

2019-2020

ISSUE 12.2

A 2020 VISION FOR HEALTH

FROM NEARLY PARALYZED TO POTENTIAL OLYMPIAN

EVMS

MAGAZINE

The VAPING Crisis

Hiding in plain sight

**PRESIDENT AND PROVOST OF EVMS,
DEAN OF THE SCHOOL OF MEDICINE**

Richard V. Homan, MD

EDITORS

Vincent Rhodes, PhD

*Editor-in-Chief, Assistant Vice President
Marketing and Communications*

Nancy Chapman

*Managing Editor, Assistant Director, Marketing and
Communications*

Linda Cobb

Copy Editor

Doug Gardner

News Director, Photo Editor

Virginia Hilton

Account Executive

Jennifer McCarrel

Director of Marketing and Communications

GRAPHIC DESIGN

John Comerford, Joy Ellinor

Art Directors

Christina Boubas

Graphic Artist

Brendan Ash, Cory Hooper

Photography/Videography

EDITORIAL BOARD

Connie McKenzie

*Senior Associate Vice President, Development and
Alumni Relations*

Jacklyn Banas

Director of Donor Relations

Tamara Poulson

Director of Alumni Relations

Ann Bowen

Assistant Director of Donor Relations

Aline Landy

Assistant Director of Alumni Relations

Natalie Semmler

Web Technologies Manager

CONTRIBUTORS

Sonja Barisic

Kelley Freund

Eric Lusher

Carin Moonin

Walt Taylor

EVMS Magazine is published three times a year. Copies are available on campus, in doctors' offices and by mail. An electronic version is available online at www.evms.edu/digitalmagazine.

To request a copy or share news, please contact Nancy Chapman, Managing Editor, 757.446.7070 or news@evms.edu.

For EVMS Medical Group Patients:

If you do not want us to contact you for fundraising efforts, you must notify our Privacy Office through one of the following channels:

- In writing:
EVMS Medical Group
Privacy Office
4111 Monarch Way, Suite 500
Norfolk, VA 23508
- Through email on the "Contact Us" page at evmsMedicalGroup.com
- By calling the Privacy Line at 757.451.6298
- By completing an "opt out" form available at each clinical unit

EVMS

MAGAZINE

2019-2020 | ISSUE 12.2



COVER STORY

The Vaping Crisis

Sadly, some teens are paying the ultimate price

Page 14

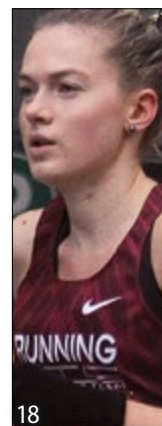
departments



10



12



18



22



34

- 4 EVMS Pulse
- 6 Picture This
- 8 Vision Quest 1
- 9 Behind the Bench
- 10 Off Campus
- 12 Your Support
- 22 2020 Vision for Health
- 42 Alumni Connections
- 44 Vision Quest 2
- 46 My Story

FOLLOW US



EVMS.edu/
Pulse



/EVMSedu



/EVMSedu



/EVMSedu



/EVMSedu



/EVMSedu



/EVMS



/edu/19574



Last summer, when we first discussed stories for this edition of EVMS Magazine, the surge in teen vaping was on a list of 2020 health topics that we would address briefly. Then young people who vaped started dying or becoming seriously ill.

In November, scientists found potential culprits in substances like diacetyl and vitamin E acetate, but as of press time, no definitive cause for this vaping-related lung disease had been identified. Until more is known, it is vital that parents and educators understand the dangers of e-cigarettes — and that a teen's wristwatch or thumb drive might be much more than a wristwatch or thumb drive. Our cover feature (*see page 14*) includes more about stealth vaping devices and the high risk of nicotine addiction for youth who use e-cigarettes.

Breaking a nicotine addiction, whether from vaping or smoking, and getting in shape are two of the most common New Year's resolutions. But instead of attempting yet another diet, what if you addressed your overall "eating pattern"? That is the guidance offered by a leader in our School of Health Professions in "A 2020 Vision for Health" (*see page 22*). Several other EVMS experts also weigh in on health issues making headlines — issues that could be important to your family.

If you need motivation to keep your resolutions, look no further than two amazing recovery stories recounted within these pages: MD student Megan Cunningham (*see page 18*) and diabetes patient Kristen Swick (*see page 46*). Their perseverance is inspirational. We hope their experiences will help motivate you to achieve your goals in the coming year.

As I have noted in the past, enhancing diversity, inclusion and health equity on our campus has been a priority for me since I joined EVMS in 2012. I am pleased to announce that our Board of Visitors recently approved a comprehensive strategic plan (*see page 30*) that has solidified this as a major focus at EVMS for the next four years.

As always, thank you for helping EVMS deliver on the promise to safeguard the health of our community — and your family. It remains an honor and privilege.

Sincerely,

Richard V. Homan, MD

EVMS BOARD OF VISITORS

Mark. R. Warden <i>Rector</i>	Sarah Bishop <i>Secretary</i>	Julie L. Damman, MD '88 Hon. Paul D. Fraim, Esq.	Phillip H. Hucles, Esq. W. Ashton Lewis Sr.	Marcus L. Martin, MD '76 Alan L. Wagner, MD (<i>Ophthalmology Residency '86</i>)
Theresa S. Emory, MD '89 <i>Vice Rector</i>	Rear Adm. Robert Bianchi (ret.) <i>Treasurer</i>	Sharon S. Goodwyn, Esq. Chester M. Hart Jr.	Fred W. Lindsay, DO T. Richard Litton Jr.	Bruce D. Waldholtz, MD

EVMS FOUNDATION BOARD OF TRUSTEES

Wayne F. Wilbanks <i>Chairman</i>	Shirley C. Baldwin Justin C. Ballard	Robert C. Goodman Jr., Esq. Andrew C. Hodge	Vincent J. Mastracco Jr., Esq. Mary E. Murden	Stephen M. Snyder Charity A. Volman
Mark B. Dreyfus <i>Treasurer</i>	Paul D. Chidester, MD Clyde T. Clark Jr.	Christopher D. Kastner Kirkland M. Kelley, Esq.	Vandana A. Patel, MD Robin D. Ray	Bradley J. Waitzer Lewis W. Webb III, Esq.
Andrew S. Fine <i>Secretary</i>	Benjamin G. Cottrell V Steven D. Fredrickson	Patricia Y. King, MD Edward L. Lilly, MD	Deborah B. Russell Louis F. Ryan, Esq.	
	Dawn S. Glynn	Darleen Mastin	Jane R. Short	



EVMS honors faculty and staff for service, excellence

EVMS honored a record 23 individuals with President's Faculty, Staff and Diversity and Inclusion Awards at the 2019 EVMS Service and Recognition Awards Ceremony, Tuesday, Oct. 29, at the Norfolk Waterside Marriott.

Dr. Siraj honored for his work in Ethiopia



Elias Siraj, MD, the David L. Bernd Distinguished Chair for Cardiovascular and Diabetes and Professor of Internal Medicine, was one of four U.S.-based physicians honored by Addis Ababa University Faculty of Medicine for sustained, loyal support of Ethiopia for many years. He was named an Associate Fellow in the Ethiopian Academy of Sciences. The praise —

the academy's highest recognition for foreign physicians — was, in part, acknowledgment of Dr. Siraj's efforts in diabetes research in Ethiopia and his contribution in establishing the country's first endocrine fellowship training program.

Researcher wins NIH funding to investigate ovulation



Diane Duffy, PhD

In the scientific world of reproductive biology, the typical objective of research is either to find a new way to enhance fertilization or a new way to prevent it. Diane Duffy, PhD, Professor of Physiological Sciences, is considering both options as she begins a five-year, \$3.36 million study funded by the National Institutes of Health.

Medical Spanish students organize free health fair

Several dozen EVMS students spent a recent Saturday volunteering at a health fair for Spanish-speaking residents of Norfolk. The student organizers and many of the volunteers are part of the Medical Spanish program, an initiative of EVMS Community-Engaged Learning. They were supported by several faculty members, including Edwin Cruz, MD, Assistant Professor of Clinical Internal Medicine.



EVMS hosts SNMA Leadership Institute

Several hundred medical students from Virginia, Maryland and Washington, D.C., made their way to EVMS for the annual Student National Medical Association (SNMA) Region VI Leadership Institute held last fall. SNMA is a national organization that aims to support underrepresented minority medical students.

The conference was open to all medical students, residents and fellows but was tailored for those underrepresented in academic medicine, in particular women, LGBTQ, and racial and ethnic minorities. The theme for this year's event was "For Us, By Us: Building Conscious Leaders in Medicine."



We would like to take a moment and thank Mrs. Yarborough and Mrs. Antrum for sharing their journeys with Vitiligo this afternoon. #EVMSMelanininMedicine would not have been possible without these two phenomenal women! #EVMSSNMA #DermatologyClub



Medical Soc. of VA
@MedSocietyVA



Congratulations to MSV member Dr. Abby Van Voorhees on receiving national honor from @AADskin as a Patient Care Hero for her leadership at the Rapid Access Clinic at @EVMSedu Dermatology Practice.

Check your **EVMS Pulse** daily. Read these stories and more at evms.edu/pulse.



10
Community
Organizations
Served

942
Volunteer
Hours

328
Students

48
Faculty/Staff


250
Care packages
made for
deployed
soldiers

43
Homeless children
and adults served at
an emergency shelter
where EVMS landscaped
and cleaned



1,230
Pink ribbons
made for
Breast Cancer
Awareness
Month

300+
Under-resourced
children in Norfolk
served at a community
center cleaned by
EVMS students




2,871
Bags of food
assembled for
community
distribution



75 

Under-resourced students
impacted by cleaned and
organized classrooms

250 

Toiletry bags
prepared for
domestic violence
shelter residents

250

Safer sex kits assembled
for LGBTQ communities



2,700

Pounds of
produce bagged
for distribution at
local community
partners



It takes a village

*EVMS initiative
has built a
“village” to help
children thrive*



Delores Greene-Price is program manager for Bon Secours Family Focus, which provides support services to parents in Hampton Roads. Her office is in Newport News, but not long ago, she tackled rush hour to reach the Chesapeake campus of Tidewater Community College for the annual EVMS Minus 9 to 5 Work Group Summit.

“I’ve been a member of Minus 9 to 5’s Thriving Families work group for about a year now,” she says. “Being involved with Minus 9 to 5 helps me learn what else is going on in the community, so my program doesn’t have to reinvent the wheel.”

That sentiment was echoed by the 90-plus attendees who joined Ms. Greene-Price at the summit. Together, they represent Minus 9 to 5’s growing network of multi-disciplinary providers, hospitals, clinics and other advocates who are committed to improving early care and education for children in Hampton Roads.

Established in 2016 by the Hampton Roads Community Foundation, Minus 9 to 5 is a community-led collective impact initiative based at EVMS. It was formed to equip and support the region’s families to raise children — starting at conception

and continuing through age 5 — who are healthy, thriving and ready to learn.

Minus 9 to 5’s six work groups each comprise 15 to 20 professionals who represent local organizations that are focused on child and family health. The work groups meet monthly to connect the dots between programs and resources that already exist and identify any gaps.

For example, after they learned that 13 home-visiting organizations were serving local families, the services were better coordinated and some duplication eliminated.

When the work groups identified a gap — low registration for kindergarten — Minus 9 to 5 created its annual Countdown to Kindergarten campaign. Each spring, the multimedia public-service campaign educates parents on how to prepare age-ready children for kindergarten and what’s required by each public school system for registration.

“Studies show that children who start

school without the social, emotional and educational skills to succeed will fall behind,” says Jane Elyce Glasgow, PhD, Executive Director of Minus 9 to 5 and a former kindergarten teacher. “This can set the stage for children to struggle for a lifetime.”

