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FOR ALUMNI, FRIENDS, FACULTY AND STUDENTS OF THE
UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

Quarterly

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QUARTERLY

The Magazine for Alumni, Friends,
Faculty and Students of the University of Wisconsin
School of Medicine and Public Health

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CALENDAR

AUGUST 2017

Friday, August 25 White Coat Ceremony

Thursday, August 31 Stethoscope Ceremony

OCTOBER 2017

Friday and Saturday,
October 20 and 21
(*Note updated dates*)
Fall WMAA Board Meeting
Homecoming Weekend, UW vs. Maryland
Class Reunions for Classes of '72, '77, '82, '87,
'92, '97, '02, '07, '12

Friday, October 27 Middleton Society Dinner

NOVEMBER 2017

Tuesday, November 14 Operation Education

MARCH 2018

Friday, March 16 Match Day

APRIL 2018

Friday, April 6 Alpha Omega Alpha (AOA) de Harter
Visiting Professor, AOA Banquet
and Induction Ceremony

Friday, April 27 Spring WMAA Board Meeting
WMAA Scholarship Reception
WMAA Awards Banquet

MAY-JUNE 2018

Thursday, May 10 SMPH Honors and Awards Ceremony

Friday, May 11 UW-Madison Commencement

Thursday and Friday,
May 31 and June 1 Spring Alumni Weekend
Class Reunions for the Classes of '53, '58, '63, '68,
and the Half-Century Society for all alumni who
graduated before 1968

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The MD Class of 2017 has much to celebrate as graduates look toward their future careers.

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SHOW

The Survey of the Health of Wisconsin (SHOW) has new lines of research, in which teams are investigating gut microbiomes and related health concerns.

Campus Scene (above)

The Lake Mendota shoreline at the Memorial Union Terrace is a relaxing place to spend time with friends in the summer.

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On the Cover

Michael Fiore, MD, MPH, MBA—who founded and directs the UW Center for Tobacco Research and Intervention—and his team are dedicated to helping people break their tobacco addiction and better understand why that grip is so tight.

ROBERT N. GOLDEN, MD



Spring and summer represent a time of annual rejuvenation and celebration. The University of Wisconsin School of Medicine and Public Health (SMPH) community is blessed with having much to celebrate. At the annual Match Day, we lauded our medical students' outstanding accomplishments and future aspirations as they prepared to move into the next stage of their training. On the beautiful day of their graduation, we shared a sense of profound pride with them and their families.

In this vibrant season, we also celebrated the accomplishments of medical students who received scholarships funded by gracious donors, and alumni who earned awards at the Wisconsin Medical Alumni Association (WMAA) Scholarship Ceremony and WMAA Awards Banquet, respectively.

Another celebration—a 25th “birthday” party—honored the Center for Tobacco Research and Intervention’s faculty, staff, trainees and supporters who have helped stem the epidemic of tobacco addiction. The center’s founding director, Dr. Michael Fiore, is a pioneer who created one of the nation’s leading tobacco cessation programs, which has gained international recognition as the

“gold standard” in addressing this vitally important public health issue. In Dr. Fiore’s characteristic manner, at the event he focused on others, including the center’s faculty, staff and trainees, thanking them for their contributions to the program’s success and inspiring them to push this important agenda forward into the next quarter century.

The SMPH had even more occasions to celebrate. At our annual Dean’s Teaching and Research Mentorship Award Ceremony, held on Medical Education Day, we recognized and thanked the school’s most impactful teachers who inspire our students through education and research programs. We also welcomed an impressive cohort of inductees into our Alpha Omega Alpha chapter. These students, residents and faculty embody the high standards established by this national medical school honor society.

Celebration is a valuable social mechanism for acknowledging and thanking those who give so much to others. In this issue, we shine a spotlight on two inspiring examples of contributions to the public good. You will enjoy reading about a program started by Dr. Zorba Paster, a remarkable physician, community leader, educator

and steadfast supporter of the SMPH, who brought together health professionals, medical students and partners in India to address the health needs of medically underserved populations halfway around the world. Dr. Paster has extended the Wisconsin Idea beyond the borders of our state to the “global village.” We also recognize two medical alumni who continued their residency training in a unique manner in the 1990s. Facing the challenge of starting residency training shortly after starting their own families, they created a new model of a shared pediatrics residency program. This innovative approach to a balanced family/professional life fostered the healthy development of their young children and their young careers.

For several decades, Dr. Patrick McBride has inspired and nurtured many cohorts of SMPH medical students. In the Perspectives column on page 40, he shares a heartfelt message of gratitude as he reflects on our school and the medical profession. Dr. McBride retires in July from the latest in a series of meaningful leadership roles at the SMPH and UW Health. He leaves behind an unbelievable legacy of service and mentorship. He is the model for what it means to be a dedicated, loyal Badger. As he moves into the next exciting chapter of his life, we wish Dr. McBride the very best and thank him for his inspirational service.

The Fourth of July serves both as the birthday of our nation and as the harbinger of another very special birthday for the school. In August, we will welcome into the world of the SMPH our incoming class of medical students. I’m wishing a happy birthday to all! I invite all of our alumni to come visit—and perhaps blow out some candles together—as we celebrate the past and toast the future of *your* school of medicine and public health.

Robert N. Golden, MD

*Dean, University of Wisconsin School of Medicine and Public Health
Vice Chancellor for Medical Affairs,
UW-Madison*

SUSAN ISENSEE, MD '83

I hope you are having a wonderful summer wherever you are. In this season, which finds many people enjoying Madison's famous lakes, colorful flowers are blooming across the University of Wisconsin-Madison—making it more beautiful than ever!

That brilliance brings with it new opportunities for the UW School of Medicine and Public Health (SMPH). Our school provides each student with a superior education, as evidenced by medical students' success on Match Day (see page 8). Their match percentage was very high.

As members of the Class of 2017 completed their time at the SMPH, I had the privilege of welcoming these new physicians—at their graduation ceremony—as lifetime members in the Wisconsin Medical Alumni Association (WMAA). This is a very impressive class, and I found the ceremony to be moving. Also, having started their class fund on the first day of medical school, these graduates are continuing with a spirit of philanthropy through the WMAA. Their contributions are helping the SMPH provide scholarships, educational luncheons, healthy food for students on exam days and much more.

The WMAA has been busy since my last message. President-Elect Dr. Dan Jackson chaired our Strategic Planning Committee and presented the draft plan to the WMAA board at its spring meeting. The board approved the plan, which you can read on page 22. That meeting was followed by the association's Scholarship Reception for medical students and donors, and the WMAA Awards Banquet at Union South (see page 14). The highly accomplished scholarship recipients and alumni award winners shared deep gratitude to the SMPH for their quality education and to the WMAA for its recognition.

In early June, the Class of 1967 celebrated its 50th class reunion and joined the Half-Century Society, which welcomes all

SMPH medical alumni who graduated 50 or more years ago. Class of '67 representatives raised a significant amount of money for a scholarship through the WMAA. Watch for details about that campaign and the spring alumni reunions in the next issue of *Quarterly*.

We now are looking forward to Homecoming Weekend, which kicks off on Friday, October 20, 2017, with more class reunions. Save the date, and watch for correspondence from your class representatives and the WMAA staff about fall reunions and other Homecoming festivities.

Whether or not this is a reunion year for you, the WMAA and class representatives keep information flowing about ways you can keep in touch with your classmates and stay involved with your alma mater. We are hosting many events and will be introducing a new social media platform, called "for(MD)," to enhance communication and connections among SMPH alumni.

As we continue to enjoy a vibrant summer in Wisconsin—including new and renovated campus buildings, new personnel and the predictable road construction—please continue to communicate with the WMAA about your careers and life milestones by sharing your news in the Class Notes section of *Quarterly* (send your news to quarterly@med.wisc.edu). I also encourage you to reach out to association staff members, who will help you stay connected and share ways you can give back to the SMPH and "pay it forward" to medical students.

On Wisconsin!

Susan Isensee, MD '83

*President, Wisconsin
Medical Alumni Association*





Unsolved Mystery

INVESTIGATORS ARE TRACKING AMERICA'S
DEADLIEST KILLER: TOBACCO ADDICTION

Mike Eheler didn't want to die and leave his wife and four kids without him. Like most smokers, he became addicted as a kid. He had smoked for 23 years, his grandmother had died from lung cancer, and now he could feel the toll on his health—and on his ability to support his family in the way he'd dreamed. It was slipping away, one \$7 pack of carcinogens at a time.

But Eheler couldn't quit, despite his best efforts. Then he saw an advertisement for the Wisconsin Smokers' Health Study at the University of Wisconsin Center for Tobacco Research and Intervention (UW-CTRI).

"It helped," Eheler says, with relief. "It had to do with me really wanting to quit and the medication I was given."

He also credits Chris Ripley, a health counselor with UW-CTRI, for supporting him.

"Without that help, I don't think I would have been able to quit," he says.

Eheler is now healthy enough to play ball with his kids. With the money he would have spent on cigarettes, he has taken his family

Eheler quit with UW-CTRI's help. He's now healthy enough to play ball with his kids.

to Disney World and used some of it toward buying a house.

"I feel like I got a lot more years added to my life to spend with my kids," shares Eheler.

Michael Fiore, MD, MPH, MBA, UW-CTRI founder and director, notes, "We're all about helping people. Through our research, we're searching for clues to arrest tobacco addiction and put away—for good—the disease and death it causes."

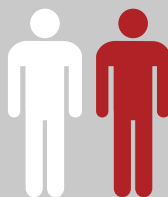
He continues, "During our 25-year history, UW-CTRI has been able to help many patients like Mike Eheler. More than 250,000 Wisconsin smokers have benefited from the Wisconsin Tobacco Quit Line and other

cessation programs. And our partnership with the UW Carbone Cancer Center expands our capacity to prevent deadly tobacco-caused cancers."

SEARCHING FOR CLUES THROUGH RESEARCH

Tobacco products are the leading preventable cause of death in the United States, killing approximately 500,000 people per year—more than deaths by homicide, suicide, illegal drugs and motor vehicle accidents combined. Even smokers who survive often suffer from debilitating ailments like poor lung capacity, heart trouble, missing teeth or amputated limbs. Counseling and medications can help patients like Eheler quit, but solving addiction for all smokers remains a mystery.

While UW-CTRI investigators don't use a Sherlock Holmes-style magnifying glass, they use techniques like genotyping and carbon



HALF of all smokers alive today WILL DIE PREMATURELY from a disease directly caused by smoking—robbing them of 10 to 15 years of life—if they don't successfully quit. This translates into 15 MILLION Americans.



Michael Fiore, MD, MPH, MBA (left), helps patient Mike Eheler use a carbon monoxide monitor.

monoxide monitoring to search for clues to better help people quit using tobacco.

Under the leadership of Fiore and Timothy Baker, PhD, UW-CTRI director of research, the center's team of scientists and staff has authored more than 300 research articles on tobacco addiction and treatment.

For instance, UW-CTRI researchers have published key articles that show the effectiveness of the major medication treatments for smoking; the helpfulness of quit-line counseling and how to get smokers to use it; and ways to engage health care systems in treating tobacco use.

Recently, studies by Dave Fraser, UW-CTRI director of research administration, and colleagues from the Wisconsin Department of Health Services showed that financial incentives can powerfully motivate low-income smokers to engage in treatment and actually quit smoking. In addition, UW-CTRI scientists—including Megan Piper, PhD '06, Danielle McCarthy, PhD '06, Jessica Cook, PhD, and Tanya Schlam, PhD—have developed new treatments for smoking, using powerful new research methods.

The late U.S. Surgeon General C. Everett Koop, MD, once said quitting smoking was at least as difficult as quitting cocaine or heroin; subsequent research backed that assertion. UW-CTRI researchers have committed to

answering the question, "What makes the hold of tobacco use so tenacious?"

"We know the same systems in the brain that are activated by nicotine are activated when an infant sees its mother," explains Baker. "It is clear that nicotine has the potential to turn on very basic and powerful brain-reward and motivational systems."

UW-CTRI investigators also have discovered that flavors seem related

For many smokers, quitting smoking is at least as difficult as quitting cocaine or heroin.

to tobacco use. For instance, Stevens Smith, PhD, and his colleagues have shown that smoking menthol cigarettes appears to reduce the likelihood of quitting smoking. And recently, Piper, the UW-CTRI associate director for research, and Doug Jorenby, PhD, its director of clinical services, have examined motives for smoking and vaping. These studies should help researchers better understand how addictive e-cigarettes can be, whether smokers are using them to quit, and the health effects of the devices.

ALL-POINTS BULLETIN TO HEALTH CARE PROVIDERS

In 2008, the U.S. Public Health Service released its updated *Clinical Practice Guideline, Treating Tobacco Use and Dependence*, which was assembled by a large team of scientists from throughout the nation, led by UW-CTRI and chaired by Fiore.

Like an "APB" to law enforcement officials, the guideline signals to clinicians that they need to be "on the look-out" for their patients' tobacco use and:

- ask about tobacco use at every visit;
- advise those who use tobacco to quit;

- assess the patient's readiness to quit (research shows 70 percent want to quit);
- assist with quitting by providing medication and counseling—in-person or via referral to the Quit Line; and
- arrange for follow-up.

The former director of the U.S. Centers for Disease Control and Prevention (CDC), Tom Frieden, MD, MPH, heralded the guideline, saying, "What you have here is the best of the best in the release of a clinical practice guideline. In the process, content, practicality and the rigor of its work, I really salute all the people who worked on it, for what really should be a model for any clinic or medical practice."

In the early 1990s, UW-CTRI researchers were the first to propose making tobacco use a vital sign—something doctors would assess at every visit, just like a patient's blood pressure. When doctors intervene, smokers are twice as likely to quit. Back then, only one of five patients was asked by their doctors if they smoked. Now, nearly every patient is asked that question.

"This sort of systematic change in health care delivery is our goal," says Rob Adsit, MEd, UW-CTRI outreach director.

UW-CTRI's outreach team strives to embody the Wisconsin Idea by taking the latest research about how to help patients quit and sharing it with doctors, nurses, psychologists, pharmacists, dentists and other providers from all disciplines. They've worked with more than 22,000 professionals representing every health care system in Wisconsin. The team helps systems incorporate the latest research into their standard of care.

Because clinicians are so busy, one of UW-CTRI's aims has been to help doctors refer smokers to the Quit Line at 800-QUIT-NOW. It's a win-win: patients get free, state-of-the-art treatments to quit smoking, while doctors can help more patients eliminate smoking from their lives.

LEVERAGING TECHNOLOGY

UW-CTRI has worked with Epic Systems Corporation—the Dane County-based worldwide leader in electronic health records (EHR) technology—to design and test a system that allows clinicians to electronically



Most smokers become ADDICTED AS KIDS, when their brains are most susceptible to addiction, and Big Tobacco knows it.

refer patients who use tobacco products to the Quit Line. The system provides service outcomes to clinicians in a secure, “closed-loop” manner.

Several health care systems, including 37 UW Health clinics, have implemented the EHR-based referral program.

