn to the new language, literacy, and culture doctoral program through the persistent encouragement from LLC founding director and professor emerita **Joann "Jodi" Crandall**.

Now, as a professor, Bickel likes to take the time to understand where her students are in their lives. That means creating a comfortable environment in the classroom and providing a support system for those navigating their doctoral pathways.

"As my instructor, Bev listened carefully to my interests and ideas, affirmed some of my most adventurous instincts, and shared resources that could help me find my path," says **David Hoffman, Ph.D. '13, LLC**, and director of UMBC's Center for Democracy and Civic Life.

"She was unfailingly patient and creative and above all, responsive to me: truly hearing my hopes, amplifying my curiosity, and helping me to believe in myself as a researcher."

Bickel's ongoing desire to connect with her students on a personal basis keeps her energized each semester, where she often starts her classes with a conversation about her students' days. Many drink tea while they chat.

"We've got to connect as humans before we try to think about whatever texts we've read," she says. "I love that about teaching. It might be four- and five-year-olds or it might be adults, but everybody is coming in with themselves first before engaging in this work we call teaching and learning."

### A SPECIAL COMMUNITY

In 2019, Cornish received the UMBC Outstanding Alumni Award for the Humanities and Bickel was honored with the Outstanding Faculty Award for her work as a clinical associate professor in the LLC program and as affiliate associate professor gender, women's, and sexuality studies.

Founded in 1998, UMBC's Language, Literacy, and Culture Ph.D. program attracts such a variety of students—many of whom teach, have families, and are well along in their careers—it has become a true experiment in balance and community.

Cornish remembers her first class with Crandall. The discussion was so interesting, intense, and fun, she says, it went at least 15 minutes over.

"I was so taken by that first class," said Cornish, who laughs as she recalls having to remind Crandall that "we have to teach in the morning!" But, the material was so rich. She challenged us, she made us think. It was wonderful."

As Crandall recalls the first years of the program, she emphasizes that Bickel and Cornish were both instrumental in building the LLC program into the standard bearer it is today.

"These are two wonderful women who had all the right leadership skills and just such a strong sense of themselves...and a strong sense of social justice," she says. "I am just so thrilled for them both."

— Jenny O'Grady

# CLASS NOTES

## 2007

**Sarah Butts, social work**, was appointed director of public policy with the National Association of Social Workers.

**Jeffrey Kelly emergency health services, M.S., '09**, serves as a trooper first class/flight paramedic assigned to the Washington Section of the Aviation Command of the Maryland State Police. He is also the secretary of the State Law Enforcement Officers Labor Alliance.

**Shane McCormick, political science, M.P.P. '14**, left his position in UMBC's Office of Academic Opportunity Programs to join the Maryland State Department of Education as the executive associate to the Deputy State Superintendent for School Effectiveness. He also recently married Jenessa Cole McCormick in a ceremony in Springfield, Oregon.

**Desi Tubb Conway, political science**, and her husband, **Tim Conway '07, English**, welcomed their child Juliette Ann Conway into the world on August 2, 2019.

## 2009

**Bethanee Bemis, anthropology, M.A., '11, history**, works as a museum specialist with the Division of Political and Military History, where she ensures the physical and intellectual care of the division's collections. She recently published an article on weddings at the White House in the *White House History Quarterly*.

**Kristina Gaddy, history and modern languages and linguistics**, has a nonfiction book forthcoming from Penguin Random House. *Flowers in the Gutter* takes place during the Third Reich, recounting the story of a group of young people called the Edelweiss Pirates who resisted the Nazis' regime.

**Rahne Jones, English**, plays the character of Skye in Ryan Murphy's new Netflix series *The Politician*. The breakout actress, who previously worked for the Department of Homeland Security, stars alongside the likes of Gwyneth Paltrow, Zoey Deutch, and Ben Platt.

**Tesia Stephenson, M17, biochemistry and molecular biology**, recently published the article "Finding the Right Postdoc Mentor Matters" in *Chemical & Engineering News*.