Dr. Glasgow explains that some area families, especially those living in poverty,

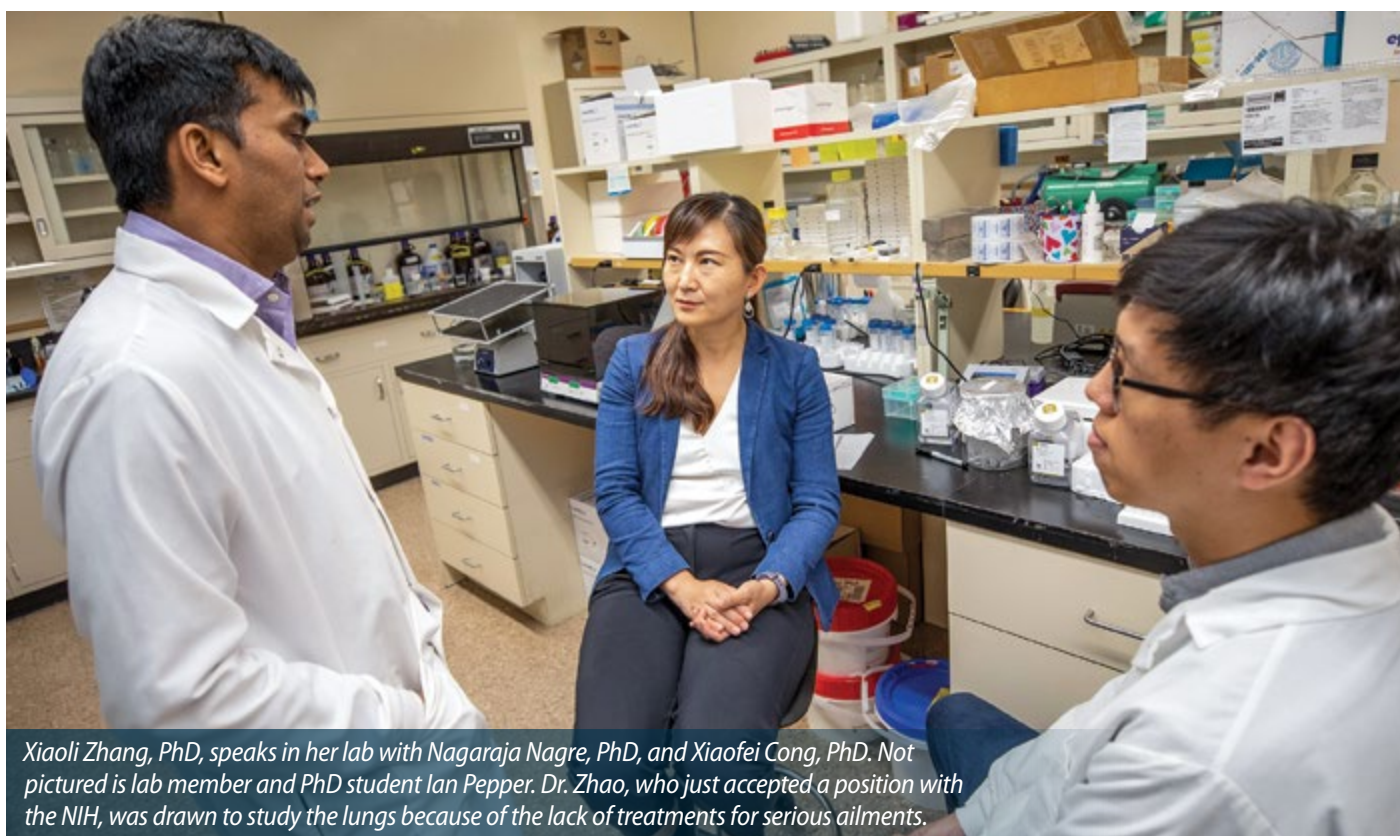
“Studies show that children who start school without the social, emotional and educational skills to succeed will fall behind.”

JANE ELYCE GLASGOW, PhD

EXECUTIVE DIRECTOR, EVMS MINUS 9 TO 5

aren’t aware of the variety of programs and services that exist to help them and their children. “This barrier strains families and can have a long-lasting negative impact on their children.”

More than 15,000 babies are born each year in South Hampton Roads’ seven hospitals. “Our goal is to ensure that South Hampton Roads’ families thrive,” she says, “and their children are healthy and enter school ready to succeed.” □



Xiaoli Zhang, PhD, speaks in her lab with Nagaraja Nagre, PhD, and Xiaofei Cong, PhD. Not pictured is lab member and PhD student Ian Pepper. Dr. Zhao, who just accepted a position with the NIH, was drawn to study the lungs because of the lack of treatments for serious ailments.

Research offers new hope for lung disease

Each day, we take 17,000 breaths, drawing in life-giving oxygen and exhaling carbon dioxide.

This critical exchange takes place in the “blood gas barrier,” a thin plasma membrane within the lungs. However, this fragile layer is under constant assault. Among the culprits: smoke, viruses, bacteria, industrial toxins, inflammation and physical injury — from mechanical ventilation, for example.

When many lung cells are injured, problems arise — the lung may fail or lose some of its ability to function due to excessive scarring. Unfortunately, medical treatments for these conditions are limited.

Xiaoli Zhao, PhD, Associate Professor of Physiological Sciences, and her research team are working to change that. Dr. Zhao believes they have found promising therapies for two common lung problems: acute lung injury and pulmonary fibrosis.

While many scientists studying the lungs concentrate on growing new cells in response to injury, Dr. Zhao has focused on cell repair. She has worked for six years to understand what happens when injured lung cells attempt to repair themselves.

Her work, supported mainly by research grants exceeding \$2 million from the National Institutes of Health, has focused her attention on two molecules found in epithelial cells on the lung surface. The first is TRIM72, a repair protein.

“We think TRIM72 has an affinity for lipid vesicles within injured cells,” Dr. Zhao says. “The role of TRIM72 is to sense the injury and bring repair vesicles to the injury site.”

Dr. Zhao was the first to demonstrate in cultured cells and animals that inhaling a man-made TRIM72 protein can treat lung injury. Dr. Zhao hopes that in the future her treatment can reduce the mortality rate of acute lung injury that now runs as high as 40%.

Dr. Zhao’s research also revealed the important role of another molecule, called asporin, which aids in reducing scarring of the lung after injury. The discovery was made in collaboration with Julius Nyalwidehe, PhD, Director of the George L. Wright Center for Biomedical Proteomics at EVMS and Associate Professor of Microbiology and Molecular Cell Biology.

Dr. Zhao found that repaired epithelial cells are the primary source of asporin. Asporin inhibits the formation of thick scar tissue that is the hallmark of fibrosis.

“We are testing if adding more asporin can reduce scarring using a mouse model of pulmonary fibrosis,” she says. Preliminary test results are promising.

If future research proves the value of asporin, it would be good news to the five million people worldwide who suffer from pulmonary fibrosis. — life expectancy after diagnosis is three to five years. □

DESIGNING *Woman*

*She makes a difference behind the scenes —
in the theatre and at the Brock Institute*

On campus, Sandra “Sandy” Short is Office Coordinator for the M. Foscue Brock Institute for Community and Global Health. Off campus, she’s a costume designer for Virginia Musical Theatre and the Musical Theatre Department of the Governor’s School for the Arts. In 2018, she was honored with a BroadwayWorld Award, Central Virginia Region, for Best Costume Design for VMT’s production of “Kiss Me, Kate.”

How did you get involved in costume design?

My daughter, Taylor, is an actor. In fact, she is starring as Velma Kelly in “Chicago” for VMT this season. She began performing in community theatre when she was 7. Since I knew how to sew, I volunteered with costuming. When we moved from Charlottesville to Norfolk so Taylor could attend the Governor’s School for the Arts, I began assisting with shows here. In 2013, I became the in-house costumer for the musical theatre department of the Governor’s School. I was the costume designer for VMT last season and will do so again this season. Our shows

include “Cinderella,” “A Grand Night for Singing,” “Chicago” and “Mamma Mia.”

What do you enjoy most about it?

I would have to say being a part of the creative process and bringing a show alive on stage in a way that’s both pleasing to the eye and period appropriate. There are so many things to consider. When did women begin wearing pierced earrings? Do the men need spats for their shoes? What is the appropriate waistline for gowns? Button or snap suspenders? Hairstyles and hats and gloves. You also have to consider quick changes: how to get a complex costume on and off an actor in a short period of time. Last season I had a 20-second full costume change. It’s an exciting process.

What’s your favorite show you’ve worked on?

Last season, the Governor’s School performed the Tony Award-winning musical, “A Gentleman’s Guide to Love and Murder.” In that show, one actor plays all of the members of the D’Ysquith family — seven men and two women. The costume changes all



occur within fractions of minutes. I also made seven Edwardian gowns for that production. It was my biggest challenge to date and my most satisfying success.

Do you make your own clothes?

My mother gave me a Singer sewing machine for my 6th birthday so I could make Barbie doll clothes. I began making my own clothes when I was 11 or 12. I don't have a lot of time to sew for myself these days, but I do a lot of sewing for my house: window treatments, bedding, custom furniture covers — that sort of thing.

Is there any connection between designing costumes and the work you do at EVMS?

As a matter of fact, there is. In managing the day-to-day running

of an office with several employees and very busy calendars, there are myriad details that have to be attended to in order that things run smoothly and efficiently. My work in the theatre is the same. In both cases, my focus is on the smallest details.

What are you most passionate about in your role at EVMS?

The Brock Institute provides a focal point for integrating EVMS clinical, educational and research programs to fulfill its vision of being the most community-oriented school of medicine and health professions in the nation. On a daily basis, the work we do impacts the health of our community— from mental health initiatives to programs for maternal and infant health. It's very fulfilling on all levels to be a small part of EVMS' mission. □



Rural communities like those on the Eastern Shore of Virginia are in dire need of healthcare providers.

Donors' generosity means MD student can return to her rural roots

Taylor Wallace knew she wanted to attend EVMS before she knew where she wanted to go to college.

The first recipient of the full-tuition Rural Family Medicine Scholarship, Ms. Wallace is grateful for the opportunity to earn her medical degree at her dream school without incurring debt. That will enable her to pursue her interest in helping people on the Eastern Shore of Virginia, where she grew up.

"People need more providers there," says the first-year medical student. "I want to serve people in a community I know. Since I want to go into primary care, this scholarship gives me financial freedom."

Women's health is her top specialty choice, followed by family medicine and pediatrics.

The scholarship was established in 2019 through the generosity of Norfolk resident Georgette Constant and her husband, Ray Gregory. News stories about the dire shortage of healthcare providers in rural areas inspired her to act. Her mother's interest in educational scholarships also influenced her.

Medical school graduates who want to work in rural areas may take higher-paying positions in cities instead so they can pay off their loans, Ms. Constant says. Others may receive scholarships in exchange for working in a rural area for a certain number of years, only to leave when they fulfill the requirement, she adds.

"We structured this scholarship in a way that the individual who is interested in rural medicine and wants to live in a rural area is able to," Ms. Constant says.

The recipient must be interested in practicing family and

community medicine in a rural community and have a connection to a rural area, such as having lived in one or having family living in a rural region.

Ms. Wallace's family lives on the outskirts of Onancock, about a 90-minute drive from the EVMS campus.

Ms. Wallace started thinking about a career in medicine in eighth grade, when her father had surgery. He jokingly suggested that she become an anesthesiologist so she wouldn't have to talk to the patients. "I was pretty shy," she says, chuckling.

In high school, Ms. Wallace participated in a nursing program for a semester and enrolled in an anatomy course, which she loved. She realized she wanted to become a doctor — and attend EVMS.

As a sophomore at Christopher Newport University, Ms. Wallace was accepted to EVMS' MD Class of 2023 through early admission. She graduated summa cum laude with a major in cellular, molecular and physiological biology and minors in psychology and leadership studies.

She applied for a scholarship to EVMS but found out just before starting medical school that she hadn't received it. Instead, she was awarded the first Rural Family Medicine Scholarship. She was overjoyed to learn she would not need to take out big loans, especially since she had college loans to repay.

She already has thousands of hours of experience in women's health and rural family medicine. She gained work experience as a Riverside Medical Group Scholar while at CNU. She worked as a medical scribe with Eastern Shore Rural Health during the summers of 2018 and 2019 as part of a pilot scribing program.

Ms. Wallace would like to help expand EVMS' maternal-fetal medicine services to the Eastern Shore. Many pregnant women on the Shore are referred to EVMS for prenatal care, she says. Some may not have the time or resources to travel to appointments in Norfolk, which requires paying a toll to cross the Chesapeake Bay Bridge-Tunnel.