PUTTING TOBACCO AWAY FOR GOOD

Fiore recently penned a commentary in the *New England Journal of Medicine* that included a blueprint for ending tobacco use in the United States. He outlined these strategies to put the proverbial handcuffs on this leading killer:

- implement the U.S. Food and Drug Administration’s full authority for tobacco-product regulation;
- mandate the inclusion of graphic warning labels on all tobacco products;
- provide barrier-free access to proven tobacco treatments;
- raise state and federal cigarette excise taxes, with the rationale that the more tobacco costs, the less people use it;

- prohibit the sale of any tobacco product to people younger than 21;
- sustain successful national media campaigns;
- focus on helping populations with the highest smoking prevalence;
- enforce the Housing and Urban Development smoke-free housing rule;
- expand tobacco research;
- fully fund comprehensive, statewide tobacco-control programs at CDC-recommended levels; and
- extend comprehensive, smoke-free indoor-air protections to all Americans.

While the percentage of people who smoke in the United States has dropped from nearly half the population after World War II to about 15 percent today—a dramatic public health accomplishment—smoking rates remain much higher among vulnerable groups. Those with mental illness or substance-abuse issues smoke nearly half the cigarettes in the nation. Evidence shows that tobacco companies target minorities.



Smoking costs the United States more than \$289 BILLION per year in medical costs and lost worker productivity. It costs Wisconsin \$4.6 BILLION per year in added Medicaid and other costs.

UW-CTRI collaborates with the Wisconsin Department of Health Services and nonprofit organizations like the Salvation Army to help people across the state to quit smoking, including those who are poor and homeless, have behavioral health issues or are marginalized in other ways. Bruce Christiansen, PhD, a UW-CTRI researcher, leads many of these efforts.

“We’ve made progress,” he reflects, “but there’s much work left to be done.”

And Eheler exclaims, “I have to thank the Smokers’ Study. I have no ambition to smoke, thank you very much!”



JOIN THE EFFORT! Please visit ctri.wisc.edu to learn about ways to support this cause.



At UW-CTRI’s 25-year celebration in 2017, the center’s five 25-year veteran faculty and staff received medallions. Left to right: Michael Fiore, MD, MPH, MBA; Stevens Smith, PhD; Douglas Jorenby, PhD; Lisa Rogers, MBA; Timothy Baker, PhD.

Fiore Earns National Honors

Michael Fiore, MD, MPH, MBA, founder and director of the UW Center for Tobacco Research and Intervention (UW-CTRI), received a national award for his lifetime of achievements in helping patients quit tobacco use. In spring 2017, he earned the John R. Hughes Award, presented in Texas by the Association of the Treatment of Tobacco Use and Dependence.

In late 2016, Fiore was awarded the Alton Ochsner Award for his contributions to helping people quit tobacco use and live longer,

healthier lives. The award is named in honor of Alton Ochsner, MD, co-founder of the Ochsner Clinic in New Orleans. In 1939, he was the first to publish evidence relating tobacco smoking as the major cause of lung cancer.

Fiore has provided perspectives to audiences ranging from Good Morning America to the U.S. Senate. He has written numerous articles, chapters and books on cigarette smoking and was a consulting editor of *Reducing Tobacco Use—A Report of the Surgeon General* (2000).

He chaired the panel that created the National Action Plan to address tobacco addiction, which led to the creation of the national tobacco quit line—now available to all Americans at 800-QUIT-NOW.

In 2005, as part of a landmark lawsuit against the tobacco industry, the U.S. Justice Department asked Fiore to craft a national plan to help smokers quit. In 2012, Fiore was elected to the National Academy of Medicine (formerly called the Institute of Medicine).

From Match Day to Graduation

MD STUDENTS CELEBRATE SUCCESS

Whether they're sporting brilliant green—to honor Match Day on St. Patrick's Day, March 17, 2017—or crimson and black robes and mortarboards, the University of Wisconsin School of Medicine and Public Health's (SMPH) Class of 2017 MD graduates celebrate in true Badger style. And they have many reasons to do so.

From opening envelopes on Match Day to learn where they'll spend the next several years of their training to accepting

their diplomas, the graduates had time to reflect upon their accomplishments, thank those who supported them along the way and look forward to their future careers.

The school's 169 MD graduates include 24 students from the Wisconsin Academy for Rural Medicine, 16 from the Training in Urban Medicine and Public Health Program and 10 who earned dual MD-PhDs.



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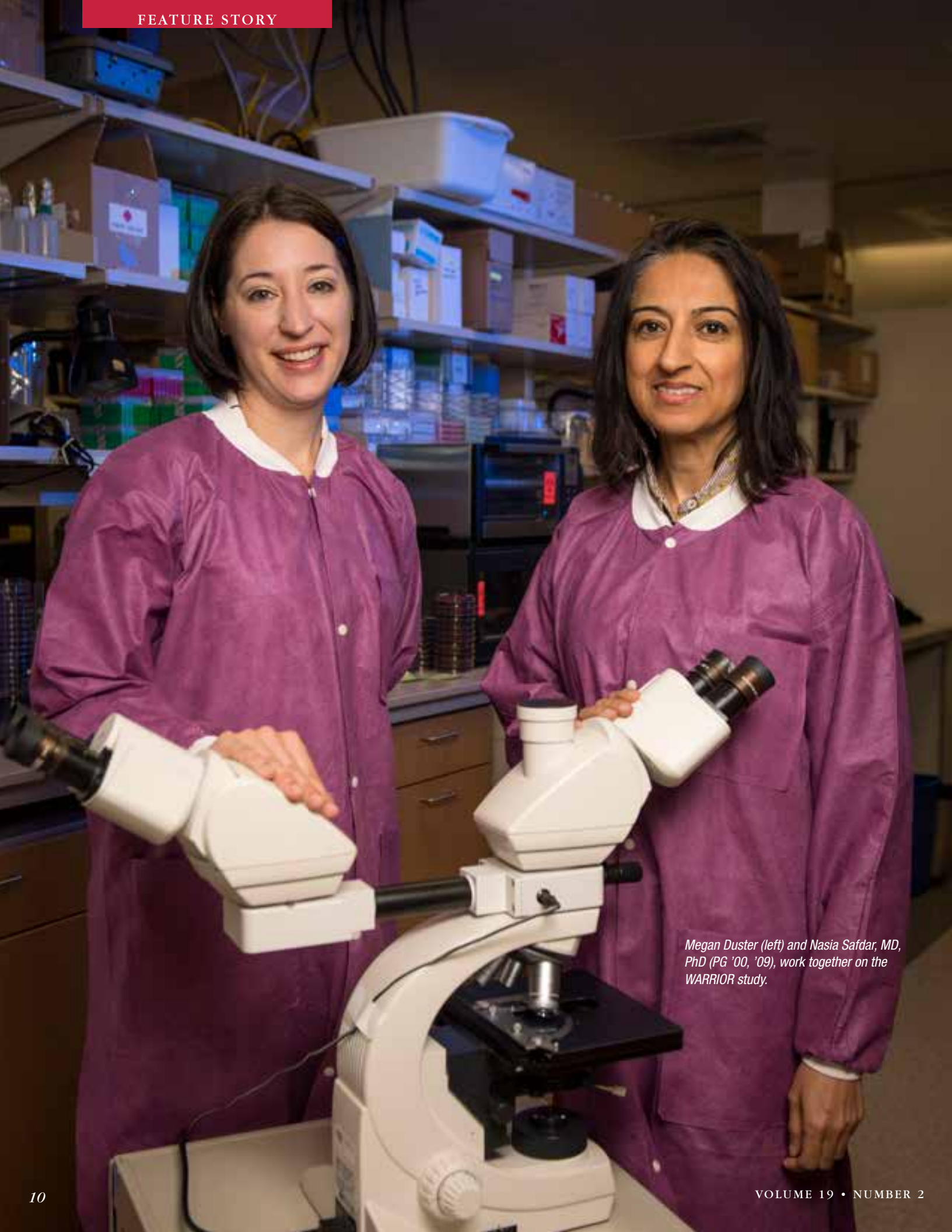
This page: Top row (left to right): Adam Bailey and Imy watch Erin Bailey read the couple's match; Syed Hussaini reveals his residency location; Mina Alfi, Erin Cheers, MD (winner of an Outstanding Resident Award), and William Jacoby pose. Bottom row: Nick Anderson and Karen Flores Rosario embrace; Emily Barker exclaims about her news; Vonzell Coleman celebrates with Akaila Cabell.

Opposite page: Top row: Mark Ehlers; Ngoc Pham. Middle row: Adebusola Adesina, Vanesa McMurry; Nisha Baliga, Karen Flores Rosario and Saamia Masoom; MD/PhD graduates with Anna Huttenlocher, MD; Allison, Maisy and Jon Scholl.

TODD BROWN/MEDIA SOLUTIONS (12)







Megan Duster (left) and Nasia Safdar, MD, PhD (PG '00, '09), work together on the WARRIOR study.

SHOW

NEW LINE OF RESEARCH TAKES GUTS

“You know, if you’re going to poop anyway, you might as well get paid for it!”

That’s Doug Esselman’s sales pitch for convincing people to collect a sample of their stool in the name of science—in this case, the latest addition to the Survey of the Health of Wisconsin (SHOW), a population-based study at the University of Wisconsin School of Medicine and Public Health (SMPH). The school’s investigators have led SHOW since its 2008 inception.

Why stool? Because growing evidence suggests that the community of bacteria in the human gut—our microbiome—plays a critical role in keeping us healthy. Its imbalance may contribute to conditions ranging from obesity, diabetes and asthma to cancer and cardiovascular disease.

To study Wisconsin’s gut microbiome, SHOW investigators have doubled the compensation they offer to participants—now \$200—to analyze the research subjects’ stool samples in the lab and correlate that data with what they eat.

SHOW investigators have collected typical past-year diet information since Day 1, but the new microbiome study—initiated in spring 2016—also asks participants to record everything they have consumed for

the past 24 hours and the time they collected their stool samples.

Even though the sample collection involves a significant “ick” factor, the researchers were surprised to find that the 24-hour dietary recall, which takes about an hour to complete on a computer, is typically perceived as a bigger burden.

“When participants deliver their stool samples, we also collect their blood, urine and saliva, and take swabs from their skin, mouth and nose,” explains Esselman, who manages the SHOW field team and has plenty of personal experience knocking on Wisconsin’s doors to recruit participants. “You’d be surprised by how many people don’t have an issue with any of that. But getting them to log into a web site and enter everything they ate in the past 24 hours has definitely been harder.”

Kristen Malecki, PhD, MPH, and Javier Nieto, MD, PhD, MPH—then chair of the Department of Population Health Sciences—were SHOW’s co-directors until Nieto left that role in SHOW in 2015, and Paul Peppard, PhD ’99, became its co-director.

Peppard admits to having had serious concerns about the success of collecting stool samples when the team first brainstormed about it.



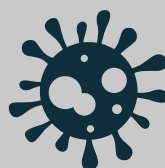
This photo, from SHOW’s early days, reflects the way team members conduct in-home visits to collect data. The program’s researchers now travel in mini-vans.

“But apparently, Wisconsinites have few qualms about handing over their stool for research,” jokes Peppard, an associate professor of population health sciences.

And they do it for a compelling reason: to help investigators in the battle against “superbugs,” or microbes that have developed resistance to the antibiotics that have greatly reduced illness and death from infectious diseases since Alexander Fleming discovered penicillin in 1928.

—Continued on next page

More than 2 MILLION Americans are INFECTED each year with MULTI-DRUG RESISTANT organisms, causing at least 23,000 deaths.





SHOW and WARRIOR faculty and staff: Front row (left to right): Amanda Rasmuson; Jen Tratnyek; Nasia Safdar, MD, PhD (PG '00, '09); Lauren Barko; Julie Mares, PhD '87; Ajay Sethi, PhD, MHS. Middle row: Maria Nikodemova, PhD; Michelle LaMore; Shannah Eggers; Pam Klak; Christine McWilliams, MPH. Back row: Paul Peppard, PhD '99; Megan Duster; Doug Esselman; Courtney Blomme; Andy Bersch; Tammy LeCaire, PhD; Matt Moehr, PhD.

According to the U.S. Centers for Disease Control and Prevention (CDC), more than 2 million Americans are infected each year with multi-drug resistant organisms (MDROs), causing at least 23,000 deaths. Since MDROs don't know any boundaries, in 2015, the World Health Organization published the "Global Action Plan on

Antimicrobial Resistance," which states that this concern "threatens the very core of modern medicine and the sustainability of an effective, global public health response to the enduring threat from infectious diseases."

Peppard considers antibiotic resistance "a growing, grossly underappreciated crisis" and stresses the need to direct resources to

microbiome research to "help us learn a lot more about how to contain this crisis."

FROM SHOW TO WARRIOR

The SHOW study, which is the only statewide public health monitoring program in the nation, has enrolled more than 6,000 individuals from 62 of Wisconsin's 72 counties since 2008. Further, it has enrolled more than 700 children since 2014.

SHOW's methods involve having trained interviewers visit randomly selected households, within randomly selected counties, to collect survey data, biological samples and physical measurements—such as height, weight and blood pressure—from all household members who legally consent to participate.

Asked why SHOW is the only program of its kind, Peppard credits the SMPH for its foresight to build important population health programs, which have been integral to the school's transformation into a school of medicine *and* public health.

"It seems like an oversight by the other 49 states, especially since the importance of this type of study has been recognized for decades at the federal level," he adds.

SHOW has been continuously funded by the SMPH's Wisconsin Partnership Program

SHOW History

The Survey of the Health of Wisconsin (SHOW) is modeled after the federally funded National Health and Nutrition Examination Survey, managed by the Centers for Disease Control and Prevention. Although this survey, initiated in 1971, has been highly successful, it does not provide reliable state-level estimates of public health metrics, such as the prevalence of obesity and chronic diseases.

One unique aspect of SHOW is its data collection with in-home visits, rather than by telephone, to assure the validity of height, weight, blood pressure and other measures.

SHOW is the brainchild of many current and former faculty members of the Department of Population Health Sciences, under the

leadership of Javier Nieto, MD, PhD, MPH, who was chair of that department from 2002 to 2016. After years of extensive planning, SHOW faculty and staff conducted their first home visits with adult participants in 2008 and started enrolling child participants five years later. In 2017, SHOW began connecting with past participants to collect longitudinal follow-up data. The demographics of the more than 6,000 SHOW participants represent Wisconsin's overall population, according to U.S. Census data.

SHOW has greatly benefitted from the UW Survey Center's experience with questionnaire development, on-site computer entry of responses and selection of random household samples from U.S. Census-defined population groups. Counties are sampled in proportion to their population.

Six to eight weeks before the start of recruitment, study staff connect with local officials, community leaders and news organizations in the target region's major cities and distribute study flyers at public places, such as health care centers and libraries. Surveyors make up to 10 attempts—two mailings, two phone calls and six in-person visits—to establish contact with household members at each randomly sampled address.

In addition to facilitating a wide range of research projects, SHOW has provided valuable local information to county health departments about obesity, dental health and medication use that can be compared to state and national data to design targeted health promotion materials and campaigns.