**Karsonya Whitehead Ph.D., language, literacy, and culture**, appeared on *The Baltimore Sun's* list of 25 Women to Watch in 2019. In addition to working as an associate professor at Loyola University Maryland, Whitehead also hosts a daily WEEA radio show called "Today with Dr. Kaye," where she discusses a range of current events. She was recently selected to *Essence* magazine's 2019 list of Woke 100 women.

## 2010

**Bobby Lubaszewski, English**, has been reclassified to assistant director of marketing within UMBC's Division of Professional Studies where he has worked since October 2015 when he was hired as a marketing coordinator. Lubaszewski is a member of the Alumni Advisory Board and recently became president of the Professional Staff Senate.

**Tabassum Majid, M18, interdisciplinary studies, M.A., '18, management of aging services**, executive director of the Integrate Institute, a non-profit focused on "optimizing quality of life for persons with dementia and their loved ones," has been recognized as a Rising Star honoree by McKnight's Senior Living.

**Adrienne Starks, Ph.D., biological sciences**, of STREAM Innovations, has been selected as an American Association for the Advancement of Science IF/THEN Ambassador to serve as a role model to girls in STEM. Starks is one of 125 ambassadors selected nationally.

## 2011

**William Archer, history**, married Suzanne Kopf on September 20 at San Francisco City Hall. The pair met while doing water ballet together with Fluid Movement, a Baltimore performance group.

**Mitch Case, media and communication studies**, is a communications coordinator for an arts nonprofit in New York City. He is engaged to be married to his partner, **Brian Brown '13, biochemistry and molecular biology**. The couple met at a STRIVE leadership retreat.

**Rima Kikani, English**, was named one of the *Daily Record's* 2019 Very Important Professionals.



Mitch Case '11 and Brian Brown '13, are engaged to be married.

**Dr. Ayobami Olufadeji, biological sciences**, was featured in a *Sahara Reporters* article about the experience of going to medical school and completing a medical residency as an international student in the United States.

**Kaitlyn Sadtler, biological sciences**, began working as an Earl Stadtman Tenure-Track Investigator and Chief of the Section for Immuno-Engineering at the National Institutes of Health. In 2018, she was awarded a TED Fellowship, culminating in a TEDTalk entitled "How We Could Teach Our Bodies to Heal Faster." She was also featured on the *Forbes's* 2019 list of 30 Under 30 in Science.

**Laura "Meg" Viar, psychology**, was one of 49 women and nonbinary people awarded a 2019 DCFemTech award. She was recognized for her work as a senior software engineer at Nomadic Learning.