Because Ms. Wallace wants to practice in southeastern Virginia, she thought attending EVMS would give her insights in to the surrounding community. She also chose EVMS because of the campus community the school has fostered.

As a child, she became familiar with EVMS when she accompanied her cousin to appointments for his Type 1 diabetes treatments. Later, during campus visits she received warm welcomes and observed happy students laughing and smiling with classmates.

"Every time I went to EVMS," she adds, "I felt like I was coming home." □

MD student Taylor Wallace, the first recipient of the Rural Family Medicine Scholarship, hopes to help expand EVMS' maternal-fetal medicine services to the Eastern Shore.

"People need more providers [on the Eastern Shore of Virginia]. I want to serve people in a community I know. Since I want to go into primary care, this scholarship gives me financial freedom."

— Taylor Wallace, MD Class of 2023

To join Ms. Constant and Mr. Gregory as well as countless others in establishing scholarships at EVMS, call EVMS Development at 757.965.8500 or email giving@evms.edu.

The VAPI

Can you pick the vaping devices?



All of the above items
are vaping devices.

NG Crisis: Hiding in plain sight



When he talks about vaping, John Harrington, MD, Professor of Pediatrics at EVMS, doesn't mince words.

"You might as well put your mouth on a car's exhaust pipe and inhale," he says.

Overstatement? Maybe. But Dr. Harrington is sounding the alarm because teen vaping has skyrocketed. A study published in November by the Journal of the American Medical Association says that 28% of high schoolers recently vaped, up from 10% just three years earlier.

Even worse, last summer vaping — particularly vaping THC — started killing

young people who were otherwise healthy. And the number of vaping-related lung injuries and deaths is still rising. About 80% of patients have been under age 35. Of those, 40% were between 18 and 24, and 14% were under 18.

Dr. Harrington and his colleagues are deeply concerned.

Widespread destruction of lung tissue — that's how Joshua Sill, MD, describes lung injuries related to vaping. Dr. Sill is the EVMS-Sentara Endowed Chair for Academic Leadership Advancement in Internal Medicine, Associate Professor of Internal Medicine and Chief of Pulmonary Medicine at EVMS.

"We don't know yet what their lung

function will be if they recover," he says of patients experiencing the new disease. "They might not be able to play sports for a while, or they may end up with permanent lung damage."

Scientists are scrambling for answers, finding potential culprits in substances like diacetyl and vitamin E acetate. Meanwhile, EVMS experts have ramped up efforts to educate parents and teachers, first, that all e-cigarettes are harmful; and second, that stealth vaping devices, masquerading as pens, flash drives and other school supplies, make the act of vaping easy to hide.

"There's still a lot of misperception that it's harmless water vapor," says Dr.

In three years, the rate of vaping among teens nearly tripled. Sadly, some are paying the ultimate price.

Harrington, who is also Division Director of Children's Medical Group's General Academics Pediatrics practice. "But just like tobacco cigarettes, e-cigarettes contain nicotine and dozens of other chemicals that react with each other and become toxic when heated to high temperatures."

Even the term "vaping" is a misnomer. E-cigarette devices produce an aerosol, not a vapor. Unlike vapor, which is simply a substance in gas form, the aerosol from an e-cigarette contains tiny chemical particles from both the liquid solution and the metals from the heating coils in e-cigarettes.

They're also unregulated.

"Vaping is like the wild, wild west now," says Amy Paulson, MPH, Instructor of Pediatrics and Director of the Consortium for Infant and Child Health based at EVMS. Depending on where e-cigarettes are purchased, she says, a teen could be using a product made in someone's bathtub.

"You don't know what the product will do to you in 30 years," Ms. Paulson says, "but you also don't know what it might do to you in three days."

Researchers do agree on one result: Teens who vape are more likely to end up smoking conventional cigarettes. Four times more likely, in fact, says a 2018 study by RAND Corporation. Another 2018 study, this one by the National Academies of Sciences, Engineering and Medicine, reports, "There is substantial evidence that e-cigarette use by youth and young adults increases their risk of using conventional cigarettes."

Once a tool to quit, now a gateway to start

It's quite a turn of events for a product promoted to help smokers quit when it was introduced in 2003. But a few popular brands, including JUUL, have been accused of targeting non-smoking teens. As a result, Ms. Paulson says, some youth don't think of "juuling" as using e-cigarettes even though it is.

"We've asked kids if they vape," she says, "and they said no. Then we ask if they 'juul,' and they said, 'Oh sure, I juul but that's not vaping.'"

Stealth vaping devices, also marketed to teens, have escalated the problem, says EVMS researcher Paul Harrell, PhD, Assistant Professor of Pediatrics.

"Kids are able to hide it much easier now," Dr. Harrell says. "Vaping is more difficult to detect, so they're using it all the time throughout the day, even in school. That may be creating use patterns that are difficult to overcome."

With JUUL promoting its single vape cartridge as roughly equal to a pack of cigarettes, some teens self-report vaping the equivalent of two or three packs a day. That level of use,

Her parents might not realize that the drawstrings in the hoodie are actually a stealth vaping device.

A vaping device disguised as a necklace, like the one on page 14, allows students to easily vape in school.



“You might as well put your mouth on a car’s exhaust pipe and inhale.”

John Harrington, MD, Professor of Pediatrics

he says, can easily lead to physiological dependence and long-term addiction.

For teens whose brains are still developing, vaping’s long-term effects could be devastating. In 2016, a report by the U.S. Surgeon General found that e-cigarettes are addictive and harmful to developing brains. Yet even with that ammunition, the Food and Drug Administration opted to delay its effort to regulate the industry. August 2018 was the FDA’s original deadline for e-cigarette manufacturers to file applications to become licensed. In 2017, the FDA delayed it to 2022.

The delay spurred the American Academy of Pediatrics, American Heart Association, American Lung Association and other respected health organizations to take action. Last year, they filed a lawsuit to force the FDA to speed up its review of e-cigarettes. In May 2019, a judge ruled in their favor, admonished the FDA and ordered the deadline moved to May 2020.

And in November, the American Medical Association called for a total ban on all vaping products that do not yet meet FDA approval as smoking cessation tools.

The last few months of news about deaths and lung injuries, as well as JUUL’s removal of flavored vape pods, might help slow the rise in teen vaping. But one challenge is hard to overcome — vaping is no longer edgy. Today it’s not just troubled teens who vape. EVMS experts have found that it’s common among all types of students, even athletes and honor students. This trend has moved it off the fringe and into the realm of normal behavior.

The proliferation of vaping also has contributed to the rise in marijuana vaping among teens, which the National

Institute on Drug Abuse says has more than doubled in the past two years.

That’s why Ms. Paulson cautions parents to be on the lookout.

“I know someone who found a vape device in her child’s car,” she says. “The teen said it belonged to a friend, and the parent didn’t want to get the friend in trouble, so she didn’t tell the friend’s parent.

“I have a 14-year-old and a 17-year-old,” Ms. Paulson continues. “They’re seeing this behavior every day in school, even in class. I hope they’ll make the right decision. But if they don’t, and another parent sees them vaping, I hope that parent would tell me. It might save my child’s life.” □



Born to Run

*Once told she might
not walk again,
medical student
heads to Olympic
Marathon Trials*

When Megan Cunningham, MD Class of 2022, decided to run the Rock 'n' Roll Virginia Beach Half Marathon in September, it was just supposed to be a practice run for an upcoming marathon.

But she felt good, so she pushed harder — not even realizing how fast she was going. With a time of one hour, 16 minutes, 42 seconds, she was

the first woman to cross the finish line with the next one nearly two minutes behind.

It's a victory that would have been hard to believe just a few years ago. After a horrific accident in 2015, Ms. Cunningham was told she might never walk again. At the time, she was a student at the University of Missouri and a runner on its Division I Track and Field team. During a summer

Every time things got tough, she remembered that her dad couldn't even get up and walk outside.

camping trip to Wyoming with her family, she fell asleep in the back seat of the car. It was windy, and they were pulling a camper behind their Ford F-350. She woke up to her father yelling. Her mother hit the brakes, which caused the camper to swing around.

"When I opened my eyes," she says, "we were perpendicular to the road and sliding at 70 miles per hour. We rolled about five times."

Their phones were thrown from the car, so they couldn't call for help. Thankfully, another driver was behind them and called 911. Rescuers used the "jaws of life" to get them out.

She was in and out of consciousness

until the next day. Only then did she realize what had happened.

"I fractured my C6, C7 and T1 vertebrae, and the back of my skull was broken into 20 pieces."

Her neck was broken; her brain was bleeding.

"The doctor actually said that it was an impressive skull fracture — which isn't something you want to hear. The whole back side was shattered, and the sides were cracked. It was pretty clear in the X-ray that there was a giant gap in my skull."

Despite all this, there was good news — she could feel her toes. "The nurses and doctors would wake me up every

few hours and ask me to wiggle my toes," she says. "It was pretty annoying, but they seemed very happy about it."

She didn't understand why until she saw her father a few days later. He couldn't move his toes.

Nor could he move his legs, feet, hands or arms. He had suffered a severe spinal injury.

"It was hard, but hearing that he probably wouldn't walk again made me determined to get back on my feet and give him hope that he could get better, too."

At first she couldn't sit up by herself. She couldn't walk or even stand in the shower. "I had to wear a neck



Megan Cunningham, MD Class of 2022

“I fractured my C6, C7 and T1 vertebrae, and the back of my skull was broken into 20 pieces. My neck was broken; my brain was bleeding.”



Before the start of the Chicago Marathon, Megan Cunningham, right, spent time with a family friend. Her finish at the race would determine whether she qualified for the Olympic Marathon Trials.

brace for so long,” Ms. Cunningham says. “My head just felt so heavy, and I could barely support the weight of it.” But every time things got tough, she remembered that her dad couldn’t even get up and walk outside.

Within two months of the accident, she was back on her feet and on campus — neck brace and all. She attended practice every day at 6 a.m. and walked around the track.

In January 2016, she was cleared to jog. She made it about 30 seconds.

“I didn’t know if I would ever be able to run again,” she says. “I keep that in the back of my mind every day.” Each day, she pushed a little more, jogging until she reached her limit. Seven months after the accident, she ran for the first time. She made it about 200 meters. “It wasn’t pretty, but I was

happy to be out there.”

Running became a way of pushing her limits — and a way of escaping the stress of life.

As graduation neared, it was time for her to decide what to do next.

“I was good at math and science but didn’t know what I wanted to do,” Ms. Cunningham says.

“After the accident, I saw the impact that modern medicine had on our lives, and that’s when I decided this is what I wanted to do for the rest of my life.”

For a Missouri native, EVMS might seem a surprising choice for medical school. But one of her dad’s physicians encouraged her to apply.

She says Richard Hotchkiss, MD, Critical Care Specialist at Barnes Jewish Hospital in St. Louis, told her he had worked with several EVMS students,

and they were all very happy with their experience there. “He was our favorite doctor, so I looked it up and decided to apply.”