Kristen Malecki, PhD, MPH (left), is the mentor for Shannah Eggers, a graduate student who is analyzing a potential relationship between antibiotic resistance and lead exposure as part of SHOW.

(WPP) since 2006, with intermittent additional support from federal agencies. The beauty of the project is that its existing infrastructure is available to other investigators—who have raised independent funds—for ancillary studies of narrower research topics, such as the microbiome's role in antibiotic resistance.

SHOW interviewers refer to “the Wisconsin microbiome study” when they explain its rationale to potential participants, but the founding investigators called it the War on Antibiotic Resistance in Wisconsin, or WARRIOR. Those leaders are Nasia Safdar, MD, PhD (PG '00, '09), associate professor of infectious diseases at the SMPH and the William S. Middleton Memorial Veterans Hospital, and Ajay Sethi, PhD, MHS, associate professor of population health sciences. They admit that WARRIOR is not the most logical acronym, “but it seemed to give us momentum, like names sometimes do,” Safdar says.

Like SHOW, WARRIOR exists because of WPP funding. In late 2014, Safdar and Sethi pitched their idea to Peppard and Malecki, an assistant professor of population health sciences. With their

support, Safdar and Sethi—along with several co-investigators—submitted their proposal to the WPP in spring 2015 and received a grant the following fall.

“WARRIOR is a perfect example of the added value that comes from the SMPH's investment in SHOW's infrastructure,” Malecki shares. “Without that, WARRIOR would not be financially feasible. I think it also illustrates the importance of cross-campus collaborations in the pursuit of team science.”

With a shared interest in studying antibiotic resistance in the hospital setting, Safdar and Sethi recognized the tremendous opportunity SHOW provided to tackle this problem at the community level. With the WARRIOR study, which is collecting 600 stool samples and dietary information, Safdar and Sethi—in collaboration with dietary epidemiologist Julie Mares, PhD '87, and microbiologist Garret Suen, PhD—will test whether a fiber-rich diet, consumed by less than half of Americans, is associated with changes in the microbiome and a lower prevalence of MDROs in the gut.

“To reduce the potential for outside pathogens to colonize the gut, you need to think about what causes its microbial imbalance,” Sethi explains. “We know that exposure to antibiotic medication plays a large role, but we also know that dietary fibers—from vegetables and fruits to certain kinds of grain—help maintain a

—Continued on page 37

Study Leadership

SHOW Leaders:

Kristen Malecki, PhD, MPH, joined the Survey of the Health of Wisconsin (SHOW) in 2008 as a researcher and soon became a scientist. Malecki became the program's associate director in 2011 and its co-director two years later, at the same time she joined the Department of Population Health Sciences faculty. She was drawn to SHOW's novelty and importance due to her interest in the intersection of environment and social determinants of health, rooted in experiences from her hometown of Milwaukee. She has added molecular epidemiology to her research portfolio.

Paul Peppard, PhD '99, joined the University of Wisconsin School of Medicine and Public Health (SMPH) as a lead scientist in the Department of Population Health Sciences. He joined the school's faculty and SHOW in 2008 and became SHOW's co-director in 2015.

WARRIOR Leaders:

Nasia Safdar, MD, PhD (PG '00, '09), joined UW Health as a resident in the Internal Medicine Residency Program in 1997 and joined the SMPH faculty in 2008. For her significant contributions to fighting infections by multi-drug resistant organisms (MDRO) in hospital settings, she earned the Presidential Early Career Award for Scientists and Engineers from President Barack Obama in January 2017; this is considered the highest honor bestowed by the U.S. government on science and engineering professionals in the early phases of their independent research careers.

Ajay Sethi, PhD, MHS, joined the Department of Population Health Sciences in 2008. He is an infectious disease epidemiologist who began his career studying HIV/AIDS in the United States and Uganda before working in the area of health care-associated infections. He collaborates with Safdar on several projects and is particularly interested in modifiable behavioral and structural factors associated with the transmission of MDROs.

The SHOW study, which is the only statewide public health monitoring program in the nation, has ENROLLED MORE THAN 6,000 individuals from 62 of Wisconsin's 72 COUNTIES since 2008.



2017 WMAA Awards Banquet

RUBINSTEIN AND RASMUSSEN WIN TOP HONORS

AWARD WINNERS

MEDICAL ALUMNI CITATION— DISTINGUISHED ALUMNI AWARD

Mary M. Herman Rubinstein, MD '60

RESIDENT CITATION— DISTINGUISHED RESIDENT AWARD

Peter A. Rasmussen, MD '91 (PG '98)

SIGURD SIVERTSON MEDICAL EDUCATION AWARD

Stephen Holthaus, MD

BASIC SCIENCES EMERITUS FACULTY AWARD

Richard R. Burgess, PhD

CLINICAL SCIENCES EMERITUS FACULTY AWARD

M. Bruce Edmonson, MD, MPH

RALPH HAWLEY DISTINGUISHED SERVICE AWARD

Henry A. Anderson, III, MD '72

WMAA SERVICE AWARD

Donn D. Fuhrmann, MD '76

HONORARY LIFE MEMBERSHIP IN THE WMAA

Gary Lyons, PhD

There's More Online! Visit med.wisc.edu/96

NOMINATE ALUMNI!

The Wisconsin Medical Alumni Association (WMAA) invites alumni to nominate fellow alumni to be considered for WMAA awards. See page 19 for details about award categories and the deadline. For more information, please contact Andrea Larson at allarson7@wisc.edu.



Mary M. Herman Rubinstein, MD '60, earned her medical degree from the University of Wisconsin School of Medicine and Public Health (SMPH). She completed an internship at the Mary Hitchcock Memorial Hospital, affiliated with Dartmouth College; a year of residency at University Hospital in Madison; and an internship and neuropathology fellowship at Yale. She was a fellow of neuropathology and assistant professor of pathology at Stanford, and a professor of pathology at the University of Virginia, where she co-directed the Division of Neuropathology.

With her husband, Lucien Rubinstein, MD, she published numerous articles in esteemed journals. She built a notable career as a neuropathologist, special expert in neuropathology and senior staff scientist at the National Institute of Mental Health, consultant neuropathologist at the District of Columbia Office of the Chief Medical Examiner and consultant neuropathologist at the Howard University Hospital. She retired in 2013.

Herman Rubinstein named the SMPH Department of Neuroscience's inaugural chair the "Mary Herman and Lucien Rubinstein Distinguished Chair in Neuroscience."

Herman Rubinstein died in June 2017.



Peter A. Rasmussen, MD '91 (PG '98), earned his medical degree from the SMPH and completed his neurosurgery residency at University Hospital in Madison. He completed an interventional neuroradiology/endovascular neurosurgery fellowship at Cleveland Clinic Foundation and a fellowship in microsurgical treatment of cerebrovascular disease, also at Cleveland Clinic.

In 2014, he served as the president of the Society of Neurointerventional Surgery. Rasmussen is the medical director for distance health and associate professor of neurosurgery in the Cerebrovascular Center at Cleveland Clinic. He directed the center for nine years, founded the Mobile Stroke Treatment Unit Program (one of the first in the United States) and is charged with guiding Cleveland Clinic's overall distance health strategy and implementing its telemedicine programs while also maintaining a busy clinical practice.

A recognized innovator, entrepreneur and key opinion leader in neurovascular disease and telemedicine, Rasmussen has been appointed as a fellow to the American Heart Association and the American Association of Neurological Surgeons. He is a leader in open and endovascular cerebrovascular neurosurgery.

2017 WMAA Scholarship Reception

HONORING AND CONNECTING STUDENT RECIPIENTS AND DONORS



TODD BROWNMEDIA SOLUTIONS (5)

At an April 2017 reception, the University of Wisconsin School of Medicine and Public Health (SMPH) and Wisconsin Medical Alumni Association (WMAA) brought together generous donors who have funded scholarships and grateful medical students who received them.

"It's important to set aside time to acknowledge our good fortune in having donors who care so deeply about our school and its students," SMPH Dean Robert Golden, MD, told participants. "This Scholarship Reception reflects not just the increasingly critical importance of private support, but our tremendous appreciation for you, our innermost circle of friends. Thank you for your partnership with us

in providing such tangible support to our students."

The school's assistant dean for students, Gwen McIntosh, MD '96, MPH, noted that the Scholarship Committee—which comprises faculty, student organization leaders, mentors, department administrators and colleagues from the WMAA and the Wisconsin Foundation and Alumni Association—takes seriously its charge to honor donor intentions when matching scholarships with students.

"We look for the best and brightest students, we listen to our donors' visions, and we create a match between donors and students. We're here to celebrate some of these wonderful connections," she said.

Top row (left to right): M3 Max Rusek, M3 Lily Thompson, M3 Devin Walsh-Felz, M3 Zeeshan Yacoub, M4 Jordan Ludwigson. Gwen McIntosh, MD '96, MPH; M2s Mark Kelly, Abbey DeBruin, Jeanette Comstock, Melissa Drezdzon, Andrew Vogel, Spencer Klein; Karen Peterson. Bottom row: Kathryn Nichol, MD '62, M2 Sarah Larson, Susan Miller. Sandra Bertics, M2 Thuy-Lihn Nguyen. M4 Will Jacoby, Ramona Steele, Norlin Benevenga.

M4 Jon Scholl—who received the James Magnino Scholarship and the Benton and Mary Taylor Great People Scholarship—shared a message of gratitude on behalf of all students, as he noted, "These donors could have invested in anything, but they chose to help us. It's an honor to be considered worthy of their investment."



UW Health radiologists consult about a patient's condition.

LORI DEITTE, MD '84

Following medical school, I completed a radiology residency and fellowship at UW Health in Madison. I am grateful for the high level of education I received. No matter where my husband (anesthesiologist) and I live, Madison will always be “home.”

During my third-year clerkship, I enjoyed various specialties. When I rotated through radiology, I knew I had found my calling.

I started my career in private practice in northeast Tennessee and later joined the

University of Florida faculty. Since April 2015, I have been the vice chair of radiology education and a member of the Body Imaging Section at Vanderbilt University in Nashville.

My practice includes abdominal imaging and ultrasound coverage for Vanderbilt's Level 1 Trauma Center. I enjoy the high level of complexity and seeing a wide spectrum of disease processes.

My passion is ultrasound and interacting with patients in the ultrasound suite. My most memorable patients

include a 4-year-old girl diagnosed by ultrasound with a neuroblastoma (subsequently cured); a 16-year-old girl diagnosed via an obstetrical ultrasound to have severe oligohydramnios during a medical mission trip in Honduras (subsequently delivered a normal baby); and a 50-year-old woman diagnosed by ultrasound to have early pancreatic cancer (disease-free years later).

I am active in multiple radiology societies, including the Association of Program Directors in Radiology, for



which I am the president. I have advised more than 45 medical students. I love to share with students my high level of enthusiasm for radiology and the impact radiologists have on patient care.

BRIAN FROHNA, MD '88

I work for Valley Radiologists Ltd. (VRL), a division of Southwest Diagnostic Imaging, in Phoenix. It is the second largest single specialty private practice radiology group in the United States. My large division serves two hospitals and owns and operates 12 outpatient centers.

As a neuroradiologist, about 90 percent of my practice is interpreting MR and CT examinations of the brain and spine. I also serve on VRL's executive committee.

In this field, we have close contact with referring physicians. One relationship

that stands out is with a spine surgeon who calls me frequently to consult about patients. Once, while I was in London, he called me from the operating room with a question about his patient. I was able to bring up the patient's case on my laptop and walk him through his concerns.

My interest in neuroradiology began during a neurology rotation at Mt. Sinai Hospital in Milwaukee in my third year of medical school. Through working with Dr. Thomas Grist, who was an intern at the time (now the chair of the SMPH Department

of Radiology), I realized this field was a great way to merge my interests.

I completed a radiology residency at the University of Michigan and a neuroradiology fellowship at the Mayo Clinic in Rochester, Minnesota.

I love my specialty. I know there will be changes, such as in reimbursement models and big data-related technology, but those of us in the field over the next several years will help define how the specialty continues to evolve.



ANDREW MILLER, MD '14

As of July 2017, I am a third-year radiology resident at Duke University Medical Center in Durham, North Carolina. We provide comprehensive diagnostic and interventional procedures for a complex, high-acuity inpatient population, as well as a diverse outpatient network.

In this field, every study presents a unique learning opportunity—whether it relates to analyzing challenging pathology, collaborating with the clinical team to narrow the differential, or applying physics to optimize image acquisition and interpretation. I most enjoy

being on the front line, guiding clinical decision-making and having the opportunity to positively impact patient care.

As a medical student, I was unsure of my specialty until early in my fourth year. That's when I was drawn to the cognitive nature and up-tempo workflow of radiology. The incredible breadth of radiology keeps me continually engaged. We work closely with clinicians across all medical and surgical subspecialties, and they challenge us to expand our knowledge of the associated anatomy and pathology. We also must stay current

with scientific literature and practice trends.

I tell medical students that radiology is a diverse specialty that offers something for almost every personality and skill set. This affords radiologists flexibility in regard to the degree of subspecialization and the work environment.

Radiology offers a wide variety of practice models and schedules, allowing individuals to pursue personal and family interests. This allows me to spend time with my wife and daughter and pursue my passion of fly fishing. I encourage undecided medical



students to explore radiology, perhaps with an elective clerkship or by talking with a radiologist.

CLASS NOTES compiled by Andrea Larson

We want to hear from you!
med.wisc.edu/shareyournews

CLASS OF 1957

Arthur Leon, professor of exercise physiology for the University of Minnesota School of Kinesiology, has been named "Top Doctor of the Year in Higher Education" for 2016-2017 by the International Association of Top Professionals. Award recipients are distinguished based on their professional accomplishments, academic achievements, leadership abilities, longevity in the field, other affiliations and contributions to their communities.

E. Richard (Dick) Stiehm is among three University of California-Los Angeles (UCLA) emeriti professors selected to receive the 2016-2017 Edward A. Dickson Emeritus Professorship Award. A professor emeritus of pediatrics, Stiehm is a renowned pediatric immunologist. Since retirement, he has

been working virtually full-time in research, teaching, and clinical and consulting work at UCLA, throughout the United States and around the world. Stiehm's highly acclaimed book, *Immune Deficiencies*, was revised and published by Elsevier in 2014. Additionally, Stiehm is the editor-in-chief for immunology for UpToDate, the widely used online compilation of evidence-based medical information. He remains active in the publication of original material.

CLASS OF 1978

Jeff Thompson wrote a book about values-based leadership, titled *Lead True*. It compiles stories from the business, health care and education fields, illustrating how a diverse group of leaders has employed value-based



leadership and succeeded. Thompson is the executive advisor and chief executive officer emeritus at Gundersen Health System in La Crosse, Wisconsin, as well as a pediatrician, author and speaker.