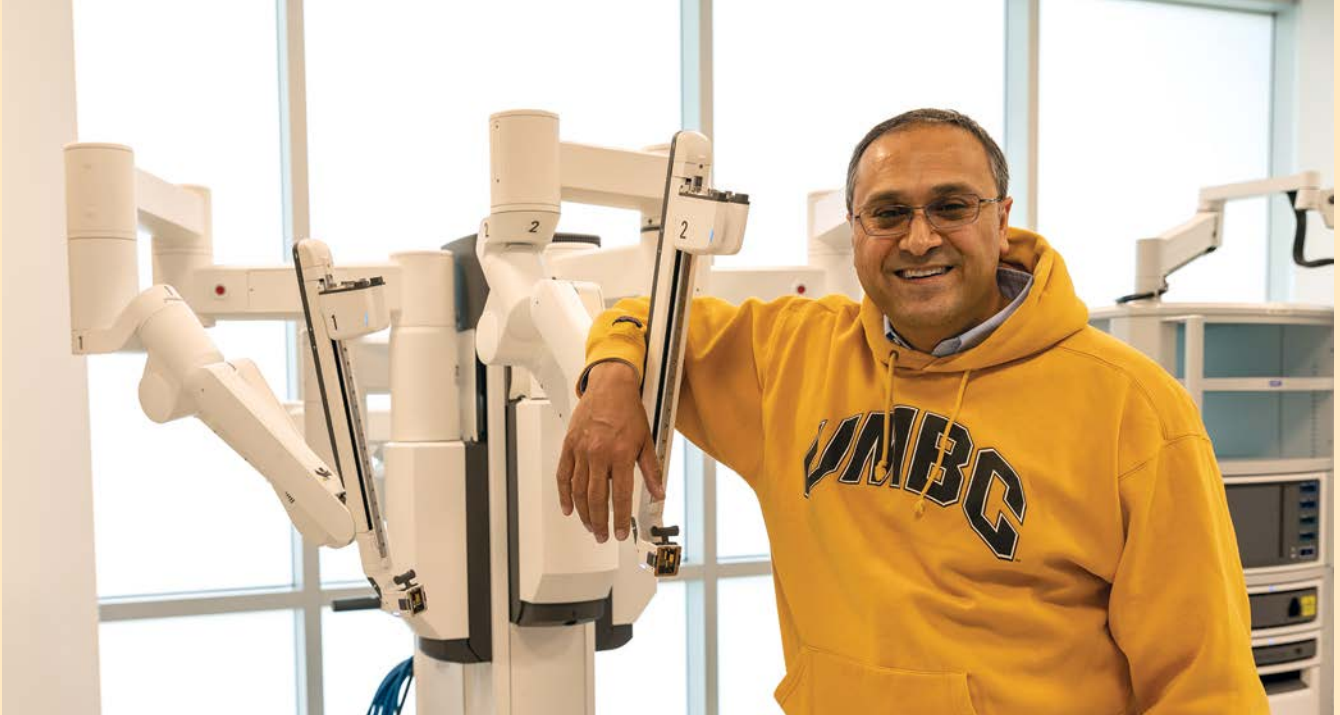
## 2012

**Stefanie Mavronis, political science and media and communication studies**, is deputy director of communications for the Office of Baltimore City Council President Brandon Scott. Previously, she worked in District 1 Councilman Zeke Cohen's office as the director of civic engagement.



# SILICON VALLEY SUCCESS STARTS AT UMBC

## Rahul Razdan '05, information systems



Although it's been 15 years and he now works in Silicon Valley, **Rahul Razdan** can still hear UMBC database management instructor **Richard Sponaule's** lessons echoing in his current work.

"I still talk about normalizing a table," he says. "A lot of what I learned at UMBC applies to what I do today."

Razdan lives in San Jose and works as a senior business process architect for Intuitive, a global company that produces minimally invasive surgery technology, most notably the da Vinci Surgical System. The system translates the surgeon's hand motions inside the patient's body using a miniaturized surgical camera and wristed instruments (i.e., scissors, scalpels, and forceps). Because the doctors are seated while they use the systems, they can perform longer, more complicated procedures.

Entering new markets in new countries, each of which has its own regulations, is where Razdan comes in. "I work with the legal and regulatory teams to interpret the standards into business requirements," he says. The fundamentals of his work, according to Razdan, are rooted in his time at UMBC, where he studied information systems on the Shady Grove campus.

"It's the foundation of my career today," says Razdan. "The systems analysis and design focus in my undergrad taught me to deconstruct problems into smaller parts and apply root cause analysis. I had such an amazing experience."

### MAKING A HOME AT SHADY GROVE

**Karen Archambault**, a former program coordinator at UMBC, isn't surprised by Razdan's accomplishments. "He didn't just focus on credits and classes," she says. "He took advantage of the full experience at UMBC."

As a transfer student from Montgomery College, Razdan knew about UMBC's reputation from its number one ranking in chess. "I thought, 'That's pretty awesome. They brag about chess.' But you know what? Nerds get paid in the end," says Razdan, with a chuckle.

On the Shady Grove campus, Razdan distinguished himself outside of the classroom. As president of the Universities of Shady Grove Student Association, he organized a job fair and started a dining discount program with nearby restaurants.

"This wasn't just a place to take classes [for Razdan]," says Sponaule, senior lecturer and associate undergraduate program director of UMBC at Shady Grove. "Any college experience is going to be what you make of it. He stood out and really applied himself to his studies, too."

Razdan says he was struck by the genuineness of his classmates and professors. "They were really humble and genuinely inviting," he says, adding that he always felt welcome on the main campus in Catonsville.

"I never felt like a stepchild. I never felt apart," says Razdan. "I could go to Catonsville and watch a basketball game or catch a lacrosse match."

### STAYING CONNECTED FROM THE WEST COAST

Before Razdan graduated, he'd already completed an internship at the *Washington Post* and had a job waiting for him at a software company.