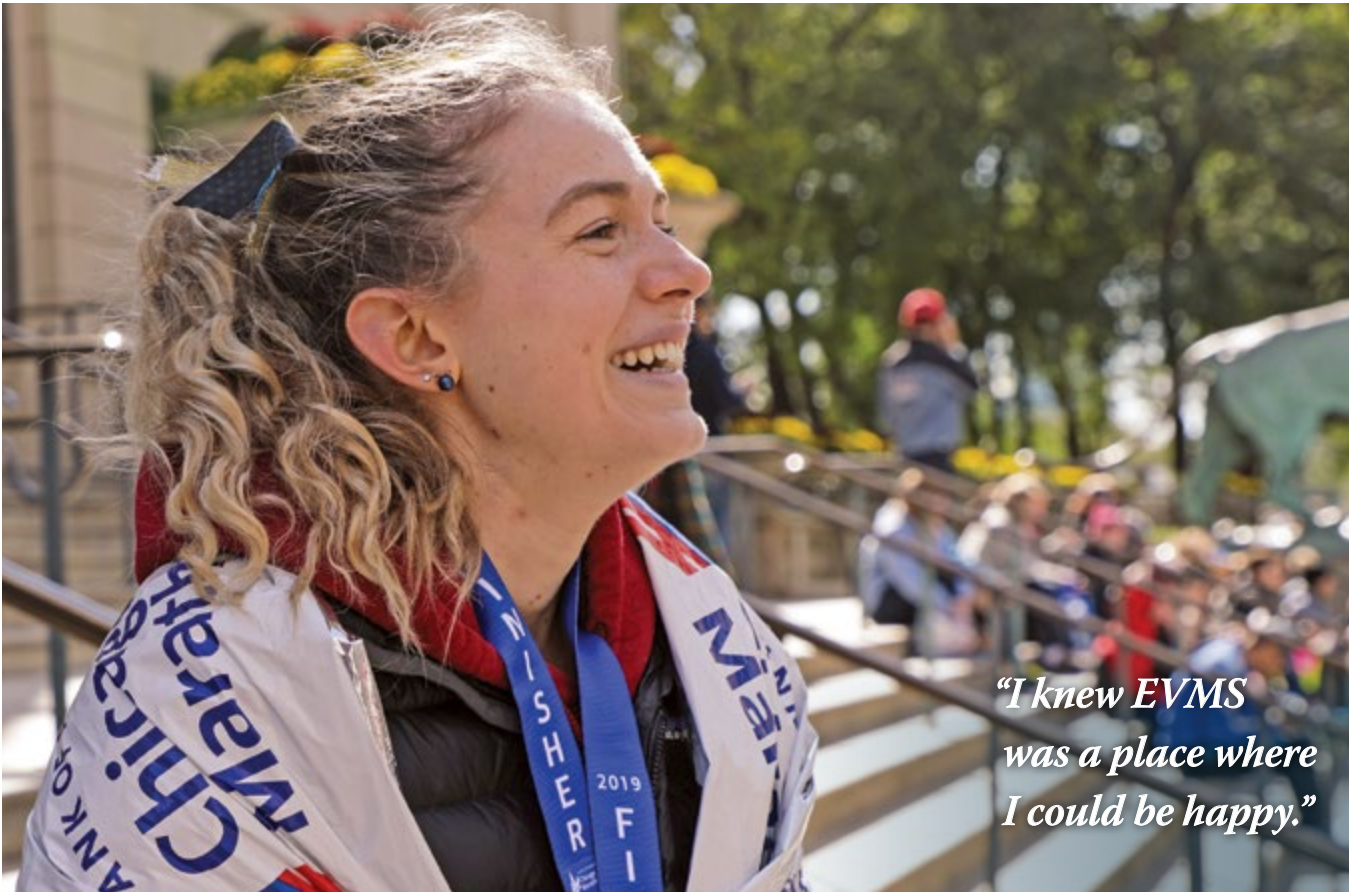
When she came in for interview day, she says it felt right. “It was the atmosphere. From the first moment in the airport, everyone was happy and helpful. I thought it would be a great experience for me to branch out and see things from a different side of the coin.”

When she was accepted, she was relieved. “I knew this was a place where I could be happy,” she says. “Even without med school, I wanted to go to a place I could call home.”

Along with the friends and mentors she has found at EVMS, she also considers the local running community a big part of what has made her feel so at home. “It’s my way of connecting



“After the accident, I saw the impact that modern medicine had on our lives, and that’s when I decided this is what I wanted to do for the rest of my life.”



“I knew EVMS was a place where I could be happy.”

here, and I’ve met a lot of people outside of school,” Ms. Cunningham says. “It gives you more perspective, and you are able to see the people you hope to help one day.”

Many of them were there cheering her on as she took first place in the Rock ‘n’ Roll Half Marathon.

“I felt really good. When I crossed and had a personal best, I was really excited.”

This victory was a surprise. As an Olympic hopeful, she had her sights set on the Chicago Marathon in October. Her 30th-place finish there — among 21,288 women — qualified her for the Olympic Marathon Trials in February.

“I hate to be the person that says everything happens for a reason,” she says, “but I know that I was able to walk away from the experience a different person. I’m more positive and much

more appreciative of everything I have. Even though it was a tragedy, it helped me grow as a person.”

When she has a bad day or something doesn’t go as planned, she thinks of her dad. “He is the reason that I go out there every day because we had the same kind of injuries, and it’s a miracle that I can walk. I’m not just doing it for myself. I’m doing it for him, too.” □

A 2020 Vision for Health

Hang on to your resolutions. After taking a close look at medical news and wellness trends, EVMS experts share their guidance for a happy and healthy new year.

**Eat this, not that.
No, wait.**

Keto. Paleo. Mediterranean. Plant-based.

Raw foods. Whole foods. Locally grown.
Farm to table.

Food deserts. Food pharmacies. Culinary
literacy. Nutrition as medicine.

It's enough to send anyone running for
the Haagen-Dazs.

So, what the heck should you eat?



EVMS nutrition expert Cynthia Cadieux, PhD, RDN, says that a whole-food, plant-based eating pattern — she's careful not to say “diet” — has the best outcomes over time.

“There’s science behind it,” she says, “not wishful thinking.”

An Associate Professor in the School of Health Professions, Associate Dean for Education Assessment and Evaluation,

and Director of Distance Education, Dr. Cadieux also is a Registered Dietitian Nutritionist and fellow in the Academy of Nutrition and Dietetics, which makes her the go-to person at EVMS for all things nutrition-related.

But as with most schools of medicine and health professions, when it comes to nutrition education at EVMS, Dr. Cadieux is a world of one.

To that end, she points to a report

issued last fall by Harvard Law School’s Food Law and Policy Clinic, which explains why the shortage of nutrition educators needs to be addressed.

“Doctoring Our Diet: Policy Tools to Include Nutrition in U.S. Medical Training” says the lack of nutrition education for physicians is “a missed opportunity for doctors to promote good health, illness prevention, and treatment of chronic diseases. . . . Physicians are less likely to recognize the importance of dietary problems, include nutrition assessments during patient exams, offer accurate basic nutrition advice, or be equipped to provide referrals as needed.”

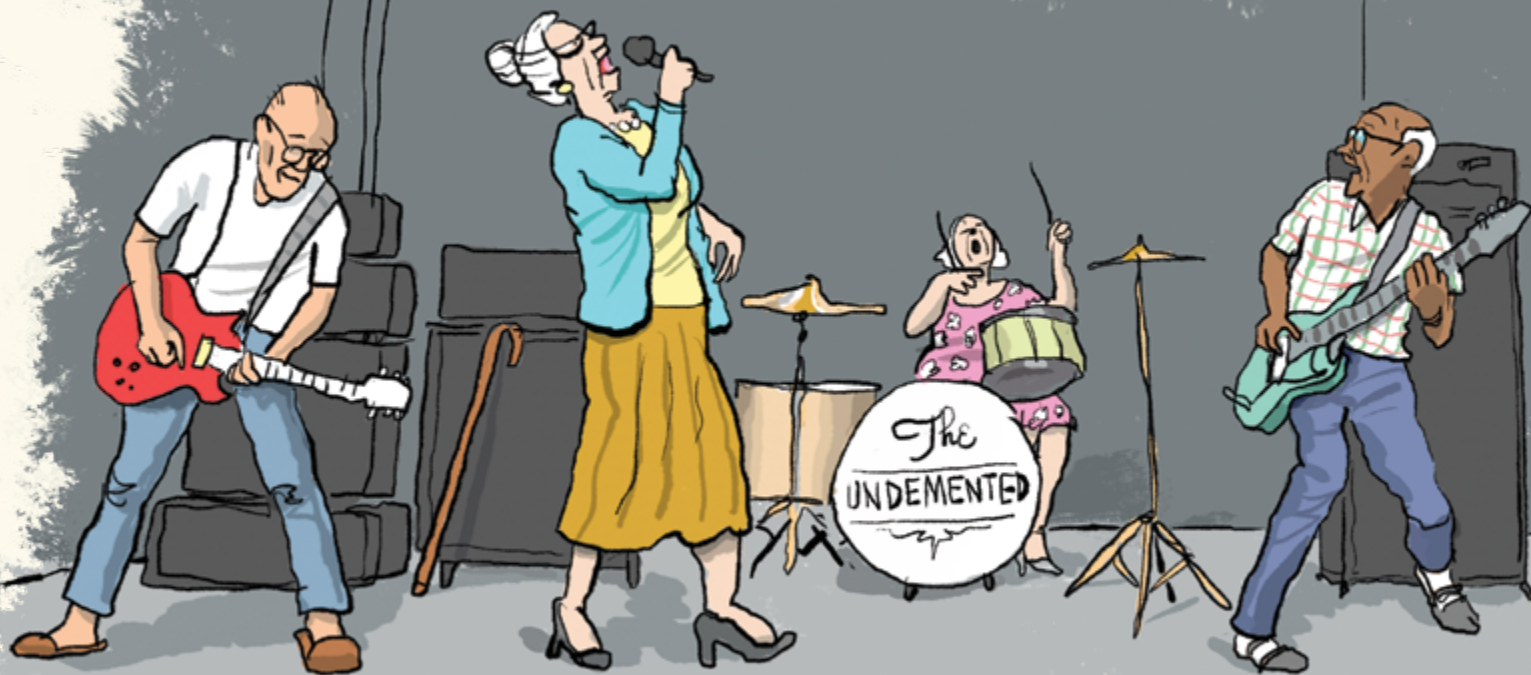
Healthcare providers are getting on board, as well, Dr. Cadieux says. Emerging trends include rooftop produce gardens atop hospitals, such as the one at Boston Medical Center that supplies its Preventative Food Pantry; and Food Rx, a food prescription program in Chicago that was developed by a University of Chicago research team, a farmers market, Walgreens and six health centers.

“The Physicians Committee for Responsible Medicine is also putting a tremendous emphasis on whole food, plant-based eating,” Dr. Cadieux says. “And environmental nutrition, which connects health and nutrition with environmentally sustainable diets, is gaining momentum.”

All of this is leading to more research in areas like preventive eating, tooth-friendly foods, and the gut microbiota and its relationship to health.”

Now the question is: When will a plant-based Haagen-Dazs hit the shelves?





A friendly battle with dementia

Can friends help us stave off dementia as we age?

There's no definitive proof, but observational studies suggest that social interaction is a strong deterrent to one of the most insidious side effects of aging, says Robert Palmer, MD, MPH, the John Franklin Distinguished Chair for Geriatrics, Professor of Internal Medicine and Director of the EVMS Glennan Center for Geriatrics and Gerontology.

"Social activity itself, even when considering age, sex, race, physical activity and so forth seems to protect people from cognitive decline and possibly a diagnosis of dementia," Dr. Palmer says.

Social activities, he says, can help the aging brain "maintain nerve networks and support the concept of cognitive reserve capacity," a process that can benefit

individuals with Alzheimer's disease or other dementia.

The beneficial effect can be enhanced when combined with regular exercise, such as walking.

Six common types of activities that involve social interaction may include:

- Going out to dinner; playing bingo or card games
- Taking day or overnight trips
- Participating in community or volunteer projects
- Visiting friends or relatives at their homes
- Participating in groups, such as senior centers and community organizations
- Attending church or religious services

Studies have shown a clear relationship between the level and degree of social support and the maintenance of normal or

even improved cognition.

"It seems," Dr. Palmer says, "that the quality of social support relationships with a network of friends and family is most important."

"Social activity itself, even when considering age, sex, race, physical activity and so forth seems to protect people from cognitive decline and possibly a diagnosis of dementia."

Robert Palmer, MD, MPH

Does social media put teens at risk for mental health issues?



Today, nearly 90% of teens have their own smartphones, and the majority of them are logged into social media.

According to a study by media nonprofit Common Sense, about 70% of them visit social media sites multiple times a day.

As social media commands a measurable span of teens' attention, many parents and researchers are concerned about its potential impact on their mental health.

"There are benefits and risks when it comes to social media and teens," says Serina Neumann, PhD, Professor of Psychiatry and Behavioral Sciences at EVMS. "While it does expose them to early learning, knowledge and opportunities to access information, it can

cause negative health impacts as well."