CLASS OF 1980

Patrick McBride, upon his July 2017 retirement, will receive emeritus status at the University of Wisconsin-Madison. As the UW School of Medicine and Public Health (SMPH) associate dean for students for 11 years, McBride guided the next generation of physicians by directing and supervising the Student Services and Admissions Departments and the Office of Multicultural Affairs. As director of alumni relations for the SMPH, he provided development leadership



IN MEMORIAM

Harold F. Deutsch, PhD '44
Sturgeon Bay, Wisconsin
June 12, 2017

Raymond H. Thomas, MD '49
Phoenix, Arizona
December 21, 2016

John B. Hughes, MD '55
Oshkosh, Wisconsin
January 14, 2017

James A. Dorr, MD '61
Milton, Wisconsin
(No date available)

John A. Palese, MD '48
West Bend, Wisconsin
November 7, 2016

Harry C. Evans, MD '52
Palm Desert, California
April 2, 2017

Fred F. Brewer, MD '60
Evergreen, Colorado
November 9, 2016

Yvonne M. Martens, MD '62
Pekin, Illinois
December 19, 2016

Elaine K. Glover, MD '49
Colbert, Washington
January 1, 2016

Leonard Kahn, MD '53
Bronxville, New York
November 14, 2016

Kent S. Mannis, MD '60
Madison, Wisconsin
March 4, 2017

Stephen Somerville, MD '71
Green Bay, Wisconsin
February 20, 2017

Sherman R. Lee, MD '49
Menomonie, Wisconsin
January 28, 2017

James J. Du Bois, MD '54
Sarasota, Florida
October 1, 2016

Mary M. Herman Rubinstein,
MD '60
Madison, Wisconsin
June 9, 2017

SMPH Faculty Member
Thomas W. Kenney, RN
Elkhorn, Wisconsin
May 4, 2017

and raised more than \$3 million. He is a past president of the Wisconsin Medical Alumni Association. During his long career, he served as director or associate director of several UW Health programs related to preventive cardiology, cardiology and family medicine. He also led the Health Reform Committee of the American Association of Cardiovascular and Pulmonary Rehabilitation. His National Institutes of Health-funded research has focused on heart disease prevention, cholesterol management, tobacco cessation, diabetes and obesity. Recently, he co-authored a major American Heart Association guideline that addresses seven metrics for cardiovascular health that reduce deaths from cardiovascular disease and stroke. The guideline is being used nationally.

CLASS OF 1990

Joshua Safer

will receive, in fall 2017, the Massachusetts Medical Society's 2017 Lesbian, Gay, Bisexual and Transgender (LGBT) Health Award, an honor recognizing an individual who has made outstanding contributions to LGBT health. Nominators noted that Safer's work bridges "the gap between perception and scientific evidence of the biological basis of gender identity and the safety of treatment." They also credited him for "creating a new generation of physicians who are not afraid to treat transgender patients." Safer is the medical director of the Center for Transgender Medicine and Surgery at Boston Medical Center and an associate professor of medicine and molecular medicine at Boston University School of Medicine. He is a national and international lecturer and author on the subjects of endocrinology and transgender health. He serves as an associate editor of the *Journal of Clinical and Translational Endocrinology* and a member



of the editorial boards of three journals: *Transgender Health*; *International Journal of Transgenderism*; and *Endocrine Practice*.

CLASS OF 2003

The International Association of HealthCare Professionals is pleased to welcome **Tina Sauerhammer** to its organization with her upcoming publication in *The Leading Physicians of the World*. Sauerhammer is a surgeon who has expertise in all facets of her work, especially reconstructive surgery of congenital anomalies and disorders, and pediatric and adult plastic surgery. She serves patients within Prevea Health in Green Bay, Wisconsin.



CLASS OF 2004

Tim Cordes was honored at Columbus Catholic High School in Waterloo, Iowa, as its 2017 distinguished alumnus. Cordes was the valedictorian at Columbus and at the University of Notre Dame. He earned his medical and doctoral degrees through the SMPH's Medical Scientist Training Program

(MSTP). Cordes is legally blind, having been diagnosed as an infant with Leber's disease, a rare degenerative condition of the retina. Now specializing in addictive disorders, Cordes has worked with veterans at the William S. Middleton Memorial Veterans Hospital in Madison. He is married to Blue-Leaf Cordes, PhD '04, MD '06; they have two sons.

Erica Barrette

has been named Physician of the Year for 2017 by HSHS Sacred Heart Hospital in Eau Claire, Wisconsin. She joined Sacred Heart Hospital in September 2011 and will be transitioning to OakLeaf Clinics in Altoona, Wisconsin, in summer 2017. She will continue to care for patients and deliver babies at Sacred Heart Hospital. Barrette completed an obstetrics and gynecology residency at Tri-Health Medical Center in Cincinnati. She serves as a member of the HSHS Western Wisconsin Division Ethics Committee and the HSHS Physician Informatics Committee and Obstetrics Multidisciplinary Safety Committee.



NOMINATE YOUR FELLOW ALUMNI!

The Wisconsin Medical Alumni Association (WMAA) invites alumni to nominate their fellow alumni to be considered for WMAA awards. The deadline for award nominations is September 1, 2017. (Note that nominations for the Citation Award would be for the 2019 award. All other 2017 nominations are for 2018 awards.)

To view descriptions of the award categories, visit med.wisc.edu/96.

Also, read about the 2017 WMAA Award winners on page 14.

For nomination materials and requirements, please contact Andrea Larson at allarson7@wisc.edu.

Know Your Class Representatives

Each University of Wisconsin School of Medicine and Public Health (SMPH) graduating class has one or more class representatives who play an integral role in working with the Wisconsin Medical Alumni Association (WMAA) to plan class reunions. Those featured here and online hope classmates will join them at their reunions in fall 2017.

JOHN F. PEDERSON, MD '72

What type of practice are you in now, and where?

Before I retired, I practiced pathology at St. Francis Hospital, La Crosse, Wisconsin, for 25 years. It joined the Mayo Clinic Health System in 1995. Before I joined St. Francis, I completed a pathology residency and served as a chief resident at University Hospital in Madison, and practiced at Howard Young Medical Center in Woodruff, Wisconsin.

What's your fondest memory of medical school?

I remember the physical diagnosis sessions we had with Dr. William Middleton, who was in his 80s but still as astute as ever.

What are your hobbies/interests?

My hobbies include reading, playing bridge and playing chess with my 8-year-old grandchild. I spend many weekends with our family at a cottage in Pepin, Wisconsin, and exercise as much as possible.

What SMPH faculty do you remember the most, and why?

I enjoyed anatomy classes with Dr. Otto Mortenson and Dr. James Pettersen, among others. I had many fine teachers.

Message to your classmates?

I will attend the fall reunion—our 45th year since graduating. I hope to see a good win for the football team and get reacquainted with classmates. I hope many people attend, including those who have retired. We can make this a fall getaway in Wisconsin!

MIA GINTOFT COHEN, MD '07

What type of practice are you in now, and where?

I am an assistant professor of clinical psychiatry at Weill Cornell Medical College in New York. I work in an academic and private practice as a child, adolescent and adult psychiatrist, and I also teach medical students, residents, child psychiatry fellows and psychology post-doctoral trainees. This year I was granted the Westchester Division Teaching Award by the child and adolescent psychiatry trainees.

What's your fondest memory of medical school?

My fondest memories include moments with my amazing classmates. We had such a cohesive class and were very close. One memory includes dressing up as roller derby girls with some classmates for Halloween and riding on roller skates through the streets of Madison. Some of us have kept in close touch, despite living in different states. I consider them some of my closest friends.

What are your hobbies/interests?

I enjoy spending time with my family, including my husband, Brian, and sons Spencer (4) and Alex (1). I also enjoy running, doing a Bootcamp, and going to the farmers' market. I often visit relatives in Wisconsin.

What SMPH faculty do you remember the most, and why?

I most remember Dean Patrick McBride. He was very involved with students and helped support me academically.

Message to your classmates?

I plan to attend the fall reunion. I hope as many classmates as possible are able to attend the reunion. I look forward to catching up and creating more memories.

Other news

My family and I met Hillary and Bill Clinton in Rockefeller Park the week after the November 2016 election. It was an inspiring moment for me politically. Our picture ended up on Saturday Night Live.

KYLE PAULY WOOD, MD '12

What type of practice are you in now, and where?

I am completing my general surgery residency in Grand Rapids, Michigan, through Grand Rapids Medical Education Partners.

What's your fondest memory of medical school?

The work was tough and often stressful, but it led to some of the best friendships I've had and to a happy marriage to my classmate, Dr. Joel Wood. I felt lucky to be a part of such a supportive, fun-loving class.

What are your hobbies/interests?

We love getting outdoors, hiking and kayaking with our dogs, and cooking big meals together. When my residency is over, I'm hoping to pick up a few more hobbies!

What SMPH faculty do you remember the most, and why?

I remember running to Dean Patrick McBride after my first genetics test, which did not go well, thinking my chance at being a physician was over. He said, "Five years from now you'll



John F. Pederson, MD '72



Mia Gintoff Cohen, MD '07



Kyle Pauly Wood, MD '12 (right)



Bob Zemple, MD '12

be laughing at this.” His unwavering support, humility and ability to give us a broad perspective during those years kept us going through the challenges. Also, Dr. Harting was always enthusiastic, compassionate, a great teacher and funny.

Message to your classmates?

I’m hoping to catch up with friends and spend some time at the Memorial Union Terrace. The reunions are great fun because you get to learn where everyone has landed and make good connections for the future while enjoying good food in Madison!

Other news

Joel completed an anesthesiology residency at University Hospital in Madison and is working as an anesthesiologist in Grand Rapids, Michigan, so we can live together while I complete my residency. We love our time together after living apart for three years. We adopted a little rescue mutt and love life with two dogs in the city.

BOB ZEMPLE, MD '12

What type of practice are you in now, and where?

I completed an emergency medicine residency at Virginia Tech-Carilion Clinic in Roanoke, Virginia. I also recently completed an emergency medical services (EMS) fellowship there, as well as a professional master of business administration degree at Virginia Tech. I am now working as an emergency room physician and

EMS physician with local agencies near Green Bay, Wisconsin.

What’s your fondest memory of medical school?

I’ll always remember our class banding together when there was a fire in the apartments that affected many fellow classmates; shaving Dean Patrick McBride’s head; stomping the Law School in the Dean’s Cup in 2009 after three consecutive years of losses; and our sense of pride and happiness on Match Day.

What are your hobbies/interests?

My hobbies are running (although still not as fast as Joel, Jason, Ben or Mark); flying, as a private pilot; hunting; exploring microbrews; and spending time with my wife, Sarah, and our four children: Bobby (5), Heidi (3), and twins Brent and Chad (2).

What SMPH faculty do you remember the most, and why?

Dean Patrick McBride, or “DMB.” I spent the most time with him of any faculty member. He was an advocate for our class in tough times and when we had concerns; he was always smiling and would lend an attentive ear; and he was a fantastic lecturer on the cardiovascular system.

Other news

I am helping the WMAA plan our five-year class reunion weekend during UW-Madison’s Homecoming. Also, I recently joined the WMAA board for a three-year term.

Message to your classmates?

It’s already been five years since we graduated! It’s time for us to come see our “whole family” again—the Class of 2012. We are the “best class ever.” Right, Dean Golden?

CLASS REPRESENTATIVES WHO ARE PLANNING REUNIONS

These classes will hold reunions on Friday and Saturday, October 20 and 21, 2017.

1972: John Pederson

1977: Charles Frinak

1982: Robert Lebel

1987: Matthew Solberg

1992: John Kryger

1997: Diane Bontke, Noelle Dowling, Peter Dull and Eric Jagar

2002: Anna Carley, Andrea DeMets, Allen Hayman and Teresa Sapida

2007: Mia Gintoff Cohen and David Sommerfeld

2012: Kyle Pauly Wood and Bob Zemple



There’s More Online!

Visit med.wisc.edu/51061 to see comments from:

- Robert Lebel, MD '82
- Eric Jagar, MD '97
- Andrea DeMets, MD '02
- David Sommerfeld, MD '07

WISCONSIN MEDICAL ALUMNI ASSOCIATION 2017-2021 Strategic Plan



The team dedicated to helping implement the strategic plan includes (left to right) Jill Watson, SMPH development director, Wisconsin Foundation and Alumni Association (WFAA); Karen Peterson, WMAA executive director; Patrick McBride, MD '80, MPH, WMAA past president; and Maureen Brady and Andrea Larson, WMAA staff. Since this photo, Jessica Gracon joined the team as an SMPH associate development director, WFAA.

MISSION:

To advance the mission of the University of Wisconsin School of Medicine and Public Health (SMPH) by fostering lasting relationships among the SMPH alumni, students and faculty.

VISION:

The Wisconsin Medical Alumni Association (WMAA) is a community that creates an exceptional environment for current students and fosters lifelong relationships connecting our alumni with each other, our students, our residents, the faculty, the school and the university.

STRATEGIC PRIORITIES:

The association's strategic priorities are organized into four categories:

- Participation
- Communications
- Career Development
- Funding

PARTICIPATION:

Increase the active engagement of all WMAA constituents (alumni, faculty, medical students, residents and donors) to encourage a life-long affinity with the WMAA.

Goals:

- Increase the percentage of alumni engaged in any WMAA activity by 25 percent.
- Increase WMAA's visibility with all SMPH medical students.
- Increase the active engagement of all SMPH medical students in WMAA activities.

COMMUNICATIONS:

Strengthen the effectiveness of all communications with WMAA constituents.

Goals:

- Continue to develop mechanisms to connect WMAA constituents with one another.
- Develop a strategy for using social media to strengthen communications.

CAREER DEVELOPMENT:

Enhance career development opportunities for medical students.

Goal:

- Ensure that every medical student will make a meaningful alumni connection.

FUNDING:

Increase WMAA endowments and SMPH scholarship funds to support WMAA programs and significant scholarships for students.

Goals:

- Foster a culture of philanthropy and giving back for current students and young alumni.
- Establish a goal for student scholarship funds.



Wisconsin Medical Alumni Association
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Alpha Omega Alpha

MEDICAL STUDENTS, SCHOOL LEADERS HONORED



Above: Fourth-year MD students: Front row (left to right): Lisa Sudmeier, Rachel Lenhart, Elizabeth Townsend, Jon Scholl, Kaitlin Peterson, SarahMaria Donohue, Syed Hussaini, Anthony Mikula. Middle row: Jordan Bruce, Kelsey Schmidt, Molly Peterson, Kathryn Ritter, Morgan Weber, Ashley Van Galen, Akaila Cabell, Kristin Zorn, Alexandra Wick, Kristin Magliocco. Back row: Brandon Bukowski, Kyle Geurink, David Staudt, Kristen McCabe, Rachell Ayers, Gregory Sovinski, James Bernatz. Not pictured: Andrew Beine, Teresa Caya, Elizabeth Maxwell, Abigail Navarro.

Top/right: Dean Robert Golden, MD, Robert Dempsey, MD.

Right: Front row (house staff): Juan Danobeitia, MD, PhD; Brittany Buhalog, MD '15; Yaoli Yang, MD; Mircea Cristescu, MD, MBA. Not pictured: Anna Meyer, MD. Back row (faculty): Terri Young, MD, MBA; Sanjay Asthana, MD; Pamela Kling, MD (PG '89); Azita Hamedani, MD, MPH, MBA; Andreas Friedl, MD.