After earning a master's degree from the George Washington University in information systems technology in 2014, Razdan moved to California with his wife. He's stayed connected to UMBC from afar in a variety of ways.

Razdan's gifts to the university have earned him a membership in the Hilltop Society. One program he donates to is the Center for Women in Technology. "It's a great way to give back to my school that gave me so much," says Razdan, "and while doing so, support women entering the science and technology space. We need a more diverse group of people at the table talking about problems affecting us today, and I find this is one way to address that problem."

Razdan still follows the news from his undergraduate alma mater and particularly enjoyed bragging from the West Coast about UMBC's NCAA Division I Men's Basketball Tournament upset in 2018. Even more fun, he said, was getting together with fellow Retrievers earlier this year at a UMBC alumni event in California. "It was great," Razdan says. "I'd love to get together once a year and build on this network."

— Laura Cech

Photo courtesy of Rahul Razdan.

# CLASS NOTES



Katie Golden '14 and Shantonu Kundu '14 got married twice in 2019. The day after a Lutheran wedding, they celebrated with a Hindu ceremony.

## 2013

**Jennifer Bohn, biochemistry and molecular biology**, completed her Ph.D. in biological chemistry at the University of Michigan.

## 2014

**Vivian Chioma, M22, interdisciplinary studies**, attended the 34th Annual M.D./Ph.D. National Meeting in Copper Mountain, Colorado, where she delivered an oral presentation about her research in the Kalivas lab at the Medical University of South Carolina. Also at the conference, she met Dr. Peter Agre, Nobel laureate, a longtime supporter of the Meyerhoff Scholars Program.

**Katie Golden, psychology**, married **Shantonu Kundu '14, M.S., information systems**, on July 20 in Occoquan, Virginia. Golden and Kundu met while volunteering at Walden Circle Community Center, which was Kundu's service site for the Shriver Center's Peaceworker Fellowship. Golden's sister, **Krissy Golden Ventre '05, geography and environmental systems**, was the matron of honor.

**Nicole Layton, political science**, is a member of the National Security Agency's Ceremonies and Special Events team, where she coordinates recognition, award, retirement, and other ceremonies hosted by senior NSA leadership. She has worked with the NSA since her senior year of high school, including during her time at UMBC.

**Bradley Potteiger, M22, computer engineering**, successfully defended his dissertation to graduate from Vanderbilt University with his Ph.D. Through four summer internships and five academic years, Potteiger has helped to start a multi-million-dollar, multi-agency initiative; helped to protect military and government stakeholders overseas; presented at the National Security Council; published over a dozen papers; presented at over 30 conferences; and become the highest NSA-funded Ph.D. student in the country.

## 2015

**Margaret Naylor, modern languages and linguistics**, has joined the team at Plave Koch, a law firm that specializes in franchising in Reston, Virginia. Naylor recently graduated cum laude from The George Washington University Law School, where she served as articles editor for the *Federal Circuit Bar Journal*.

## 2016

**Dina Gharib, media and communication studies**, is a federal contractor for Leidos working as a marketing and communications specialist at the U.S. Department of Transportation. In June, she was a finalist in the 2019 Miss District of Columbia competition, her first pageant. She won the competition's Miss Photogenic Award.

**Xavier Mack, modern language and linguistics**, begins his third season as a member of the Dallas Black Dance Theatre, Dallas' oldest, continuously operating professional dance company.

## 2017

**Adetola Abdulkadir, chemical engineering**, along with current intermedia and digital arts M.F.A. student **Safiyah Cheatam**, was granted a Ruby award, project-based funding granted to Baltimore-area artists. Abdulkadir's award will go to support *Obsidian*, a speculative fiction podcast series based in Afrofuturism.

**Elise Adamson, chemical engineering**, a graduate student at Duke University, was awarded a Gilliam Fellowship by the Howard Hughes Medical Institute.

**John "Johnny O" Olszewski, Jr., Ph.D., public policy**, was named one of the *Daily Record's* 2019 Very Important Professionals. He serves as Baltimore County Executive.