Among those are sleep problems, attention issues, a higher incidence of obesity — and depression. The access to knowledge and information that Dr. Neumann mentioned as a positive can also be considered a negative for giving teens access to information that may make them feel bad about themselves.

Another cause for concern is the trend of social comparison. "When teens constantly compare themselves to other people on social media, it can cause negative feelings and thoughts about self-worth and not being good enough. This can lead to internalizing issues."

In those situations Dr. Neumann advises parents to look for signs that teens are withdrawing from activities,

passing on being with friends to be online and experiencing sudden changes in personality.

Moving forward, Dr. Neumann says more research is needed on the topic. "We need better designed long-term studies to clarify the ways we can help prevent negative impacts."

Until then, she recommends monitoring screen time and setting up a family media-use plan to create a balance between screen time and other activities.

"With so many teens having phones," she says, "it's inevitable that they will be using social media. But if you have clearly communicated boundaries about privacy and what's age appropriate, you will be much more prepared."





HPV vaccinations are having a big impact

Just 10 years since the Gardasil vaccine was first recommended, the number of human papillomavirus (HPV) infections has dropped significantly.

A recent study using data from the National Health and Nutrition Examination Survey showed that vaccine-preventable HPV infections among 14- to 19-year-old women decreased by 86% in the 10 years since the vaccine's approval.

HPV is a common virus that can lead to cancer. According to the Centers for Disease Control and Prevention, nearly 80 million people are infected, and another 14 million people become infected every year.

Clinical trials have shown that the vaccines, now recommended for preteen girls and boys, provide close to 100% protection against pre-cancers and genital warts.

EVMS researchers have seen similar positive results in a rare and serious disease in young children caused by HPV infection in the respiratory tract. Juvenile onset recurrent respiratory papillomatosis (JORRP) causes wart-like growths around the larynx and on the vocal cords. The growths can spread all the way to the lungs. In children, it is most commonly acquired during vaginal delivery.

After the HPV vaccine's approval, physicians around the country began noticing a decline in new cases. The Centers for Disease Control and Prevention chose EVMS researchers to organize the effort to validate these anecdotal observations. Craig

Derkay, MD, the Fine Family Professor in Otolaryngology and Professor of Otolaryngology – Head and Neck Surgery, is leading the five-year project.

"We recruited colleagues from around the country to help us with this research," Dr. Derkay says. "Our preliminary results show a dramatic effect from the vaccine, and we are seeing it earlier than expected."

Over a 10-year period, researchers found the number of JORRP case-patients and incidences declined by about 80%.

A recent study using data from the National Health and Nutrition Examination Survey showed that vaccine-preventable HPV infections among 14- to 19-year-old women decreased by 86% in the 10 years since the vaccine's approval.

"If my legacy is that I can have a hand in preventing any new cases of this from being managed by the next generation of doctors," Dr. Derkay says, "then I will have achieved a career goal. Finding something that prevents this devastating disease and wiping it out of the United States would be great."

Dr. Derkay says the decline is most likely the result of a herd immunity, meaning that if enough people in a population are vaccinated, the circulation of the disease is reduced.

"I've been doing this for 30 years, and I'm ecstatic about the results," Dr. Derkay says.

"I would be happy to put myself out of business."

Myths about vaccines bring measles back



It may be 2020, but a recent rash of measles outbreaks has healthcare providers feeling like we've stepped back in time.

According to the Centers for Disease Control and Prevention, before the U.S. measles vaccination program started in 1963, about three million people nationwide got measles each year. Of those, 400 to 500 people died, 48,000 were hospitalized, and 1,000 developed encephalitis (swelling of the brain).

Thankfully, widespread use of the vaccine in the U.S. led to a 99% reduction in measles cases. And on a global scale, the measles vaccine is estimated to have saved 21 million lives between 2000 and 2017.

So why all the fuss now?

Vaccination rates in the U.S. are down, making more people — especially children — susceptible to the highly contagious viral infection. In fact, the CDC reports that the vaccination rate for measles has fallen below 85% in some areas of the country.

Officials have attributed this largely to a growing number of parents who refuse

to vaccinate their children due to either religious reasons or concerns that the vaccinations have a link to autism — a link that extensive research has discredited.

“Most if not all of this is related to misinformation and a misunderstanding of the benefits of vaccination,” says John Harrington, MD, Professor of Pediatrics at EVMS.

Vaccine hesitancy — the reluctance or refusal to be vaccinated or to vaccinate your children — was identified by the World Health Organization as one of the top 10 global health threats of 2019.

“Public health requires the public to be knowledgeable about the dangers of being duped by online misinformation that provides some type of conspiracy theories,” Dr. Harrington says. “The problem is that sometimes they sprinkle a nugget of truth that gets twisted into some secret reason we should not vaccinate.”

What do people need to know?

“The measles vaccine is safe,” Dr. Harrington says.

Research has shown that the measles

Vaccine hesitancy – the reluctance or refusal to be vaccinated or to vaccinate your children – was identified by the World Health Organization as one of the top 10 global health threats of 2019.

vaccine does not cause autism or other permanent neurologic or developmental problems. It does, however, provide 99% protection rates.

In the U.S., the vaccine is not given to babies under 1 year of age because they are too young to be immunized. It is also not given to those with immune system deficiencies.

And since measles is highly contagious, that's a really important factor to take into account. The virus can linger in the air for about two hours after a contagious person has left the room, and nine out of 10 unvaccinated people will contract measles if exposed.

Meaning those who can vaccinate, should.



Breast implant illness – more questions than answers

Tens of thousands of women who say they're living in pain are choosing to have their breast implants removed. And they have plenty of questions.

Many of them have turned to Facebook support groups to share that they feel their implants have caused a variety of problems, including chest and joint pain, headaches, neurological disturbances and unexplained fatigue.

While there hasn't been any official evidence linking implants to those symptoms, the Food and Drug

Administration recently urged surgeons to warn women of the potential hazards.

In October 2019, the agency also recommended that manufacturers print a warning on the packaging clearly listing the risks for patients but did not make it a requirement.

Several years ago, FDA researchers did find a connection between a certain type of textured implant and anaplastic large cell lymphoma (ALCL).

"It's a very rare immune-system cancer," says Lambros Viennas, MD, Chief of Plastic Surgery and Assistant Professor

of Surgery at EVMS. "While there are tests that can help surgeons determine if a patient is having problems due to ALCL, the same cannot be said for breast implant-associated illness."

Dr. Viennas says that he and the American Society of Plastic Surgeons are taking the issue very seriously.

"We want people to know that we are going to study this problem and get back answers that are scientifically based."

If it's not the implant, what is it?

That's the biggest concern for Dr. Viennas.

"It appears that many of these patients are having an autoimmune issue, but what is the underlying cause? We as a society are going to start collecting data and doing a more careful analysis." □



Students, faculty and staff tackle important **diversity** work

Like every first-year medical student, LaKeisha Majette, MD Class of 2022, was buried in books last spring when she was tapped for a special project. Yet she was eager to jump in.

“It was a privilege to participate,” Ms. Majette says. “To be able to sit down at the table and have input — that was very meaningful.”

Ray Ramirez, MD Class of 2020, was juggling one clinical rotation after another when he got the call. “To me, participating was a no-brainer,” he says, “and I was happy to help out.”

Eric Werner, MD, Professor of Pediatrics at EVMS, is a pediatric hematologist/oncologist at Children’s Hospital of The King’s Daughters and CHKD’s co-chief medical information

officer. Yet he didn’t hesitate to expand his workload.

“It’s personally rewarding,” he says, “to be involved with identifying and implementing solutions that can address these issues.”

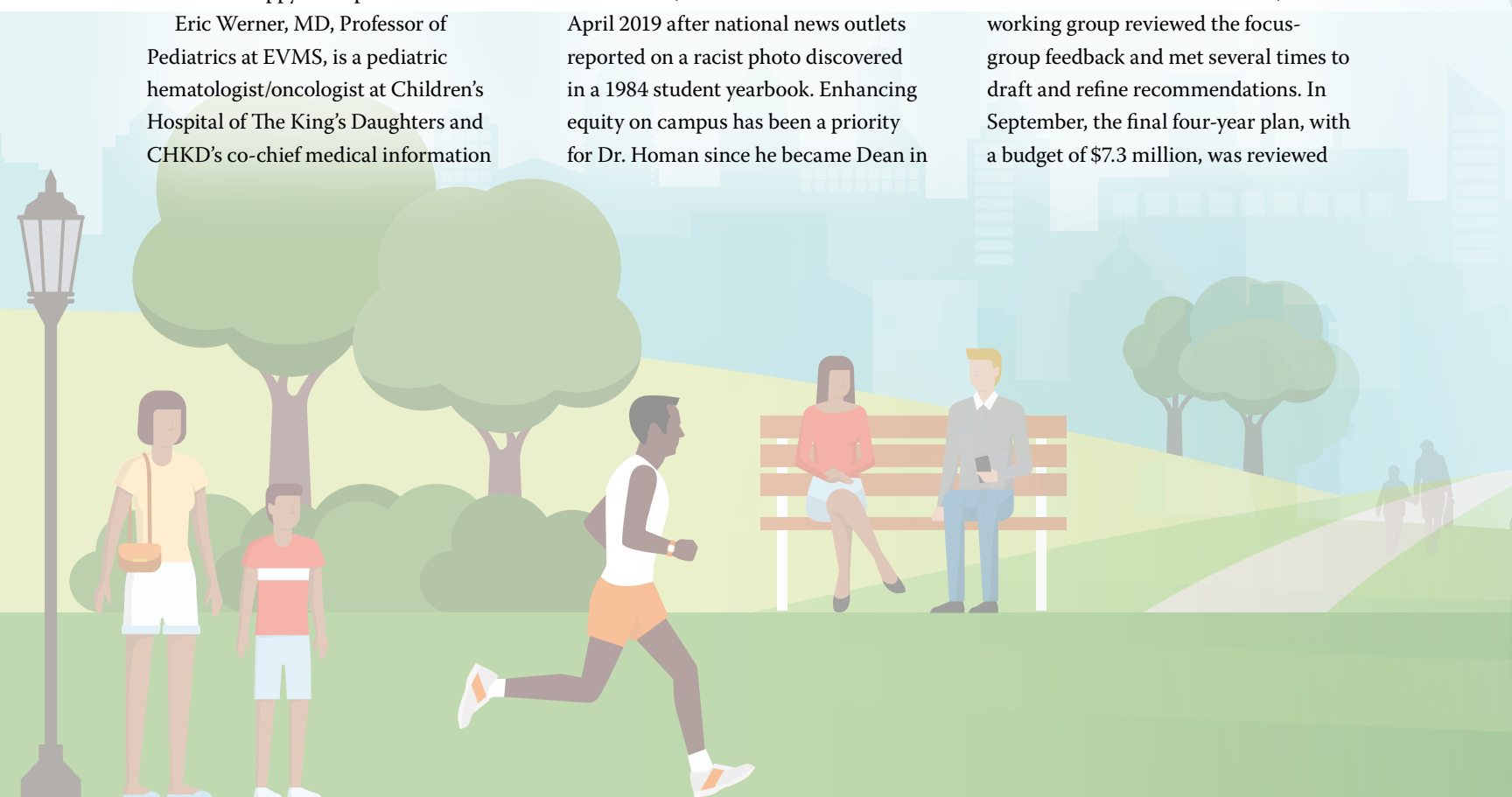
The issues? Diversity, inclusion and health equity. The project to address them? Creating the EVMS Strategic Plan 2020 – 2024: Advancing Health Equity and Inclusion for Community and Academic Impact.

Richard V. Homan, MD, President and Provost of EVMS and Dean of the School of Medicine, launched the initiative in April 2019 after national news outlets reported on a racist photo discovered in a 1984 student yearbook. Enhancing equity on campus has been a priority for Dr. Homan since he became Dean in

2012 and created the EVMS Diversity and Inclusion office. Being in the national spotlight increased this commitment.

To develop the strategic plan, more than 100 EVMS faculty, staff and students came together in five working groups — Education, Community, Patient Care, Research and Administration — and an Advisory Committee.