TODD BROWN/MEDIA SOLUTIONS (3)

In March 2017, the Alpha Omega Alpha (AOA) Honor Society inducted fourth-year medical students and faculty leaders from the University of Wisconsin School of Medicine and Public Health (SMPH) and UW Health house staff (see names in captions). The AOA recognizes inductees for honesty, honorable conduct, morality, virtue, unselfishness, ethical ideals, dedication to serving others and leadership.

At the SMPH induction—hosted by the Wisconsin Medical Alumni Association—Dean Robert Golden, MD, introduced guest speaker Robert Dempsey, MD, the Manucher Javid Professor and Chair of the SMPH Department of Neurological Surgery and co-director of the UW Health Stroke Program.

“Dr. Dempsey has had an enormous impact in advancing the missions of his department, our school and our academic health system. His work demonstrates the remarkable synergies that can be created across research, education and clinical care activities,” Golden noted.

Dempsey also has trained students, residents and faculty at the SMPH and around the world and received myriad local, national and international honors.

In his talk, “Preserving What is Noble in Medicine,” Dempsey told students, “You are about to enter a noble profession against difficult odds and forces which are political, economic, ethical and professional. The stresses are very real. ... It may be easy to lose sight of why you went into medicine.”

He encouraged them to maintain balance in life and shared the pillars he uses to do so.

“One is my patients—the whole of this great profession that I stand for. The second is family, and the definition of family can be very different, but it always means a set of people who trust you and you trust them, who you can be honest with, and who will call you out if you are drifting from what you believe in. ... And the final pillar is faith. Faith also can be different for everyone, but it’s always a belief system of values that you measure your actions against. Because when you do that, you define yourself,” he said.

“I’ve seen you work and interact with people. You are capable of preserving what is noble, and I am inspired by you every day!”

Dean's Teaching and Research Mentorship Awards

TODD BROWN/MEDIA SOLUTIONS



Left to right: Dean Robert Golden, MD; Perry J. Pickhardt, MD; Eliot C. Williams, MD, PhD (PG '79); Ann P. O'Rourke, MD '02, MPH '06, FACS (PG '09); John W. Beasley, MD (PG '75); Will Aughenbaugh, MD '97 (PG '00).

The annual Dean's Teaching Awards and Dean's Award for Excellence in Medical Student Research Mentorship honor outstanding contributions by faculty members in University of Wisconsin School of Medicine and Public Health (SMPH) education and research programs, respectively.

SMPH Dean Robert Golden, MD, presented the awards during the school's 2017 Medical Education Day, noting, "These awards are very special. The recipients are selected by prior awardees. Recognition of excellence from one's peers is, indeed, a great honor."

He presented Dean's Teaching Awards to:

- **Will Aughenbaugh, MD '97 (PG '00)**, associate professor (CHS) and vice chair of education, Department of Dermatology; chief of dermatology, William S. Middleton Memorial Veterans Hospital
- **John W. Beasley, MD (PG '75)**, professor, Department of Family Medicine and Community Health
- **Ann P. O'Rourke, MD '02, MPH '06, FACS (PG '09)**, associate professor (CHS), Department of Surgery
- **Eliot C. Williams, MD, PhD (PG '79)**, professor, Department of Medicine; affiliate professor, Department of Pathology and Laboratory Medicine

Golden also presented the Dean's Award for Excellence in Medical Student Research Mentorship to:

- **Perry J. Pickhardt, MD**, Department of Radiology; chief of Gastrointestinal Imaging; member, UW Carbone Cancer Center

Aughenbaugh joined the Department of Dermatology faculty in 2001 and has served in multiple leadership roles across all levels of undergraduate and graduate medical education. From 2008 to 2016, he was the Integrated Dermatology course director. He redesigned that course using a "flipped classroom," which challenges students to problem solve and apply their knowledge to clinical scenarios early in their education.

A student said Aughenbaugh's course "Felt like it was one of my first experiences with the full clinical spectrum of diagnosing, treating and communicating with patients."

During the same timeframe, Aughenbaugh was the director of the Dermatology Clerkship, served on the Graduate Medical Education Oversight Committee and was the co-chair of the Grading Committee for the ForWard Curriculum.

Currently, Aughenbaugh is the Phase 3 curriculum director, chair of the Curriculum Content Subcommittee and program director of the Dermatology Residency Program.

Aughenbaugh earned his MD from the SMPH. He completed an internship at LDS Hospital in Salt Lake City and a dermatology residency at UW Health, including service as a chief resident.

He was inducted into the Phi Beta Kappa National Honor Society and has volunteered for several national and international medical and teaching missions.

Beasley joined the Department of Family Medicine and Community Health's faculty in 1975, and since 2007, he has been the medical director of the SMPH's Physician Assistant (PA) Program. Beasley and Program Director Virginia Snyder, PhD, PA-C, transitioned the PA Program from a baccalaureate to a master's degree in 2010 and designed its capstone requirement.

For more than 40 years, Beasley has been devoted to multiple educational endeavors, including directing the Family Medicine Clerkship; teaching in the Patient, Doctor and Society Course; and serving on committees such as the Education Policy Council, Student Promotion Committee

(which he chaired), Committee on Integrated Health Sciences Curriculum and Student Affairs, and the Curriculum Thread Development Committee.

In 1991, Beasley joined with James Damos, MD, former director of the department's Baraboo Rural Training Track, to create the Advanced Life Support in Obstetrics course. This course, now owned by the American Academy of Family Physicians (AAFP), is offered in 62 countries.

He also was the chair of the Wisconsin Medical Society's Council of Medical Education, and president and board chair of the Wisconsin Academy of Family Physicians.

He earned his MD from the University of Minnesota Medical School. Following service in the Peace Corps, he completed a family medicine residency at the SMPH.

Beasley's many honors include the AAFP's Thomas W. Johnson Award for Career Contributions to Family Medicine Education, the Wisconsin Academy of Family Physicians' inaugural Lifetime Achievement Award and the State of Wisconsin Primary Care Health Educator Award. Additionally, he was given the Fox Valley Family Medicine Residency Program's Outstanding Teacher Award and Class Mentor of the Year Award.

A resident wrote, "Dr. Beasley sets a beautiful example of knowing and caring for each of his patients. His patients talk about him as if he is a family member or dear friend. I strive to follow his leadership in compassion and humanistic care."

O'Rourke joined the Department of Surgery faculty in 2010. She has taken on numerous leadership roles in teaching, developing curriculum and creating new courses such as the "Surgery Boot Camp," Surgery Acting Internship, and Surgical and Procedural Care Block.

Applauding the way O'Rourke integrates public health into teaching, a student said, "After she had operated on an individual, by ruminating on the upstream factors that may have caused the patient to receive this operation, she considered ways to improve upon the systems that may have caused this patient's presentation and could influence future prevention of these traumas."

Currently, she is the director of medical student surgical education and the Surgery Clerkship, as well as the integrated block leader for the Phase 2 Surgical and Procedural Care Block of the ForWard Curriculum.

O'Rourke also serves locally and regionally as an instructor and director for the Advanced Trauma and Life Support Course.

She earned her MD and MPH degrees from the SMPH. She completed a general surgery residency at UW Health and a trauma and critical care fellowship at the University of Tennessee.

In recognition of her innovative teaching methods, O'Rourke received the 2015 Louis Bernhardt Resident Teaching Award. She also received a General Surgery Resident Teaching Award and UW Health Patient Experience Champion Award. Early in her career, she taught science in the Peace Corps in Tanzania.

Williams joined the Department of Medicine in 1980. For 38 years, he has dedicated himself to teaching undergraduate health professions students, medical students, residents and fellows.

His major contribution includes serving as director of the Integrated Hematology Course from 2009 to 2015. During this time, Williams revised the course materials and activities, resulting in significant improvements in evaluation ratings.

A student wrote, "Dr. Williams' in-depth explanations, openness to questions and obvious mastery of his specialty made for truly excellent small groups. He shared scientific bases for tests, symptoms and pathology, along with real-life clinical insights and advice."

He also directed the Hematology Fellowship for 19 years and mentored residents and fellows for three decades.

Williams has received numerous teaching awards in the Departments of Medicine and Pathology. He has been ranked consistently for two decades among the "Best Doctors in America" and "Best Doctors in Madison." Additionally, the American Heart Association honored Williams with its Clinician Scientist Award and Clinical Investigator Award.

He earned his PhD and MD degrees from Indiana University. He completed his internal medicine residency at UW Health.

Pickhardt joined the Department of Radiology faculty in 2003. With a particular interest in CT imaging, including CT colonography, quantitative biomarker imaging, oncologic imaging and opportunistic screening, his research is supported by grants from the National Institutes of Health, U.S. Department of Defense and other funding agencies. He has published more than 300 articles in peer-reviewed journals.

Pickhardt has mentored 14 students through the Shapiro Program, and many others through programs such as the Research Honors Program and ICTR-Shapiro Research Fellowship.

A current ICTR-Shapiro fellow wrote, "Dr. Pickhardt deeply cares about the success of his students and is always willing to go the extra mile for them. Under his guidance, I have been able to gradually develop my ability to independently design, carry out and publish high-quality clinical research. . . . It feels more like I am collaborating with someone than being told exactly what to do."

Pickhardt's collaborations with students have generated 35 articles in high-impact, peer-reviewed publications since 2010, with a student as the first author on many of them. His students have presented more than 30 scientific abstracts at national meetings.

He earned his medical degree from the University of Michigan Medical School. Before he joined the SMPH faculty, he completed a diagnostic radiology residency at the Mallinckrodt Institute of Radiology at Washington University School of Medicine and served as a radiologist in the U.S. Navy in Guantanamo Bay, Cuba, and Bethesda, Maryland.

Pickhardt has been active in many professional organizations and served on several academic committees, including the SMPH Student Research Committee. He has received numerous honors, including the Most Influential Radiologist Researcher Award by AuntMinnie.com and the Honored Educator Award from the Radiological Society of North America.

Bioethics Essay Contest

ETHICAL ISSUES IN TRANSGENDER-RELATED MEDICAL CARE

University of Wisconsin School of Medicine and Public Health (SMPH) student Sarvesh Periyasamy (right) received first place for his submission to the third-annual Dr. Norman Fost Award for the Best Medical Student Bioethics Essay. His essay explored the theme of the April 2017, ninth annual Bioethics Symposium, "Queering Bioethics: Ethical Issues in LGBTQ Health Care," sponsored by the SMPH and its Department of Medical History and Bioethics.

Essays followed criteria in reaction to a stated scenario. This essay was edited for length; the unedited essay, including endnotes and bibliographic references, as well as the full prompt, are available at med.wisc.edu/51032.



THE MATURE MINOR DOCTRINE:

A Perspective For Transgender Medicine

Over the latter part of the 20th century, a litany of cases have helped establish the "mature minor doctrine," a description of legal policy that "recognizes that children younger than 18 years who show maturity and competence deserve a voice in determining their course of medical treatment." Although few states have established explicit statutes recognizing this doctrine, it is a growing trend. A 2016 Minnesota statute addressing this topic became the center of attention when a 17-year-old transgender girl, living on her own, was given hormone replacement therapy and subsequently sued by her non-consenting mother. The passing of the original statute was not met with fanfare; this case, however, was met with scrutiny and publicization in the media. This begs a discussion on why transgender medicine suffers from undue controversy and why the mature minor doctrine is particularly important to transgender adolescents.

Whilst being transgender alone does not necessitate medical therapy, intervention is typically preceded by a diagnosis of gender dysphoria. Patients with gender dysphoria experience persistent, significant distress related to the conflict between their identified and assigned gender. With no known etiology, and little pathologic understanding, the hesitation that many providers have when approaching transgender medicine is understandable. This hesitation, however, should not preclude gender dysphoria from the same urgency that other psychiatric illnesses demand in adolescents. Transgender youth suffer from disparate mental health outcomes, and addressing their health concerns at an

early age is important. With some research indicating that transgender youth identify as early as age 10, the mature minor doctrine can help address the medical concerns of mature transgender minors who have suffered dysphoria to significant hardship throughout their adolescence.

Addressing that hardship often involves hormone replacement therapy or sex reassignment surgery. These therapies are often criticized because they confer irreversible, physical changes to the patient. Permanent. Unchangeable. These terms can invoke worry, especially when it involves youth. It must be recognized, however, that irreversible therapies are not unique to transgender medicine. In the same way that a child with congenital limb deficiency may opt for amputation, or a teenage girl may request a breast reduction for chronic back pain, transgender therapy addresses an important health concern of the patient. Hormone replacement therapy shows a statistically significant improvement in quality of life for transgender individuals; to withhold that from mature, emancipated minors based on a fear of irreversibility is medical discrimination. The controversy may stem from the fact that outcomes of transgender-related services lack a tangibility that make it difficult to compare to other services. A blood pressure reduction can be easily measured. A reduction in anxiety and an improvement in happiness? Not so much. But as bariatric surgery patients have demonstrated in the past, the psychosocial benefits of intensive therapies can be just as important as the physical ones.

Transgender medicine may suffer from unwarranted attention because of social determinants. Surveys targeting discrimination against transgender individuals report many feeling rejected by family and coworkers, some victimized by violence. Despite public opinion about transgender rights trending upward over the last decade, it must be acknowledged that the particular backlash against transgender-related care for minors may be a symptom of a societal attitude. Although a physician must be cognizant, and sometimes even sympathetic, to social climate, it should never impede the ability to practice evidenced-based, patient-centric care.

Adolescents, transgender individuals in particular, require policy in the vein of the mature minor doctrine to make decisions about their care at times when it is most critical. With the human brain undergoing cortical changes up to age 30, it is clear that arbitrary measures of maturity, like age of adulthood, do not serve patients faithfully. Empowering transgender minors who demonstrate financial, legal and personal independence to control their medical services can be an opportunity to improve care in a population that often feels marginalized by their providers. Strengthening patient-clinician relationships has been shown to improve health care outcomes across the board; treating transgender-related services like any other medical service for minors will only improve trust between transgender patients and providers. Of course, appropriate consideration for contraindications and adverse effects should be taken, but it should be taken with the same reverence that it is for all other medicine; not more so, and certainly not less so. Supporting mature minor doctrines throughout the United States may be a good first step in achieving equitable, effective and autonomous care for transgender youth.

CRITERIA FOR THE ESSAY CONTEST

Using one or more of the following ethical questions, explain a major ethical issue concerning the provision of transgender-related medical care and defend a relevant ethical conclusion regarding that issue:

Doctors can now provide an array of medical services to help transgender people have their bodies better match their desired gender presentation. Services include hormone blockers, hormone replacement therapy, gonadectomy, genital and breast reconstruction, voice therapy and plastic surgery. Although professional guidelines on transgender-related medical care have been published, ethical disagreements remain.