## 2018

**Erick Gutierrez, chemical engineering**, was selected by the Biochemical Technology Division of the American Chemical Society as the recipient of the Young Professionals Award in Upstream and Downstream Processing for his poster "Microscale Chromatography Toolkits for Rapid Screening and Purification of Therapeutic Proteins"

**Iman Said, psychology**, successfully completed her first year as a doctoral student in psychology at Georgia State University. Her mother, **Jacquelyn Said '83, psychology**, and now works as a mental health therapist in Baltimore.

**Joe Sherburne, financial economics**, a former UMBC Basketball player and a standout from UMBC's historic win against UVA in 2018, has signed a professional contract with Team Ehingen Urspring of the ProA in the German Second Division.

## Friends We Will Miss

**Kwame Ansah-Brew**, an adjunct professor of Africana studies who taught courses on African religions, African dance, and black music, passed away on June 7. In addition to his scholarly work, Ansah-Brew was also a skilled musician, performer, and percussionist. He was the founder of the Performing Arts Center for African Cultures, Fritete Afrobeat, and the Fritete African Drum and Dance Ensemble, and he performed frequently throughout the community, promoting an appreciation of African cultures.



**Thomas F. Carroll, III, '18, psychology**, passed away on July 23. Carroll lived with Hemophagocytic lymphohistiocytosis, a severe systemic inflammatory syndrome, while working hard to achieve his degree. Carroll's father says he never saw him happier than when he walked across the stage at Commencement.

**Susan Watt Dunham '79, American studies**, passed away in July at the age of 81. Dunham held positions in the Howard County government, the Maryland state government, an Ohio architectural firm, and Summit/FISERV in Oregon before her retirement in 1995. In her retirement, she served as the first chairperson of Corvallis Stone Soup, a nonprofit dedicated to providing free meals to the hungry.

**Thomas Fisher '18, Asian studies**, passed away after a climbing accident in China, where he had been teaching English. During his time at UMBC, Fisher won awards for excellence in Asian studies and was an active member of the Down and Dirty Dawg Band.

**Charles David Kuhn '01, visual and performing arts**, passed away on July 24. Kuhn had recently begun a career in web development. He will be remembered for his creative spirit and his sense of humor. He is survived by his mother and father and two brothers.

**Teresa Lupinek**, who retired in March from her position as executive administrative assistant to the president, passed away on August 2. Lupinek had held several positions at UMBC since 1984, when she started in the biology department before moving to a position in the Career Center. In 2012, she served as interim executive administrative assistant to the Provost's Office before taking on the role of executive administrative assistant to the president. Lupinek was instrumental in the creation of the Non-Exempt Staff Senate shared governance group. Outside of UMBC, Lupinek was a skilled and successful multimedia artist and calligrapher.

**John Thomas Middleton '74, political science**, passed away in January. Middleton spent his entire career in purchasing and supply chain management. He is survived by his wife of 43 years and his children and grandchildren.

**James Milani '73, political science**, assistant dean of administration and operations in the College of Engineering and Information Technology, passed away on June 26, after a 45-year career at UMBC. Milani participated in a number of campus initiatives, including, most recently, serving as a member of the implementation team and co-chair of the Faculty/Staff Advisory Committee of UMBC's Retriever Courage Initiative. Members of the UMBC community will remember him for his charitable spirit, his unrelenting positivity, and his selflessness.

**Keith Northern '85, economics**, passed away on January 29 at the age of 56. Northern was a successful entrepreneur who launched his own firm, KMN Consulting LLC, in 2005 that specialized in business management and corporate marketing. He is survived by his wife, son, and daughter.

**Benjamin Pioso** was a senior majoring in chemistry and mathematics when he passed away unexpectedly on June 26. Despite multiple health issues, Pioso was determined to stay at UMBC. His family reports that Pioso was grateful to have studied at UMBC and cherished the friends, professors, and staff members he met during his time here.

**Robert Provine**, a neuroscientist who taught psychology at UMBC for over forty years prior to his retirement in 2013, died on October 17. Provine was a neuroscientist who spent his career studying the nervous system and human behaviors. Provine took his research to shopping malls and other public spaces to study people's reasons for laughing—his conclusions showed that often laughter was not a response to uproarious humor but instead a function of solidifying social bonds. His findings were published in two books, *Laughter: A Scientific Investigation* and *Curious Behavior: Yawning, Laughing, Hiccupping, and Beyond*. Provine advocated "small science" and "sidewalk neuroscience" approaches to asking serious scientific questions. An obituary in the *New York Times* called him "an authority on laughter."