Six focus-group discussions were held in May. During those sessions, a cross-section of EVMS constituencies shared their views about challenges and opportunities related to diversity, equity and inclusion. Over the summer, each working group reviewed the focus-group feedback and met several times to draft and refine recommendations. In September, the final four-year plan, with a budget of \$7.3 million, was reviewed



and unanimously approved by the EVMS Board of Visitors.

Brian Martin, PhD, MBA, is EVMS' Associate Dean for Admissions and Enrollment, Director of the Master of Public Health and Doctor of Health Sciences programs, and Professor in the School of Health Professions. His days are packed, to be sure, yet he didn't think twice about joining the Advisory Committee.

"This project could have been approached as just checking a box," Dr. Martin says, "but I didn't witness any of that. This wasn't just a corporate band-

aid. People were genuinely engaged, and their ideas were creative and innovative."

Student LaKeisha Majette, a member of the Community working group, agrees: "EVMS wasn't afraid to start from the inside and take a hard look at itself."

For Catherine Derber, MD, Associate Professor of Internal Medicine, it was clear that EVMS leadership was willing to invest the necessary effort and resources to identify and resolve any issues.

"It was meaningful to me," Dr. Derber says, "to see that EVMS was working to ensure that all voices were represented."

That diversity of voices represents the diversity that EVMS is striving to achieve."

Dr. Eric Werner co-chaired the Administration working group. "The events of last winter put a focus on the EVMS culture," Dr. Werner says, "but processes to promote inclusivity here long pre-dated those events. This plan is the next step. We can't underestimate the importance of this both internally within EVMS, but also in the interaction between the school and the community and ultimately, for the community's long-term health. There's so much more we need to understand about healthcare disparities."

Co-chair of the Advisory Committee, Mekbib Gemed, MA, joined EVMS in 2013 as Vice President for Diversity and Inclusion. "In these meetings," he says, "people were honest and candid about

EVMS
September
2019

A four-year plan, with a budget of \$7.3 million, was unanimously approved by the EVMS Board of Visitors.

EVMS

"EVMS wasn't afraid to start from the inside and take a hard look at itself."

— LaKeisha Majette
MD Class of 2022

their experiences. There were both courageous discussions and meaningful engagement.”

Elza Mylona, PhD, co-chaired the Advisory Committee with Mr. Gemedá. As Vice Provost for Faculty Affairs and Institutional Effectiveness and Professor of Internal Medicine, Dr. Mylona led the last two strategic plans for EVMS.

“This one touched people’s hearts,” Dr. Mylona says. “When you touch the heart and the brain connects, it’s exciting and gratifying. It gave us a lot of opportunity to look at how we engage with each other. It also brought our EVMS community together to review, reflect and create a rigorous plan for the future that will ensure that our commitment to health equity and inclusion is cemented and continues to flourish.”

At EVMS since 2015, Dr. Martin acknowledges the institution’s limited resources but says, “We’ve decided that this is extremely important. We took a deeper dive into looking at our own social fabric. Where do we see weaknesses? Where do we see opportunities? We’re putting real resources toward it.

“I hope the project is seen by our community, our peers and our employees as evidence that we really do care about making progress in this area,” he adds. “Give it a chance. See what happens.”

Student Ray Ramirez believes the plan will put EVMS’ commitment into action. “When I saw all of the different staff, faculty and students in the first meeting,” he says, “it really resonated with me that so many great people at EVMS are willing to use their voices to help such an important cause.”

EVMS Strategic Plan 2020 – 2024: Advancing Health Equity and Inclusion for Community and Academic Impact

In 2019, EVMS came together as a campus community to identify opportunities to foster greater diversity, equity and inclusion in our core mission areas. The result was a road map to ensure that EVMS continues to be a unique academic environment where diversity, equity and inclusion in healthcare are the driving forces to achieve the EVMS mission and advance the community. Below are the plan’s five strategic priorities. A continuous quality improvement plan will be implemented to guide decision-making for the first three years and beyond.

- Provide Enriched Training and Assessment for Access and Success
- Foster and Maintain a Diverse Workforce and Learner Population
- Strengthen Community Engagement and Health Equity
- Enhance Health Equity Research and Clinical Services Delivery
- Benchmark for Excellence

To read the entire plan and review each priority’s objectives, strategies, metrics/indicators, investments and timelines, visit evms.edu/magazine.



EVMS Diversity & Inclusion Timeline

Below is a sampling of the programs and initiatives put in place since 2012 to address diversity, inclusion and health equity at EVMS.

January 2012: Richard V. Homan, MD, hired. Dr. Homan identified the need to create a Diversity and Inclusion office.

February 2013: Dr. Homan recruited Mekbib Gemed, MA, from New York University to serve as the first Vice President of Diversity and Inclusion at EVMS.

Summer 2013: EVMS Diversity Statement developed and implemented. Holistic Review Admissions Process and campus-wide implicit bias training implemented.

Fall 2014: Mentoring program launched to match underrepresented minority high-school students from the Maury High School medical program with minority medical students at EVMS.

Fall 2016: Social determinants of health integrated into MD student curriculum. Students engage from the first day they arrive. Community-engaged learning formalized as part of the MD curriculum to bring students face-to-face with a diversity of area residents to enrich learning opportunities.

Summer 2018: EVMS/NRHA Youth Engagement Program, a mentoring and development program for youth in Norfolk public housing, established.

Fall 2018: Pipeline K-12 initiatives expanded to work with the organization 200+ Black Men to inform African American male high-school students and their parents about the range of health professions careers.

March 2019: EVMS received the 2019 Institutional Excellence Award from the National Association of Diversity Officers in Higher Education.

April 2019: Dr. Homan launched process to create the four-year Strategic Plan for Advancing Health Equity and Inclusion for Community and Academic Impact.

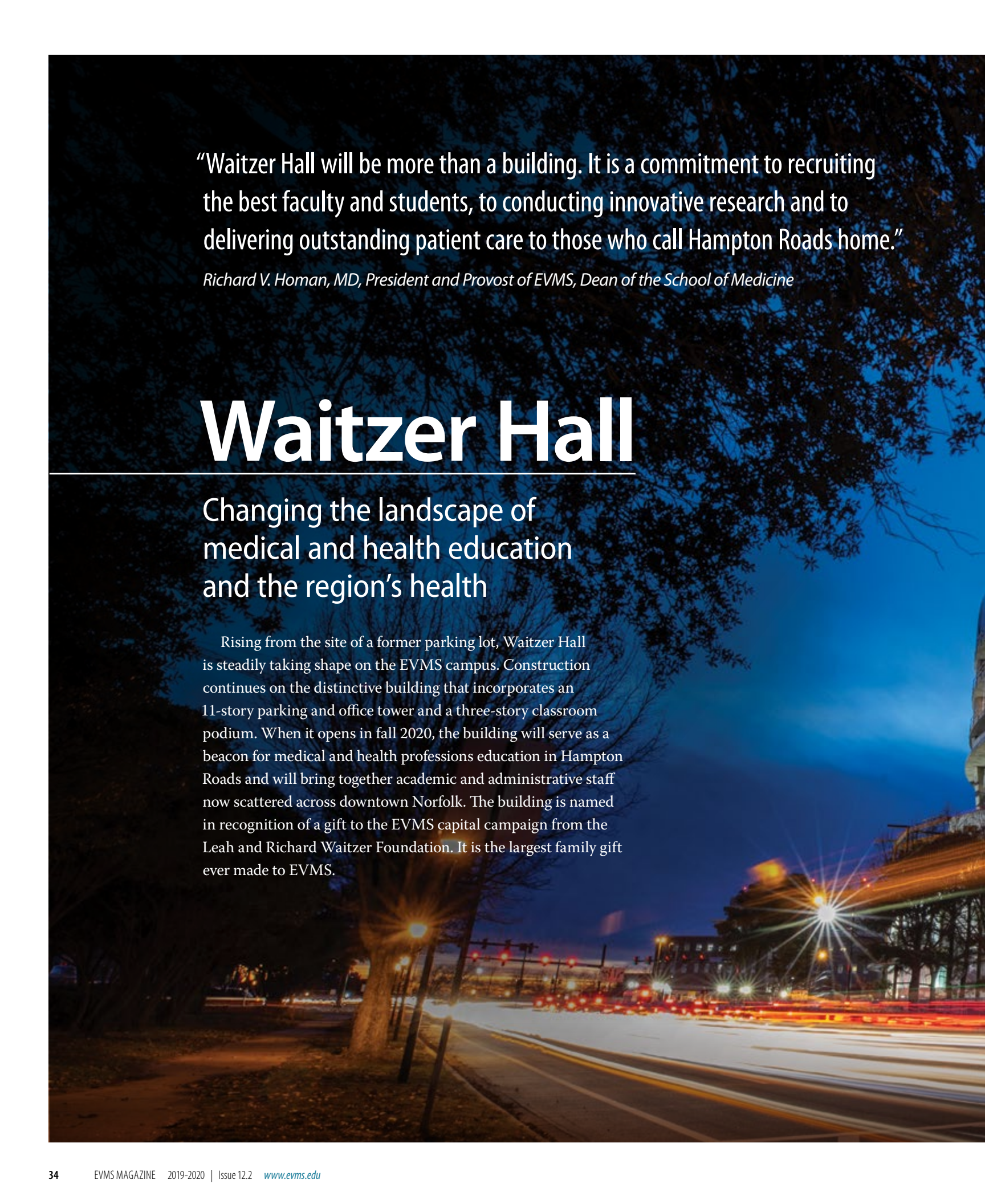
Summer 2019: In partnership with Portsmouth Public Schools, EVMS hosted a summer educational experience for 20 high school students interested in pursuing careers in medicine or health professions. □

EVMS
2020 – 2024

Diversity, equity and inclusion are the driving forces in achieving the EVMS mission.

“This one touched people’s hearts. When you touch the heart and the brain connects, it’s exciting and gratifying. It gave us a lot of opportunity to look at how we engage with each other.”

— Elza Mylona, PhD



“Waitzer Hall will be more than a building. It is a commitment to recruiting the best faculty and students, to conducting innovative research and to delivering outstanding patient care to those who call Hampton Roads home.”

Richard V. Homan, MD, President and Provost of EVMS, Dean of the School of Medicine

Waitzer Hall

Changing the landscape of medical and health education and the region’s health

Rising from the site of a former parking lot, Waitzer Hall is steadily taking shape on the EVMS campus. Construction continues on the distinctive building that incorporates an 11-story parking and office tower and a three-story classroom podium. When it opens in fall 2020, the building will serve as a beacon for medical and health professions education in Hampton Roads and will bring together academic and administrative staff now scattered across downtown Norfolk. The building is named in recognition of a gift to the EVMS capital campaign from the Leah and Richard Waitzer Foundation. It is the largest family gift ever made to EVMS.



At 11 stories, Waitzer Hall towers over the busy intersection of Colley and Brambleton avenues where telltale streaks of light reflect rush-hour traffic in a long-exposure photo. Construction is on track to finish up in time for occupancy in fall 2020.

Anchoring the south corner of the medical campus, Waitzer Hall will be a hub of activity for students and staff alike.



Greg Vuyovich, Project Manager for EVMS, center, speaks with Carleton Bitgood, S.B. Ballard EVMS Project Manager, left, and Billy Hubbard, S.B. Ballard EVMS Superintendent.