- **Minors:** *Currently accepted guidelines issued by the World Professional Association for Transgender Health (WPATH) recommend that, because feminizing and masculinizing hormone therapies may lead to irreversible physical changes, they should only be provided to people legally able to give informed consent. But parents are ethically allowed to consent on behalf of their minor children for other medical services that result in irreversible physical changes when they reasonably think those services will best promote the children's interests. Similarly, it can be ethical for a surrogate decision-maker to authorize, on behalf of an incompetent patient, medical treatment that is in the interest of the patient even if it leads to irreversible physical changes.*
- **Youth with Legal Decision-Making Authority:** *Minnesota law allows minors to give legally effective consent to medical services if they live apart from their parents and support themselves financially. Controversy arose when news outlets reported in November 2016 that a Minnesota health care clinic provided, without parental consent or notification, hormone replacement therapy to such a minor. Had the 17-year-old transgender girl not been seeking transgender-related medical care, it seems unlikely that the situation would have made the papers.*
- **Mental Health Screening and Waiting Periods for Adults:** *Guidelines also recommend restrictions on providing some transgender-related medical services to adults. They recommend that feminizing and masculinizing hormone therapies and body-modification surgery be provided only after the patient has received mental health screening by a mental health professional, and state that genital surgery should be available only after the patient has lived continuously for at least 12 months in the gender role congruent with their gender identity. Other interventions that modify the body do not require mental health screening or a waiting period.*

Are there, or are there not, ethically relevant differences between transgender-related services and other similar medical services? If so, what are those differences, why are they ethically relevant, and what are their ethical implications for transgender-related medical care? If not, what ethical implications does that have for the kinds of policies and attitudes at issue?

The Seesaw Effect

TWO PEDIATRICIANS
SHARE NON-TRADITIONAL
PATHS TO SUCCESS



Medical school classmates Gail Allen, MD '91 (PG '98) (left), and Elizabeth Neary, MD '91 (PG '97), shared a pediatrics residency to be able to maintain work-life balance, which Neary describes as "more like a seesaw effect."

by Andrea Schmick

In 1996, *Quarterly* magazine profiled two University of Wisconsin School of Medicine and Public Health (SMPH) alumni who, in their quests to balance career and family, took an unconventional step: they shared a pediatrics residency at UW Children's Hospital (now called the American Family Children's Hospital).

This was a unique, new arrangement that took considerable planning and lots of give and take to make work. But work it did.

Today, Elizabeth Neary, MD '91 (PG '97), and Gail Allen, MD '91 (PG '98), each have two children (and for Neary, three grandchildren) and have cultivated successful careers as primary care pediatricians, educators, advocates and leaders.

Looking back, they realize that work-life balance is "more like a seesaw effect"—a term Neary coined many years ago.

Flexing Work Schedules and Family Lives

Throughout residency, Neary and Allen followed a "month on/month off" schedule that gave them time with their children while ensuring that they covered their professional responsibilities. The split schedule doubled their residency from three years to six for each of them, but it allowed flexibility that proved crucial in both of their lives.

Neary recalls how Allen would share call when Neary's husband's job took him out of state. And when Allen needed to take medical leaves due to a complicated pregnancy and an unexpected injury, Neary stepped in.

Both emphasize that their husbands' support was essential. Neary's husband, William Bula, an architect with Flad Architects, scheduled work-related travel during her "off" months whenever possible, and he was the primary caretaker for their children during her "on" months. Allen's husband, Jeff Hoerning, PhD—who was completing his doctorate degree in mechanical engineering at the time of his wife's residency—extended his time in graduate school to accommodate family needs.

"It was critical for us to be flexible in our busy-ness," reflects Allen. "You don't just need time, you need flexibility."

Neary: Shifting Focus to Teaching and Advocacy

After completing her residency in November 1997, Neary began practicing at Associated Physicians, LLP, an independent clinic in Madison.

In addition to the relationships she cultivated with families, she found rewards in teaching medical students, nursing students and residents—often reviewing interesting cases with learners during breaks.

But over time, she began to realize that some of the health problems she saw in the clinic were symptoms of bigger issues. She developed a strong interest in public health, and in 2012, left her practice of 15 years to focus on volunteer teaching and advocacy.

Now, Neary teaches in several SMPH courses and serves as an informal mentor for SMPH students and pediatrics residents. She is on the steering committee of the Wisconsin Environmental Health Network, which hosts an annual conference at the Health Sciences Learning Center. She is the chair of education for Second Harvest Food Bank's Hunger Care Coalition, an effort to encourage physicians to screen patients for food insecurity. She also serves as a grant reviewer for the SMPH's Wisconsin Partnership Program.

In addition, in 2017 on behalf of the SMPH and UW Health, Neary twice provided expert testimony to the Wisconsin State Legislature on the health effects of lead, a topic she speaks about frequently.

"When you get older in life, you often have opportunities to help the next generation—whether it's students, your family or community members," she says. "That's what I want to do at this point, and I want to use my voice to advocate for others."

Allen: Improving Clinical Quality and Community Health

In May 1998—six months after Neary completed her residency—Allen graduated from her residency and joined the SMPH Department of Pediatrics as a clinical assistant professor, practicing at the UW Health Middleton and then West Towne Pediatric and Adolescent Medicine Clinics.

Now a clinical associate professor and vice chair of her department's Division of General Pediatrics and Adolescent Medicine,



Gail Allen, MD '91 (PG '98), and Elizabeth Neary, MD '91 (PG '97), were featured in the winter 1996 *Quarterly* magazine (see med.wisc.edu/51033).

she's responsible for 37 faculty members who provide primary care for more than 55,000 children at eight UW Health clinics.

She also collaborates closely with leaders in family medicine and general internal medicine to redesign primary care delivery throughout the organization. Much of that work is focused on systems and quality improvement (QI)—a good fit for someone who earned a bachelor's degree in industrial engineering before entering medicine.

For example, Allen has been part of a UW Health QI project aimed at improving care for children with asthma. It entailed creating a registry of all UW Health general pediatric patients age 4 and above who have asthma, establishing workflows to increase the use of asthma control testing and asthma action plans, and training nurses to educate patients and families about the disease. As a result, asthma-related emergency department visits have decreased 36 percent over the past two years in children who have medical homes with UW Health primary care pediatricians.

Allen shares Neary's passion for bettering the health of children in the community, particularly those who live in poverty.

She and Neary both served as members of the Dane County Delegation to Increase Economic Stability for Young Families, an initiative convened by the United Way and led

—Continued on page 36

RAYMOND NAMED ASSOCIATE DEAN FOR FACULTY AFFAIRS AND DEVELOPMENT

Nancy Raymond, MD, is the University of Wisconsin School of Medicine and Public Health's (SMPH) new associate dean for faculty affairs and development and a professor in the school's Department of Psychiatry.



Her job will be to provide leadership, vision and oversight for programs aimed at faculty development, recruitment, satisfaction, retention and mission-aligned growth. She is responsible for developing, implementing and assessing faculty development programs that will allow individuals to develop to their fullest potential while meeting SMPH goals. In addition, she will be managing faculty awards. She fully supports the SMPH mission of providing each faculty member with quality professional development opportunities within a respectful environment that promotes personal wellness, enrichment and professional development.

Raymond has extensive experience mentoring students and junior faculty members, notes Elizabeth Petty, MD '86, the SMPH senior associate dean for academic affairs. From 1991 to 2017, Raymond was a faculty member in the University of Minnesota's (UMN) Medical School's Department of Psychiatry. She served as that school's associate dean of faculty affairs for three years. Additionally, she collaborated with faculty in the UMN School of Public Health through her leadership of the Center for Women's Health and as the principal investigator of a Building Interdisciplinary Careers in Women's Health K12 training grant.

SCERPELLA RECEIVES WOMAN IN SCIENCE AWARD

One of few female tenured professors of orthopedic surgery in the United States, Tamara A. Scerpella, MD (PG '90), earned the 2017 Woman in Science Award from the American Medical Women's Association (AMWA).



This award is presented to a woman scientist who has made exceptional contributions to medical science through basic research, publications and leadership in the field.

Scerpella is the Ballantine Endowed Professor of Orthopedic Research at the University of Wisconsin School of Medicine and Public Health, chief of the Division of Sports Medicine, vice chair of the Department of Orthopedics and Rehabilitation and team physician for the UW Badgers.

"For the past 20 years, Dr. Scerpella has concentrated her research efforts on understanding the role of physical activity in the development of bone mass, density, geometry and strength during childhood and adolescence," says Theresa Rohr-Kirchgraber, MD, AMWA's past president. "Dr. Scerpella's influence reaches much beyond her local sphere. Her ability to informally mentor students and residents regionally and nationally is exceptional."

Scerpella's observational and interventional trials have resulted in more than 24 peer-reviewed publications and 50 national and international presentations. She has mentored more than 50 orthopedic surgery residents, medical students and undergraduates.

TEAM TREATS FIRST PARTICIPANT WITH STEM-CELL THERAPY FOR HEART FAILURE

A University of Wisconsin School of Medicine and Public Health (SMPH) team recently treated its first patient in an innovative clinical trial using



stem cells for the treatment of heart failure that develops after a heart attack. The trial is taking place at University Hospital, one of three sites nationwide currently enrolling participants.

The patient experience with the investigational CardiAMP therapy begins with cell-potency screening. Those who qualify are scheduled for aspiration of bone marrow, which is then processed on-site and delivered directly to the point of cardiac injury in a minimally invasive procedure. It aims to stimulate the natural healing response.

The primary outcome to be measured is the change in distance during a six-minute walk 12 months after the baseline measurement.

"By being at the forefront of research for this debilitating condition, we look forward to studying the potential of this cell therapy to impact a patient's exercise capacity and quality of life," says UW Health cardiologist Amish Raval, MD (pictured above), associate professor of medicine and a co-principal investigator for the trial.

The CardiAMP Heart Failure Trial is a Phase III study of up to 260 patients at up to 40 centers nationwide. It is funded by Biocardia, Inc., which developed the potential therapy.

JOHNSON AWARDED GRANT FOR MYHEART STUDY

Heather Johnson, MD '02, MS '11 (PG '05, '10), has been awarded \$3.5 million over five years (R01) from the National Institutes of Health



National Heart, Lung and Blood Institute for her proposal entitled, "The MyHEART Study: A Young Adult Hypertension Self-Management Randomized Controlled Trial." In the study—in which MyHEART stands for My Hypertension Education And Reaching Target—Johnson and collaborators will conduct a randomized controlled trial in two large health care systems in Madison and Milwaukee to evaluate the impact of the MyHeart Program on high blood pressure in geographically and racially/ethnically diverse young adults.

An associate professor in the University of Wisconsin School of Medicine and Public Health's Department of Medicine, Johnson specializes in cardiovascular medicine. She notes that young adults with hypertension are less likely to achieve hypertension control compared to other age groups. Her MyHEART Program is an intervention that aims to help young adults live healthier lives, lower their blood pressure and prevent heart disease.

In addition, as part of this program, Johnson is disseminating an online toolkit for use by health care providers, community organizations and health care systems. The toolkit explains the MyHeart web site and provides customizable brochures and social media communication drafts.

RESEARCH HELPS TARGET DIABETES OUTREACH NATIONALLY

The idea that where you live has a major impact on your health continues to gain traction in public health. In keeping with that idea,



the Centers for Medicare and Medicaid Services (CMS) is employing a novel tool to target disparities in diabetes care.

Two years ago, Amy Kind, MD '01, PhD '11, associate professor of medicine at the University of Wisconsin School of Medicine and Public Health (SMPH), and her team published findings showing seniors from highly disadvantaged neighborhoods are more likely to be readmitted to the hospital than those from less disadvantaged neighborhoods. In that work, the team used U.S. Census data to update the Area Deprivation Index (ADI), a measure of neighborhood socioeconomic disadvantage; they then linked this index with Medicare claims and other data. As part of a study funded by the National Institutes of Health on Minority Health and Health Disparities, Kind's team now has updated these metrics for every U.S. neighborhood.

The CMS will use the ADI to target diabetes education for seniors in the most disadvantaged areas, including neighborhoods and communities that had not been identified for inclusion before. The Everyone with Diabetes Counts Program provides diabetes self-management education to medically underserved seniors.

CRYNS, ANDERSON AWARDED GRANT FOR BREAST CANCER STUDY



Two University of Wisconsin School of Medicine and Public Health (SMPH) researchers— Richard Anderson, PhD (left), and Vincent Cryns, MD (right)—have been awarded \$1.5 million over three years from the U.S. Department of Defense (DoD) Office of the Congressionally Directed Medical Research Programs. The grant is for their project titled "Targeting a Novel Lipid Kinase Complex that Regulates Mutant p53 Stability in Triple-Negative Breast Cancer."

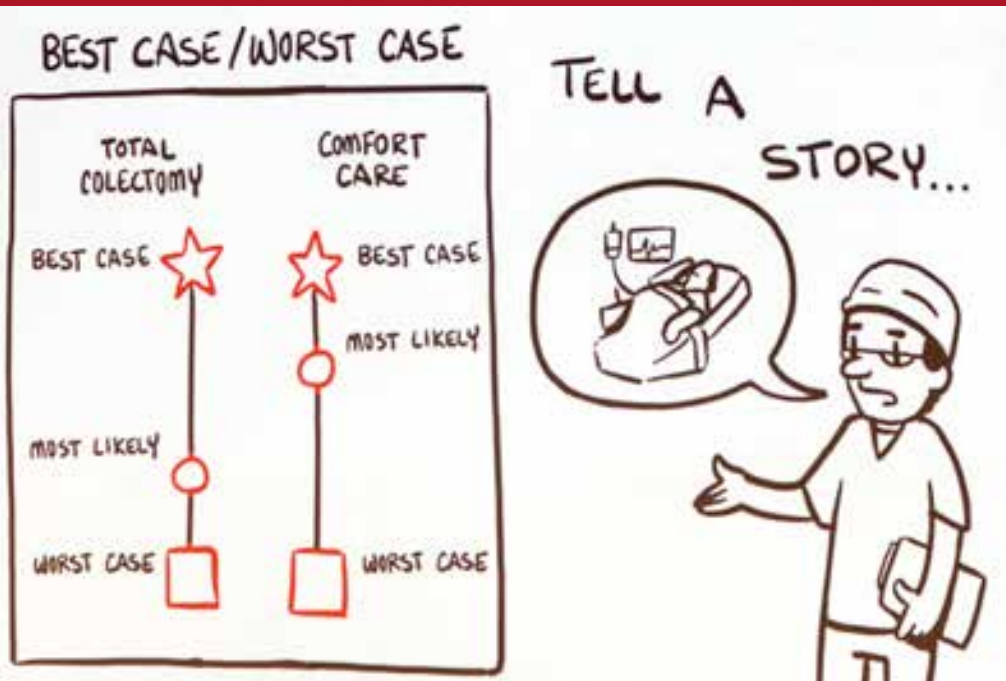
Cryns is a professor in the SMPH Department of Medicine, the Marian A. and Rodney P. Burgenske Chair in Diabetes Research, and chief of the department's Division of Endocrinology, Diabetes and Metabolism.

Anderson is a Kellett and University Professor at the SMPH.

Funding for their study was granted through the DoD's Breast Cancer Research Program Breakthrough Award (Funding Level 2).

"We have discovered a new molecular complex that stabilizes mutant p53, one of the most common mutations in cancer that promotes aggressive tumor growth," Cryns noted. "Potentially more important, we identified a drug that disrupts this complex, destroys mutant p53 and selectively kills tumor cells. Our studies may open up new ways to treat these aggressive tumors."