## PUPPY PARADE – HOMECOMING 2019



# THEN & NOW

## Pack Your Bags

Last summer, the incoming class of 2023 had an opportunity for a study abroad experience unlike any other offered at UMBC previously. Dawg Days Abroad is a new summer orientation program that allows incoming freshmen to travel abroad, take a class, and complete a research project—all before beginning their first semester.

In its inaugural year, 29 students traveled to the United Kingdom, where they stayed in the residential halls at the University of Bristol. Over the course of the two-week trip, students visited numerous cultural landmarks in England and Wales.

Though the Dawg Days Abroad program is in its first year, it is certainly not the first program to offer exciting, short-term study abroad opportunities. The first such class dates all the way back to 1969's "Mini-Mester." Over the course of three weeks, 42 students and three professors in the Classics department visited multiple countries in Europe, setting an early precedent for Winter Session study abroad programs that continues to this day, fifty years later.

—Johanna Alonso '20



Students on the 1969 trip were a part of a class called "Rome: Ancient and Modern" and visited many sites of antiquity.



Students visit the Cardiff Castle to learn about the Welsh parliament.



The entire group in front of Caerphilly Castle in Wales.



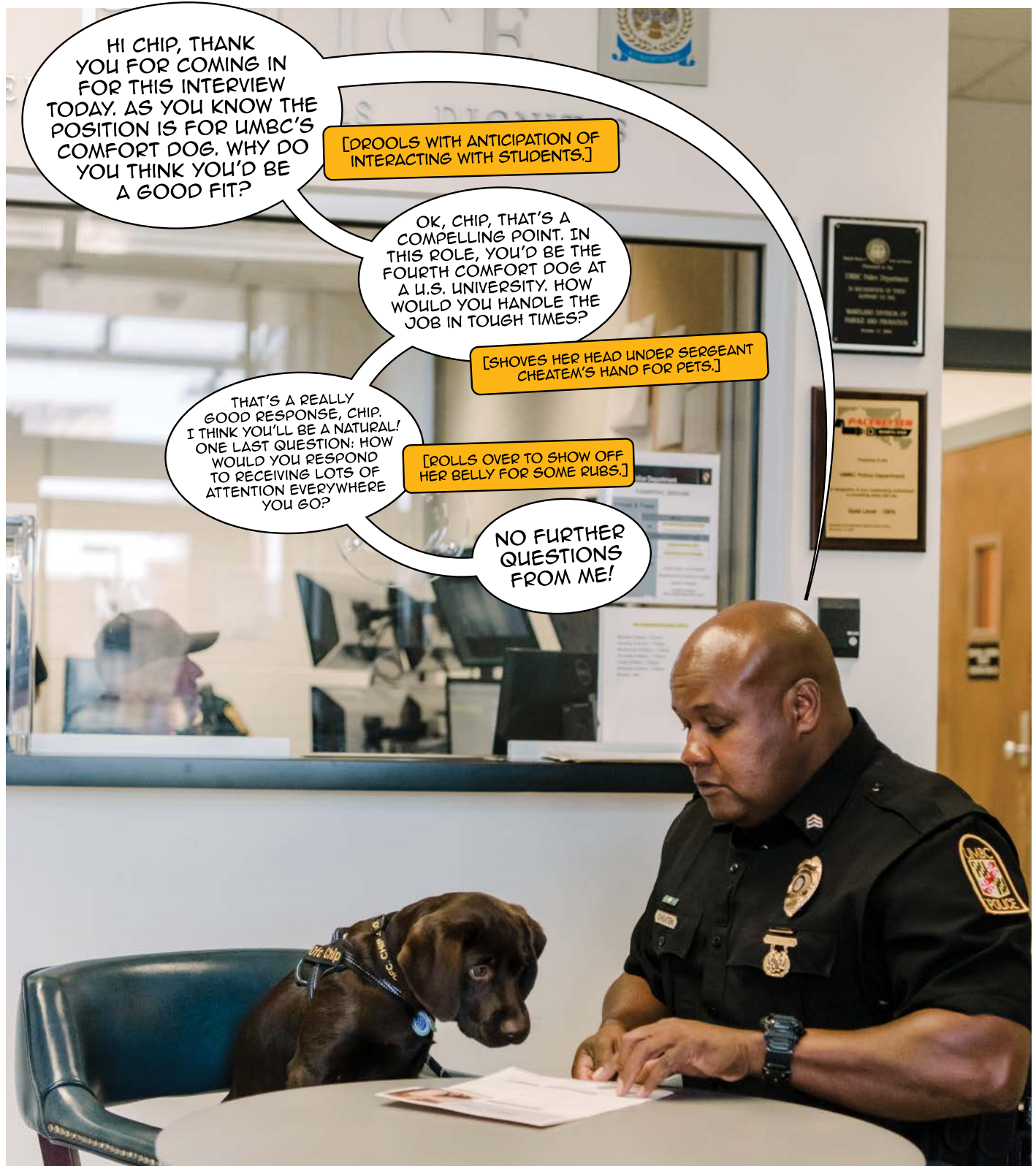
*Students on the balcony of one of the towers of Salisbury Cathedral, which they visited to see the Magna Carta.*