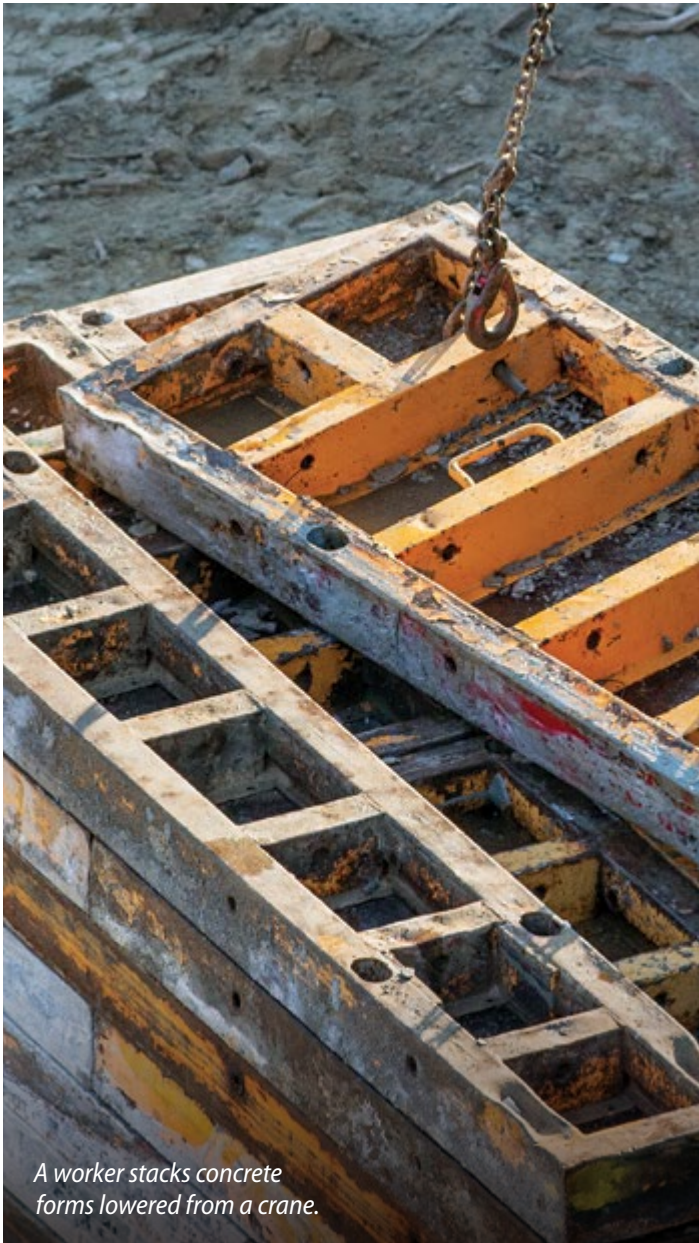
Iron workers prepare the framework of the three-story podium that will provide much-needed classroom space.







A worker installs framing in a first step to transform the concrete shell into offices and classrooms.



A worker stacks concrete forms lowered from a crane.



The building is supported by 675 piles that were each driven nearly 90 feet into the soil.



The building is named in recognition of a gift from the Leah and Richard Waitzer Foundation, the largest family gift ever made to EVMS. Leah Waitzer and the late Richard Waitzer (pictured above), along with their sons, Bradley and Edwin, have been longstanding supporters of EVMS. A pillar at the top of the building immortalizes Richard Waitzer, who died in January 2019.



Donors and legislators joined EVMS leaders, architects and builder representatives at the topping-off ceremony in September 2019.

Waitzer Hall

OPENING IN
FALL 2020

*Thank you to our
generous donors
for delivering on
the promise.*

BUILDING

Leah and Richard Waitzer Foundation

LOBBY

TowneBank

TESTING CENTER

Bank of America

FIRST FLOOR PROMENADE

Thomas Mansbach

SECOND FLOOR PROMENADE

Theresa Emory, MD (MD '89) and
Roger Emory, MD (MD '89)

THIRD FLOOR PROMENADE

Wayne and Ashlin Wilbanks

PODIUM ELEVATOR

BJ and Stephen B. Ballard

TOWER LOBBY

Huntington Ingalls Industries

VICE DEAN OF ACADEMIC AFFAIRS OFFICE

Bruce and Sarah Bishop

VICE DEAN OF CLINICAL RESEARCH OFFICE

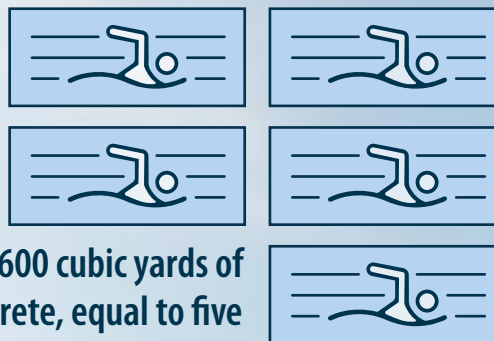
Steven and Mara Fredrickson

COACHING ROOM

Randy Gould, MD (MD '78), and Natalie Gould

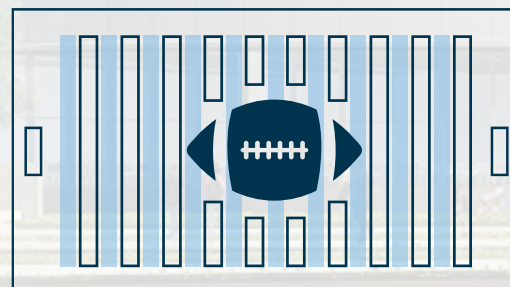


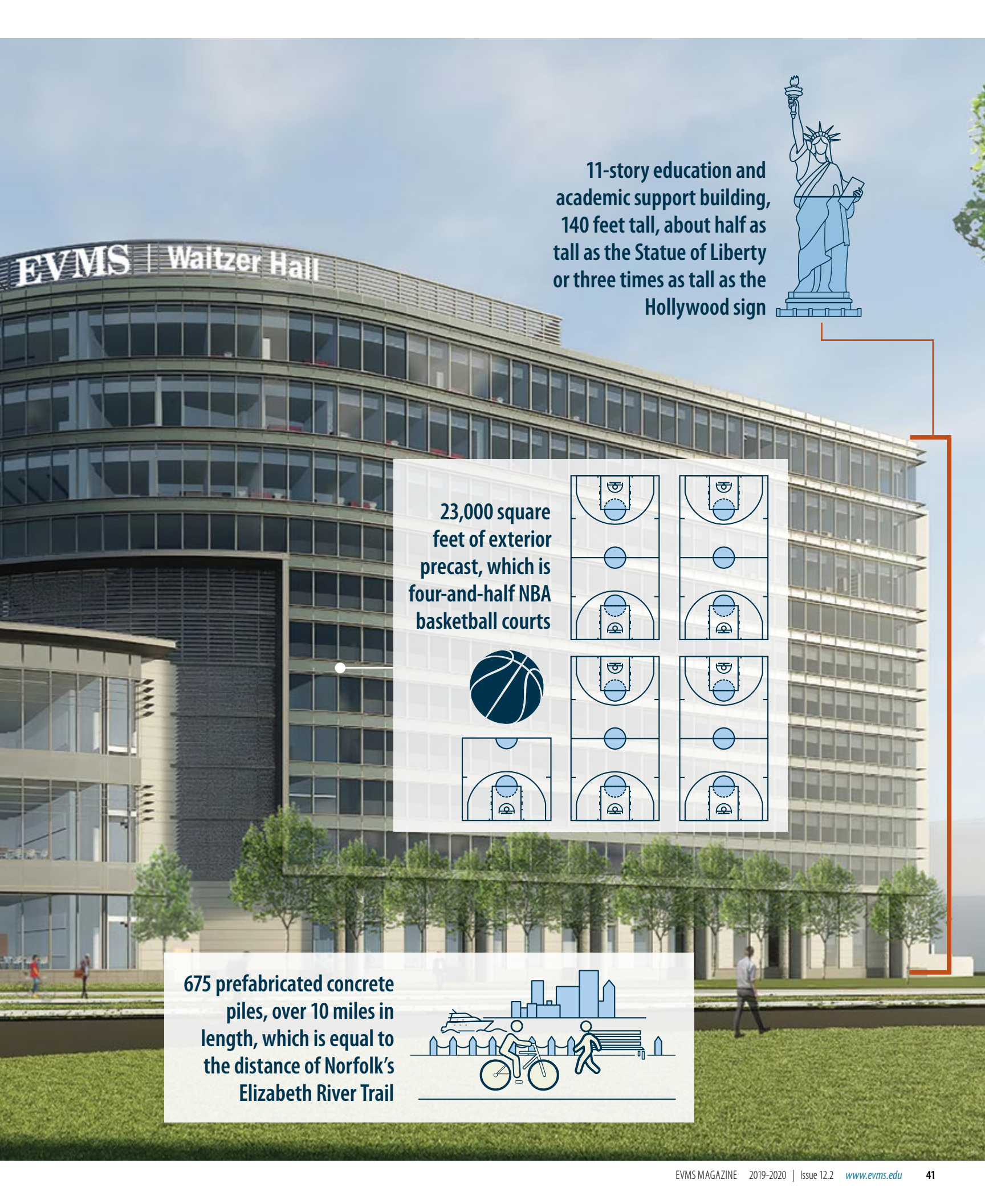
200 tons of steel
used, as heavy as
the Sphinx in Egypt



16,600 cubic yards of
concrete, equal to five
Olympic-sized pools

60,000 square feet of glass, which is
larger than an NFL football field



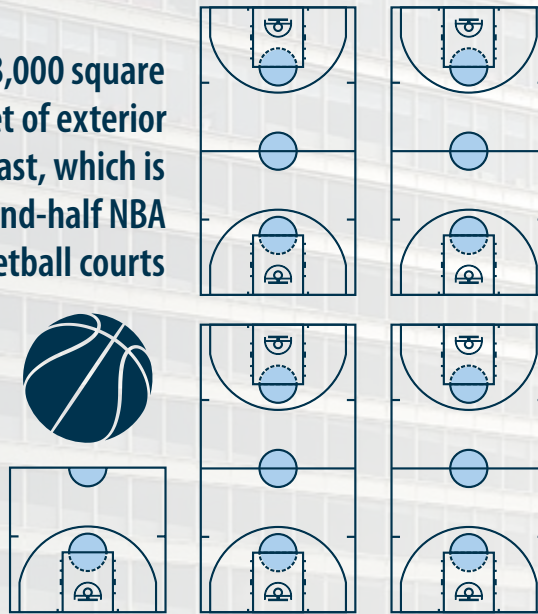


EVMS | Waitzer Hall

11-story education and academic support building, 140 feet tall, about half as tall as the Statue of Liberty or three times as tall as the Hollywood sign



23,000 square feet of exterior precast, which is four-and-a-half NBA basketball courts



675 prefabricated concrete piles, over 10 miles in length, which is equal to the distance of Norfolk's Elizabeth River Trail





Members of the MD Class of 1989, from left: Roger Emory, MD; Theresa Emory, MD; Raymond Connell, MD; Pamela Juba, MD; Daniel Juba, MD; Carol Shannon, MD; and Vincent Perrotta, MD.



Physician Assistant alumni and current students at the Physician Assistant Mini Reunion Social, clockwise from top left: Christian Joyner, MPA (PA '06); Erin Donahue, PA Class of 2020; Heather Lustig, MPA (PA '18); Sapa Truong, MPA (PA '18); Shannon Morris, MPA (PA '09); Yekaterina Jones, PA Class of 2020.



Riley Suter, MS (Medical Master's '19), MD Class of 2023; and Wayne Torre, MD (MD '79), sharing a laugh.



Above: MD alumni from various class years, from left: Wayne Torre, MD; Pamela Juba, MD; Laura Heiby, MD; Daniel Juba, MD; Daniel Mason, MD; Taryn Torre, MD; Kristi Kidd, MD; Patricia Strauss, MD; Wendy Spinosa Rush, MD; Barbara Joebstl, MD; Mary Wirshup, MD; Carol Shannon, MD; and Karo Ohanian, MD.

At left: Byers Bowen, MD (Surgery Residency '15), and his family enjoying the Alumni Family Barbecue.

Surgical Assisting alumna is a founder of Mayo Clinic program

When Helga Olson, MS (Surgical Assisting '09), was growing up in Winnipeg, Canada, her family's dinner conversations revolved around medicine. Her father was a family physician, her mother a nurse practitioner at the same practice, and Ms. Olson could see how much they enjoyed their careers.

But when the time came to select a career path of her own, she chose to study counseling psychology at the University of Findlay in Ohio. She worked as a psychiatric treatment caseworker for an outpatient facility but harbored regrets about not going into medicine. So at 27, she began applying to schools.

Ms. Olson liked the structure of EVMS' Master of Surgical Assisting program and the opportunity it provided to rotate through all surgical specialties in a variety of hospitals. She also appreciated the professors who encouraged students to think about their role in medicine differently.