Mini Med School: TOOLS TO IMPROVE PHYSICIAN-PATIENT COMMUNICATION



Clockwise from left: This tool helps physicians describe to patients and families the potential outcomes of two medical scenarios. Toby Campbell, MD, MSci (PG '04) (left), and actors demonstrated how physician-patient conversations may go. Left to right: Margaret "Gretchen" Schwarze, MD, Campbell, and William Ehlenbach, MD '02, MS (PG '05), fielded questions.

by Robyn M. Perrin, PhD

Clear communication between health care providers, patients and families is perhaps more important today than at any time in history. But in many ways, communication has never been more complicated. As innovations in medical technology have expanded the universe of what can be done for critically ill patients, health care providers often find that the same pace of progress has not occurred in medical communication techniques.

To better guide decisions about what should be done for care to be consistent with patients' values, faculty members and colleagues at UW Health and the UW School of Medicine and Public Health are developing new techniques—and implementing them across the nation.

"Today's doctors know that communication is a skill," said Toby Campbell, MD, MSci (PG '04), associate professor (CHS), Hematology, Medical Oncology and Palliative Care, and the Ellen and Peter O. Johnson Chair in Palliative Care.

Campbell served as master of ceremonies, addressing hundreds of attendees at the June 2017 Mini Med School event. Richard Page, MD, George R. and Elaine Love Professor and chair, Department of Medicine, and Laurel Rice, MD, chair, Department of Obstetrics and Gynecology, serve as the "mini-deans" for Mini Med School.

"Communication is the most important procedure we do in the intensive care unit (ICU)," noted William Ehlenbach, MD '02, MS (PG '05), assistant professor in the Department of Medicine's Division of Allergy, Pulmonary and Critical Care Medicine, adding that technological innovation since the 1960s

mean that the percentage of patients with critical illness who die in the hospital has declined, but many who survive end up dying in the weeks and months that follow.

Even in the absence of imminent death, ICU stays for critical illnesses can cause new health challenges. Studies show that survivors of critical illness are at risk of cognitive impairment equivalent to mild Alzheimer's disease or moderate traumatic brain injury. They also are at risk of being unable to perform activities of daily living and to have depression, anxiety and post-traumatic stress disorder. It's hard on family members, too: after caring for a loved one with a critical illness, they have a 30 percent higher risk of psychological symptoms.

"As a critical care expert, I can tell you the likelihood of surviving, and I can give you some information about what that survival might look like, but I don't know how that

fits into your values or your preferences,” said Ehlenbach, adding that’s where communication comes in.

Making Time for Difficult Conversations

Given the minute-by-minute crises that arise in the ICU, what steps can clinical care teams take to make sure communication isn’t inadvertently pushed out of the way? Ehlenbach and colleagues studied a relatively simple intervention: relocating an experienced palliative care nurse to the ICU who could be with the critical care team when they discussed any patient who was at high risk of dying.

“This nurse didn’t meet with families or patients. She was like our conscience, and her presence alone was associated with significant improvement in communication,” he said.

By prioritizing communication with families, conversations about end-of-life care were moved to earlier stages. This didn’t lead to an increased death rate, explained Ehlenbach, but rather allowed decisions to be personalized to each patient’s values by providing space for palliative care discussions. The approach was so successful that the critical care team at University Hospital now includes two full-time RN facilitators who meet with patients and families early in the ICU stay and enable discussions between providers and families during the duration of their care in the unit.

Best Case/Worst Case: Harnessing the Power of Scenario Planning

Margaret “Gretchen” Schwarze, MD, associate professor, Departments of Surgery and of Medical History and Bioethics, described a communications strategy that she co-developed with Campbell. The duo is training surgeons and other health care professionals involved in high-stakes decision making using a technique they call “Best Case/Worst Case.” (See page 38 for information about a recent study about this technique.)

“This method uses a graphic aid—the surgeon draws a diagram—which

is accompanied by a description about how patients might experience different treatments,” said Schwarze.

For example, when talking with a very ill patient or family member about whether to proceed with a high-stakes operation, the physician draws one line representing surgical treatment and then tells a story about the best-case outcome (e.g., survival but complete dependence on skilled nursing care in a long-term care facility) and worst-case outcome (e.g., after surgery the patient has multiple complications in the ICU and dies a few weeks later). The surgeon then places a mark on the line indicating where he or she thinks the patient’s most likely outcome would be. A second line represents a non-surgical, comfort-focused approach, with best, worst and most likely outcomes also conveyed through storytelling.

During Mini Med School, Campbell demonstrated the “Best Case/Worst Case” technique in real time with actors playing the roles of a wife and a sister of a gravely ill, septic patient with cancer in the ICU.

“Our approach is to get really close to the challenges that the family faces,” said Campbell, whose team has analyzed hundreds of doctor-patient conversations that lung cancer patients have given permission to study.

By identifying patterns of unspoken collusion to avoid discussions about prognosis, for example, Campbell hopes to identify pragmatic steps that providers can take to improve communication.

“We’re thinking about little ways that we could incrementally make the conversations better,” he said, explaining that there are many small steps, multiplied by thousands of physicians trained through programs—such as WeTalk, a simulation-based training workshop for physicians—he and colleagues have created.

Teaching Empathy by Exploring the Emotions of Experience

Empathy can be taught, believes Amy Zelenski, PhD, assistant professor (CHS), Division of General Internal Medicine. And

while the field of medicine tends to attract highly empathetic personalities, for many physicians, the rigors of training and the pain of living through one’s own emotional reactions to patients’ experiences can lead to emotional scars and a decrease in empathetic behavior.

“Part of what I’m trying to do is prevent this,” said Zelenski, who holds a doctorate degree in education and has a background in theater.

Zelenski quoted Henry David Thoreau, who wrote, “Could a greater miracle take place than for us to look through another’s eyes for an instant?” and added, “Thankfully, we have professionals who have been doing this for centuries: actors and theater professionals.”

Using theatrical improvisational techniques, Zelenski trains health care professionals in skills such as close listening, attention to body language, mirroring of expression and spontaneity of communication.

“Improv teaches you how to be authentic, how to listen closely to another person and how to respond,” she said, noting that these are the same skills that can lead to improved patient-physician communication.

With care, time and attention, medical communications experts at UW-Madison believe health care providers can use new ways of approaching tough conversations that lead to reduced distress and to care that aligns with values that are most dear to each patient. Together, they are working toward a world where words themselves can play a role in the healing process.



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to view archived sessions
of Mini Med School



Zorba Paster, MD (left), greets the Dalai Lama; Paster first invited the Delek Hospital team to the UW Global Health Institute's Quality Improvement Institute, where they developed a TB project that attracted the Dalai Lama's support.

Goal: Zero TB in Tibetan Kids

COLLABORATION WITH TIBETAN HOSPITAL BRINGS TOGETHER PHYSICIANS, STUDENTS

by Catherine Goslin

The project began in 2015 in a University of Wisconsin-Madison classroom. Zorba Paster, MD, invited Tibetan health leaders from Dharamshala, India, to participate in the UW-Madison Global Health Institute's week-long Quality Improvement (QI) Leadership Institute. Their goal? To wipe out tuberculosis (TB) in Tibetan schools and monasteries, where the infection rate is six times higher than the global average. The effort will make a difference in their community and show that death and illness due to TB can be eliminated.

Fast forward two years. The Dalai Lama meets with the TB team led by Dawa Phunkyi, CEO of Delek Hospital, Paster and

colleagues Kunchok Dorjee, MD, PhD, and Dick Chaisson, MD, from Johns Hopkins Bloomberg School of Public Health. They explain the TB dilemma, and the Dalai Lama agrees to record a public service message in Tibetan to underline the threat of the disease. He urges civil, government, school and religious leaders to work together on a new project, Zero TB in Tibetan Kids: Training to End TB Now.

TB in Dharamshala

Health professionals and community members have worked for decades to eradicate TB in Dharamshala.

"TB used to be mostly in the adult population, but within the past five or six years, we have been seeing it more in students," Delek pediatrician Sonam

Topgyal, MBBS, says. "We're trying to bring the number of cases to zero."

The QI Institute, hosted annually by the UW-Madison Global Health Institute (GHI), gave Delek a path forward, as the team in 2015 launched a highly successful active-case-tuberculosis-finding program targeting schoolchildren. That QI-inspired program—aiming to reduce TB among students by 10 percent in 12 months—led to the Zero TB in Tibetan Kids Initiative.

"The Dalai Lama's interest is a direct result of the fact that the Delek group came here, decided to look at TB and did so as part of their QI project," says Paster, a Madison physician, clinical adjunct professor of family medicine and community health at the University of Wisconsin School of Medicine and Public Health (SMPH) and radio

personality who has a long history of working with Tibetans. “He didn’t know how many Tibetan children had TB.”

When Paster, Topgyal and others explained the Zero TB project during an audience with the Dalai Lama, he wanted to participate by recording a series of public service announcements to support it.

A Community of Tibetan Refugees

After China’s invasion of Tibet in 1959, more than 80,000 Tibetans fled to India. Many settled in Dharamshala—a city that has become the epicenter of Tibetan life and home to the Dalai Lama and the Tibetan Central Government.

These Tibetans are among the most stable refugee populations, yet they have long been plagued with the highest incidence of tuberculosis in the world. For 40 years, they have turned to Delek Hospital for help. The 45-bed, not-for-profit hospital has a dedicated clinic and isolation ward for TB patients, and it is the primary hospital for refugees with complicated TB cases.

Delek teams participated in the QI Institute in 2015 and 2016 to further improve care. The institute—which has trained more than 100 health care providers from 14 countries—brings together health care practitioners from around the world with the UW community for a week of lectures and workshops on the fundamentals of strengthening health care systems through measurable steps. The Tibetan staff applied what they learned in 2015 as soon as they returned home. Seeing the effectiveness of the effort, Phunkyi returned to the 2016 summer institute with additional staff, including Topgyal and nurses from Delek Hospital.

“The ideas of quality improvement should be known by staff of all levels, so that’s why we have a doctor as well as nurses here,” Phunkyi said during the institute.

Quality Improvement at Work

Topgyal, who joined Delek Hospital in 2015, became heavily involved in the team’s QI projects, surveying schoolchildren for TB through a series of screenings, as well as physical exams and laboratory testing.



Delek Hospital CEO Dawa Phunkyi, left, joined colleagues from UW-Madison and Johns Hopkins Bloomberg School of Public Health, to meet with the Dalai Lama, who agreed to record a public service announcement supporting Zero TB in Tibetan Kids.

The screenings showed an alarmingly high prevalence of the disease when 17 of the 535 schoolchildren tested positive.

The QI experience helped the team tackle a wide range of factors contributing to the high number of infections, including poor access to TB clinics, infrequent screening and the stigma of the disease.

“We have used the tools we learned (in Madison) to implement new projects; we have learned to specify aims and objectives, set a goal and analyze situations to make the best possible decisions,” Phunkyi says.

Once they identified active cases, the team needed human resources, especially to collect and analyze data. That’s where SMPH medical student Aref Senno came in.

Senno had heard of Delek’s QI projects. Having studied TB and the epidemiology of infectious diseases, he was particularly intrigued that the patients were refugees. Arriving in Dharamshala in summer 2016, he worked with the Delek team to develop a data processing system that radically simplified day-to-day operations at the hospital.

“All the credit goes to them; the development, the organization, the funding,” Senno says. “They’re just a hospital; they don’t have to go out into the public to screen people for TB: But they do, they go.”

Lasting Impacts

The combination of Delek’s highly skilled team, the pillars of QI learned at UW-Madison and Senno’s work have helped reduce TB among Dharamshala’s children and given Delek a strong foundation for the future.

“QI has played a huge role in the organization, particularly in narrowing down and measuring progress,” Paster says in regard to how QI has impacted the hospital. “QI provides the concept of the infrastructure so you can see that you can actually perform a project and finish it successfully.”

Collaboration like the one that has developed between UW-Madison, Johns Hopkins and Delek Hospital leads to successful programs with scalable potential, says GHI Associate Director Lori DiPrete Brown, MSPH, who leads the QI program.

“When the local team has a network of partners that are investing in their professional development and supporting implementation, everyone wins,” she notes. “We have created a foundation for an ongoing partnership, and our health sciences students, residents, infectious disease experts and fellows are all ready to advise and collaborate as needed.”

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SMPH Joins National Partnership

The University of Wisconsin School of Medicine and Public Health (SMPH) is a founding member of a new national collaborative aimed at transforming medical education across the continuum from pre-medical school to physician practice. The National Transformation Network—launched in June 2017—is part of the new Robert D. and Patricia E. Kern Institute for the Transformation of Medical Education.

The Medical College of Wisconsin (MCW) leads the Kern Institute. Other founding partner schools include the Geisel School of Medicine at Dartmouth, Mayo Clinic

School of Medicine, University of California-San Francisco School of Medicine, University of Texas at Austin Dell Medical School and Vanderbilt University School of Medicine.

The Triple Aim for Health Care (enhancing patient experience, improving population health and reducing cost) is widely accepted as the key to optimizing health system performance and reducing the burden of suffering from illness and disease. The Kern Institute will drive a national movement by proposing a Triple Aim for Medical Education: character, competence and caring. These elements of physician development are

critical to partnering with patients, families and communities for compassionate, evidence-based care, delivered with integrity.

“We are excited about accelerating needed transformation of medical education through this partnership by defining and addressing a new Triple Aim for Medical Education,” says Elizabeth Petty, MD '86, senior associate dean for academic affairs at the SMPH. “We deeply appreciate the Kern Family and Kern Family Foundation's generosity and strategic commitment to advancing innovation in medical education.”

For details, visit mcw.edu/kerninstitute.

ALUMNI PROFILE *Continued from page 29*



Gail Allen, MD '91 (PG '98) (left), and her family today.

by UW-Madison Chancellor Rebecca Blank and former Madison Police Chief Noble Wray.

Allen has a strong interest in models of care coordination that identify needy families in the community and connect them with existing health and social services.

“My job is to support doctors and clinic personnel in delivering the best care they can,” she says. “But what gets me out of bed in the morning is how I might use my skills and leadership role to improve the lives of the youngest, neediest children.”

Forging Paths for the Next Generation

Nearly 20 years after completing residency, Neary and Allen are focusing their work on what's important to them at this

stage of life. Their children, now grown, were their focus when their lives first intersected and, in many ways, follow in their footsteps.

Neary's first daughter, Claire Bula, is the marketing director for an accelerator for technology and life sciences start-up companies. She and her husband, Kevin Keenan, a sales executive in e-commerce, live in San Diego. Neary's second daughter, Christine Williams, is a research associate in the Department of Pediatrics at the University of California, San Diego; she and her husband, Brian Williams, MD '09—a medical-pediatrics hospitalist at UC San Diego and Rady Children's Hospital—welcomed their third child in May.

Allen's children, Steven and Elizabeth Hoerning, both studied engineering like their parents. Steven double-majored in industrial engineering and mathematics at UW-Madison and studied predictive analytics at the Stanford Graduate School of Business, where he earned a master's degree; he plans to start his own business. Elizabeth's undergraduate degree, also from UW-Madison, is in civil and environmental engineering. In fall 2017, she'll enter the Master's in Public Health Program at the

University of Illinois at Chicago School of Public Health.