# WILD CARD

## The Right Dog for the Job



Follow along with more photos of Officer Chip's first few weeks on the job at [magazine.umbc.edu/the-right-dog-for-the-job](http://magazine.umbc.edu/the-right-dog-for-the-job).



# GRIT & GREATNESS

The Campaign for UMBC



## THE GRIT & GREATNESS CAMPAIGN SUPPORTS THESE PRIORITIES



SCHOLARSHIPS



RESEARCH



ATHLETICS



COLLEGES

Since July 1, more than **925** donors have helped UMBC reach together.  
Make your gift by December 31 at [giving.umbc.edu](https://giving.umbc.edu).



# CLAIM YOUR FUTURE

## Thank you, #RetrieverNation.

You've made us proud and now UMBC wants to celebrate our alumni.

Due to the great response last year, UMBC is once again awarding all newly admitted alumni with a **\$1,000 scholarship** toward their first semester of graduate studies tuition in any master's or graduate certificate program. UMBC is also waiving the application fee, so now is the time!

UMBC offers over 60 master's and certificate programs in a range of disciplines, including some of our newest program offerings: Data Science; Entrepreneurship, Innovation, and Leadership; Community Leadership; and Integrated Product Development and Manufacturing. **APPLY NOW. No Application Fee.**

[gradschool.umbc.edu/retrievernation](https://gradschool.umbc.edu/retrievernation)

# ● UMBC

## Returning Alumni Scholarship

**UMBC MAGAZINE**

University of Maryland, Baltimore County  
1000 Hilltop Circle, Baltimore, MD 21250

## ALUMNI EVENTS

Check out [alumni.umbc.edu](http://alumni.umbc.edu) for upcoming events and initiatives, including the Annapolis alumni reception, men's and women's basketball games and alumni receptions, alumni admissions programs for prospective students, networking and service events, and much more, such as the following opportunities.

- January 29** – Houston Alumni Reception
- February 7** – Career and Internship Fair
- February 8** – Alvin Ailey Performance and Reception at the Kennedy Center, hosted by the Chapter of Black and Latino Alumni
- February 20** – San Francisco Alumni Reception
- February 27** – Black and Gold Rush: UMBC Giving Day
- March 4** – Nashville Alumni Reception
- April 16** – Alumni and Student Networking Event “Sweeten Up Your Network”
- May 20 & 21** – Golden Anniversary: 50th Anniversary of the First Graduating Class
- May 29** – 15th Annual Wine Tasting and Silent Auction, hosted by the Chapter of Young Alumni

Update your contact information with us to stay up to date on all of our alumni events, and follow UMBC Alumni on social media.



[facebook.com/umbcalumni](https://facebook.com/umbcalumni)  
[facebook.com/umbcpage](https://facebook.com/umbcpage)



[@umbclife](https://instagram.com/umbclife)



[@umbc](https://twitter.com/umbc)