"You can teach anybody off the street to go into a room and hold a retractor for a number of hours," Ms. Olson says. "But EVMS professors wanted us to be very dimensional thinkers and practitioners — to have that medical knowledge but also really think about the patient and all the

other attributes that go into their care."

After graduating from EVMS, Ms. Olson began working in the cardiac surgery division at the Mayo Clinic in Rochester, Minnesota, before transitioning to education. She became one of the founders of the Mayo Clinic's surgical assistant program and has now worked for seven years as an instructor. She also teaches anatomy and still spends time in the operating room.

Outside of work, Ms. Olson loves to watch hockey, and she takes advantage of Minnesota's lakes to go fishing. Her dad is retired now but is always asking his daughter what's new with her job, and the two of them share medical journal articles.

"People are always going to need surgery, so this field will always be around," Ms. Olson says. "And it's a career that's growing and expanding with new technologies. Even since I was in school, so much has changed with the development of procedures and techniques. It's exciting to see and to be part of that." □



Helga Olson, MS
(Surgical Assisting '09)



Jaimee Foster (Art Therapy and Counseling '17), showing off her artwork from the Art Therapy continuing education session.



During a recent food-pantry distribution at Port Norfolk Church in Portsmouth, Pastor Connie Shoemaker (left) worked with EVMS staff members Bray Nemetz-Gardner and April Reichmeider of the Portsmouth Diabetes Prevention Project.

Hungry for Change

EVMS partners with local foundation to reduce diabetes in Portsmouth

There's a perfect health storm threatening Portsmouth, says Amy Paulson, MPH, Instructor of Pediatrics and Director of the Consortium for Infant and Child Health based at EVMS.

"Portsmouth is a community with a lot of strengths," Ms. Paulson explains. "There are so many interesting, wonderful things about the city and its people. But many of its residents are at risk for diabetes, for a variety of reasons."

Those reasons include lack of physical activity, high obesity rates and difficulty

accessing transportation, fresh food, education and healthcare. They also include food insecurity, caused by lack of steady access to food. People experiencing food insecurity sometimes choose inexpensive, calorie-rich versus nutrition-rich foods, often resulting in obesity and diabetes.

To address this concern, EVMS and the Portsmouth General Hospital Foundation created the Portsmouth Diabetes Prevention Project. Funded by the foundation, the project has three goals:

- Improve the nutritional value of the food offered through local nonprofits to people with or at risk for diabetes
 - Positively affect individual behaviors
 - Develop sustainable community approaches to healthy, active living
- Ms. Paulson, along with Margaret Baumgarten, MD, Professor of Family and Community Medicine, are co-principal investigators of the project.

Public statistics show Portsmouth has higher rates of poverty, food insecurity, obesity and diabetes than the rest of the state. For example, while 30% of Virginia residents are obese, in Portsmouth, it's 57%. About 10% of Virginia residents experience food insecurity, but in Portsmouth, it's nearly double that.

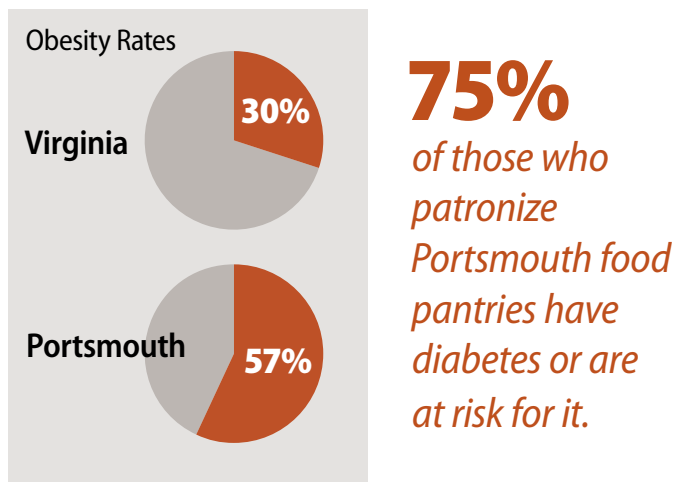
Within those numbers, the risk of diabetes increases. According to an EVMS

survey, 75% of those who patronize Portsmouth food pantries have diabetes or are at risk for it.

Along with EVMS, Portsmouth General Hospital Foundation also recognized the importance of addressing diabetes prevention and care. The foundation's mission is to improve the health, wellness and quality of life of the Portsmouth community through its philanthropic efforts.

"EVMS is a cutting-edge organization," says Alan Gollihue, President and CEO of Portsmouth General Hospital Foundation. "They have been a real joy and delight. They work together like a well-oiled machine."

Food for Thought: Portsmouth's Challenge



Portsmouth's Port Norfolk Church has one of the area's largest food pantries, serving more than 2,100 people a month. Pastor Connie Shoemaker, who runs the food pantry, says the church aims to provide healthy choices for the community, and EVMS has been helpful with tools and education.

"If you're going to provide food, it should be healthy," Pastor Shoemaker says. "We don't buy it if we wouldn't give it out." For example, rather than diet sodas, the Port Norfolk pantry stocks flavored waters.

The Portsmouth Diabetes Prevention Project works with food pantries around the city, like Port Norfolk's. The pantries' staff and volunteers receive comprehensive toolkits that contain educational materials to guide client choices toward healthy options.

The toolkit includes recipes, activity suggestions and advice on how to make food healthier, such as rinsing canned green beans to reduce sodium. The food pantries also received newsletters sharing nutritional information and fitness tips. Many pantries now host events to educate clients, including tastings where a chef

"The goal is to develop long-term, sustainable community programs. Individually, we're trying to shrink the change to something minimal and achievable. But we're also looking at big interventions with community partners."

MARGARET BAUMGARTEN, MD

prepares and shares a healthy recipe. Recently, Port Norfolk Church held a tasting that featured lentil tacos.

Early on, the project team learned that residents wanted a personal connection to help with healthy choices. So "Connect for Health," a behavioral change program, was just launched.

Participants partner with a wellness coach via phone call, email or text over 30 days to work on one small goal, like reducing soda consumption, walking 10 minutes a day or eating a vegetable three times a week. Most of the wellness coaches are volunteers who have been trained to help with behavior change.

The goal is to develop long-term, sustainable community programs, Dr. Baumgarten explains. "Individually," she says, "we're trying to shrink the change to something minimal and achievable. But we're also looking at big interventions with community partners."

One intervention involved the Craddock neighborhood. Although Craddock was designed to promote walkability, problems such as cracked sidewalks and poor lighting have created challenges. And reaching the close-by Paradise Creek Nature Park requires crossing Victory Boulevard, a four-lane highway that had no clear crosswalk into the park. EVMS worked with the city of Portsmouth to secure a grant to install a crosswalk light, making the park more accessible to pedestrians.

The team wants to change how people engage with food and activity over time. "We work to make the healthy choice the easiest choice," says Michelle Charters, MPH, the project's Program Coordinator.

"It's a fast food world," Pastor Shoemaker adds. "But what's fast and easy isn't usually healthy. Bringing health awareness to the new generation is important, too. Diabetes prevention isn't just an old-people problem." □

EVMS diabetes experts get runner's life back on track

"When I started running again, I felt like I could fly. Everything felt so effortless compared to the sheer willpower it used to take just to walk across the room."



Tired wouldn't even begin to describe it.

Exhaustion settled over Kristen Swick each day like a heavy, wet blanket. Her body hurt. She was shaky.

She felt "off."

Time and again, the 37-year-old marathon runner found herself curled up in the corner of her couch instead of exercising — instead of really living.

She kept getting worse.

But her toddler-aged son begged his mommy to play with him. He didn't understand why she was always tired. Why she always said she was sick.

"I didn't want that to be the parent that he grew up knowing," Ms. Swick says. "That was my instigator for finding out what was wrong."

The answer was surprising.

Ms. Swick was diagnosed with Type 1 diabetes — the kind often mistakenly referred to as "juvenile diabetes."

The symptoms of Type 1 diabetes often take longer to show up in adults than in children. Plus, adults with Type 2 often present as overweight, so when a patient like Ms. Swick is lean and in shape, a doctor who doesn't specialize in diabetes may not even consider adult-onset Type 1 as a possibility.

"It was kind of a shock," she says. "Just the thought of having to manage an autoimmune disease was a little overwhelming."

She had so many questions. How do I manage my blood sugar? How does my

diet need to change? Will I ever get my energy back? Can I still run? How do I get back to a normal life?

Ms. Swick turned to the EVMS Strelitz Diabetes Center, where she found the answers and resources she needed.

Today, she manages her diabetes and is back to training for marathons.

"When I started running again, I felt like I could fly," Ms. Swick says. "Everything felt so effortless compared to the sheer willpower it used to take just to walk across the room."


But more than that, Ms. Swick is now able to run and play with her son and be the parent he needs her to be.

"I was so grateful to feel alive again," she says, "and that gratitude hasn't worn off." □




View video My Stories at
evms.edu/digitalmagazine.

EVMS PULSE Wednesday, December 18



An EVMS made-of by Alexandra Leader, MD, MPH, Director of Global Health at EVMS, recently traveled to Cox's Bazar, Bangladesh, to learn and serve in the world's largest refugee camp. See more in the EVMS Digital Magazine.

TOP HEADLINES



Join the fun during Choosing Wisely Day
EVMS will host Choosing Wisely: Innovations and Meet Day Monday, Jan. 27.

EVMS dermatologist honored as Patient Care Hero
The American Academy of Dermatology (AAD) recently recognized Abby Van Voorhes, Chair and Professor of Dermatology, as a Patient Care Hero for her leadership at the EVMS Rapid Access Clinic.

New research will study protein vital to reproduction
In the scientific world of reproductive biology, the typical objective of research is either to find a new way to enhance fertilization or a new way to prevent it. Diane Duffy, PhD, is considering both options as she begins a five-year, \$3.38 million study funded by the National Institutes of Health.

Event aims to increase diversity in the field of medicine
EVMS recently hosted the very first Melanin in Medicine conference.

EVMS IN THE NEWS
Local researcher warns vaping is gambling with your health
Oct 03, 2019 | KRCR-TV Online
Share on: f t in

Mixed Results For A Test Of Vitamin C For Dengue
Oct 01, 2019 | NPR/National Public Radio Online
Share on: f t in


Marshall Police finally have AEDs in their patrol cars, nearly 15 years after Virginia Beach's Southside Daily
Aug 18, 2019 | South-Star Daily
Share on: f t in

Puerto Rico schools, EVMS team up for medical camp
Aug 08, 2019 | WVEC-TV Online
Share on: f t in

Swimming can put you at a higher risk of dehydration. Here's why
Jul 11, 2019 | WVEC-TV Online
Share on: f t in


Global Service
Pursuing Health Equity at Home & Abroad
EVMS
DIGITAL MAGAZINE
Issue 12.1 Now Available
EVMS.edu/digitalmagazine

FEATURED VIDEO




Global Health trip to Panama
In April of 2019, EVMS Global Health partnered with the Floating Doctors to assist in their ongoing healthcare initiative to provide care to the Ngöbe-Bugle community, an indigenous population in rural Panama.


EDITORS' PICKS




Sentara and EVMS win top ranking from U.S. News & World Report




Work group summit advances mission of Minus 9 to 5



New Director aims to enhance opportunities for students




JAMA Pediatrics publishes EVMS study on marijuana arrests



EVMS professor named UN global leader in road safety

EVMS.edu Contact EVMS myEVMS Give to EVMS

Media Contact
EVMS Marketing and Communications
P.O. Box 1960
Norfolk, VA 23501
757.446.7070
news@evms.edu



View the latest EVMS Magazine

Have you checked your **EVMS**PULSE?

Get all of your EVMS news in one place

- research breakthroughs
- academic accomplishments
- campus life
- health headlines
- featured videos
- interviews and more



evms.edu/PULSE

OUR VISION: Eastern Virginia Medical School will be recognized as the most community-oriented school of medicine and health professions in the United States.



When you give,
Checkered Flag gives.
Make a gift to the EVMS Fund
during the month of March
and Checkered Flag
will give — up to \$25,000!
Help us cross the finish line
to reach our goal!
Visit www.evms.edu/checkeredflag.



Checkered Flag