Looking back, Allen and Neary are grateful to the Department of Pediatrics and American Family Children's Hospital for supporting their nontraditional routes to career and family. They agree that although there is no true work-life balance, success is possible.

“I hope Beth and I are examples of people who have stepped off the traditional track and become leaders in our own ways,” says Allen. “If you're diligent and you have good ideas, you can get where you want to go. But you might have to make your own plan.”



Elizabeth Neary, MD '91 (PG '97) (right), and her family today.



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healthy, diverse gut environment in which MDROs are less likely to grow.”

Despite the logical connection, Safdar and Sethi say WARRIOR explores uncharted territory because the relationship between diet and the microbiome has not been studied in a community-based setting.

When stool samples arrive in Safdar’s lab, which has to happen within 48 hours from collection—or, as Sethi quips, “before the samples hit the fan”—Megan Duster and her team divide them into several portions, most of which are frozen. One fresh sample is added to a substance that promotes the growth of multiple disease-causing germs. Negative stool cultures grow no bacteria of interest for this study. On positive cultures, researchers run additional tests to identify the bugs and test their reaction to common antibiotics.

Next, investigators classify stool samples into two groups based on the presence or absence of at least one known MDRO, such as methicillin-resistant *Staphylococcus aureus*. Finally, statisticians compare the amount of fiber the study participants had consumed in the 24 hours before they collected their stool samples.

While this is seemingly straightforward, investigators face the big challenge of accounting for various lifestyle and long-term dietary differences between the people whose samples are in the two groups.

“More complex statistical methods are needed to attribute microbiome differences to fiber intake, rather than the fact that people with a healthier recent diet may also be healthier in general,” Sethi explains.

As a practicing physician, Safdar ultimately hopes the WARRIOR study will suggest new weapons to wield against superbugs that survive today’s antibiotic arsenal. Since probiotic yogurts and fecal transplants have had mixed success, and it’s premature to endorse them across the board, Safdar says the field is wide open to options.

“If the fiber angle becomes promising, increased dietary or supplemental fiber enrichment may be a useful measure,

especially for patients who are at high risk for MDROs or have been infected by one,” says Safdar.

Sethi adds, “There is some evidence that a physician handing you a prescription that reads ‘eat more fiber’ or ‘take a fiber supplement’ may be more effective than having someone simply tell you to live a healthier lifestyle.”

ANTIBIOTIC RESISTANCE, THE MICROBIOME AND LEAD EXPOSURE

Adding a complex ancillary study like WARRIOR to SHOW is a significant investment. With SHOW support, researchers must obtain new funding, hire and train staff, and redesign study logistics, while participants are asked to commit a substantial chunk of additional time (and overcome the “ick” factor) for the ultimate goal of improving human health.

But one way to amplify the value of these efforts is to use the newly collected data to address more research questions. The SHOW team didn’t hesitate to do just that.

Around the time Safdar and Sethi were hashing out the WARRIOR study, Malecki’s graduate student, Shannah Eggers, who has a background in microbiology, was searching for a dissertation project. Malecki’s laboratory focuses on understanding human susceptibility to environmental factors, and she encouraged Eggers to think about interactions between the environment and the microbiome. Eggers found several published studies supporting a possible relationship between superbugs and lead, but none in humans. For instance, aquatic bacteria with a high tolerance for the heavy metal also tend to have a greater antibiotic resistance, suggesting that the two properties may be genetically linked. Other studies showed that mice exposed to lead as babies have an altered microbiome composition as adult animals, and cell assays indicate that lead compromises the body’s immune system, as does an imbalance in the gut microbiome.

“Taken together, these three lines of evidence make it highly plausible for lead exposure to increase the risk of an MDRO infection,” Eggers says. “This motivated our proposal to measure lead levels in the urine of approximately 500 WARRIOR participants to see if they are correlated with the presence of MDROs in their stools.”

When Eggers, Malecki and Safdar submitted that proposal to the Department of Medicine, the opportunity to piggyback on the existing study infrastructure—coupled with the ability to explore new scientific territory by testing the lead/MDRO hypothesis—resulted in a thumbs-up funding decision. It didn’t hurt that Malecki and Eggers’ home department has a long history of studying lead-associated health outcomes and that the Flint, Michigan, crisis of lead in its drinking water was making news headlines at the same time.

As the metric for testing the lead/MDRO hypothesis, Eggers and Malecki chose urine because it reflects 70 percent of the body’s buildup of lead. However, since blood lead is the standard most often used for monitoring human exposure to lead, they also will measure blood in a subset of samples to determine which one is more predictive of MDROs in the gut.

Reflecting upon the recent growth in the scope of SHOW’s research agenda, Malecki offers a shout-out to the thousands of Wisconsinites who make the study possible.

“I think SHOW participants are amazing people for being willing to share a large amount of time and energy with us,” she says. “As for the microbiome study’s success, many people are fascinated by the idea that our bodies are made up of all these bacteria and viruses. It’s a hot topic, and we are incredibly grateful that the research subjects want to be part of the cutting-edge research we are able to do through SHOW.”



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Predicting Silent Strokes

A University of Wisconsin School of Medicine and Public Health (SMPH) study published in the *Journal of Neurosurgery* is the first to predict which patients are at risk of cognitive decline caused by small, silent strokes. People with unstable carotid artery plaque scored poorly on cognitive tests, and their brains showed evidence of suffering many silent strokes.

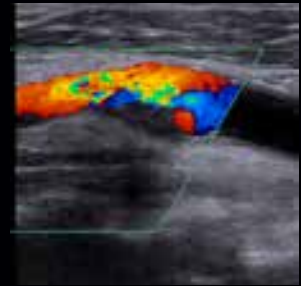
A research team—led by Robert Dempsey, MD, chair of the Department of Neurosurgery and the study's lead author, and Stephanie

Wilbrand, PhD, research specialist and co-author—studied patients who had plaque blockages of more than 60 percent in their carotid arteries. Using ultrasound, they looked at the arteries as they pulsed with heartbeats. In some patients, the plaque was impeding blood flow and cracking under the strain.

The study also measured tests of intelligence, decision-making and motor skills. It found that the patients with the cracked plaque had the poorest scores on cognition tests and evidence of brain

injury thought to be the result of repeated brain injuries caused by plaque-related blockages of blood flow. It is suspected that before completely blocking the vessel, bits of plaque can break off and cause these small brain injuries.

“We showed that silent strokes are much more common than we thought and that we are able to predict which people will show cognitive decline, long before an official diagnosis of dementia,” says Dempsey, who estimates that 11 million



Americans a year could be affected by silent strokes.

“By identifying who is at risk for silent strokes, we can intervene to prevent further decline,” he says.

Communicating about High-Stakes Treatments

For frail older adults, acute health problems often have life-altering effects. However, research shows that aggressive treatments, including surgery, are common near the end of life, even though most older adults say they prefer to avoid burdensome interventions that could diminish their quality of life.

In a study published in *JAMA Surgery*, University of Wisconsin School of Medicine and Public Health (SMPH) researchers describe a novel communication model that shifts the focus of decision-making conversations from

a problem with a surgical solution to a discussion about treatment alternatives and outcomes. This conversation framework, called “Best Case/Worst Case” (BC/WC), may allow patients and families to make treatment decisions that are better aligned with personal goals.

Using the BC/WC framework developed by SMPH researchers, surgeons use stories to describe how patients might experience a range of possible outcomes and their most likely scenarios.

“Incorporating stories that describe how surgery can impact the patient’s

overall quality of life can help surgeons, patients and families avoid surgery when even the best-case surgical outcome is unacceptable,” explains Margaret “Gretchen” Schwarze, MD, associate professor of surgery and the study’s principal investigator.

For the study, surgeons at University Hospital received training about the BC/WC framework. Before training, they described patients’ conditions in conjunction with operative solutions, directed deliberation over options, listed procedural risks and did not integrate patient/family preferences into a treatment



recommendation. After the training, surgeons presented a clear choice between treatments, described a range of postoperative trajectories and involved patients and families in shared decision-making and deliberation.

See page 32 for a related article.

Disrupting HIV Replication in Human Cells

University of Wisconsin School of Medicine and Public Health (SMPH) researchers discovered a potential means to stop production of HIV-1, the most widespread type of HIV in humans.

Jordan Becker, a graduate student and lead author of a paper describing the research, and Nathan Sherer, PhD, assistant professor of molecular virology and oncology, showed that disrupting the movement of viral messenger ribonucleic acid molecules (mRNAs) can

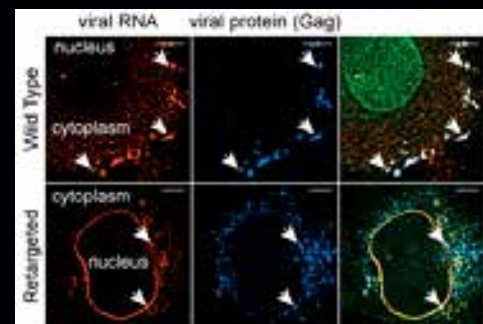
prevent the HIV-1 from creating new particles.

Published in the *Journal of Virology*, the study showed that when HIV-1 mRNA is released from the nucleus, it spreads out like a liquid and binds to proteins in the cytoplasm. But, for HIV-1 to form a new virus particle, the assembly must happen at a specific place, says Sherer.

After the HIV RNA binds with a Gag protein, it moves to the plasma membrane, where new HIV-1 virus particles are formed and released, with potential to spread the infection.

Through the research—done in conjunction with the UW McArdle Laboratory for Cancer Research and the UW Institute for Molecular Virology—Becker and Sherer devised a way to disrupt HIV-1 RNA movements by tethering the RNAs to structures other than the plasma membrane.

If this strategy were to become reality, people with HIV-1 would not be able to make the infectious virions that transmit the disease. It is difficult to know if the strategy alone would kill the virus, but combined with existing



drugs, it could enhance their effectiveness, Becker notes.

“Selectively targeting HIV RNA’s movement inside cells could be a great way to kill HIV,” says Sherer.

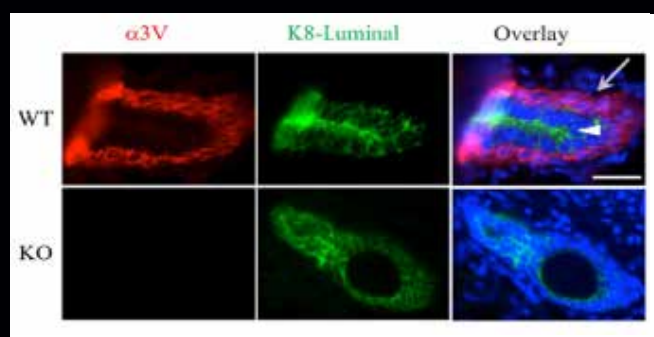
Understanding Collagen’s Link to Breast Cancer

Researchers at the University of Wisconsin School of Medicine and Public Health (SMPH) found that removing a specific type of collagen—alpha 3V—can dramatically reduce the growth of one form of breast cancer.

Daniel Greenspan, PhD, professor of cell and regenerative biology, and colleagues examined the role of this collagen in luminal breast tumors. Their research showed that when alpha 3V collagen was removed in mice, the growth of luminal tumors was greatly reduced.

Alpha 3V collagen is produced at high levels in the basal cells of the normal mammary duct, but begins to be produced in the duct’s luminal cells when these cells become cancerous. Breast tumors are thought to form from cells in the luminal layer, Greenspan says.

Discovering the link between alpha 3V collagen and luminal tumors in breast duct tissue has prompted Greenspan to immediately seek funding to create better antibodies against alpha 3V collagen. Antibodies against the alpha 3V collagen



also were found to slow tumor growth.

There are three other primary forms of breast cancer—luminal B, triple negative/basal-like and HER2 type—but levels of alpha 3V collagen appear to correlate best with the appearance of luminal A breast tumors in

humans. The potential for this anti-alpha 3V treatment to greatly slow luminal A breast cancer, as part of a broad treatment plan, could allow for more effective treatments, according to Greenspan.

The study was published in *Nature Communications*.

Gratitude and Fortitude

REFLECTING ON A THREE-DECADE CAREER AT THE SMPH

I am so grateful for the privilege of working at the University of Wisconsin School of Medicine and Public Health (SMPH) and UW-Madison. The school and university have undergone many changes since I started here as a medical student in 1976 and joined the faculty in 1984. I would like to share my perspective as I retire from the SMPH.

Every day, I am amazed at the sterling work I see throughout the SMPH and UW Health. I am always happy to tell our alumni and citizens about the dedicated efforts of our faculty and staff and the results of their work. We are among the nation's leaders in education, research and clinical care, which I know makes our graduates proud and increases the value of our degrees. The quality of our faculty, staff and students motivates me to do my best every day, in line with our goal to provide the highest quality of care possible for our patients. Our faculty and alumni are superb role models for our learners.

I have had the opportunity to provide patient care and conduct scientific studies in family medicine and cardiovascular medicine (preventive cardiology), and to serve as the SMPH associate dean for students and associate dean for faculty affairs. I work with clinicians, researchers and staff who continually improve clinical care and find solutions for our most challenging medical problems. I treasure most the opportunities I've had to teach and interact with students. This makes me strive to be the best physician, teacher and professional I can be.

Research funding is increasingly difficult to obtain, yet our scientists work extraordinarily hard to keep us among the top tier of universities in the nation in scientific grant funding and increase our amount of support for scientific investigations. We recruit study participants, including patients and collaborating health care professionals, from throughout the region. SMPH teams are cutting-edge in revolutionizing health care.

In my career, I have participated in five curriculum transformations. Our medical education team works hard to provide training that is innovative and built upon best practices. Our school's new ForWard Curriculum is based on providing our students with excellent opportunities to learn and choose their specialties. We are committed to providing the highest quality curriculum and evaluations so we can prepare our graduating physicians, physician assistants, physical therapists and other health care professionals to meet the myriad needs of patients and work in complex health care systems in their future careers. Faced with escalating demands for new health care professionals to serve Wisconsin, our nation and the world, the SMPH is dedicated to successfully fulfilling its missions while it overcomes continuing challenges in technology, informatics and facilities.

We are proud that approximately 45 percent of our medical alumni practice in Wisconsin. This school could not function without the dedication of so many SMPH graduates and other clinicians who teach our students, often on their own time, and serve as role models in providing the highest quality health care. Patients throughout the state are in great hands due to the outstanding SMPH alumni who practice all around Wisconsin. I had the opportunity to work with our Wisconsin Academy for Rural Medicine and Training in Urban Medicine and Public Health Programs, which seek to boost the numbers of physicians who practice in medically underserved rural and urban areas of our state and beyond. These unique programs make a difference by exposing trainees to work in environments that face physician shortages and preparing graduates to practice in those areas.

When I started at this school, state support provided almost 60 percent of the SMPH's funding, but this has dropped to about 10 percent. Thus, we rely more heavily on donor support to keep tuition



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costs affordable for students. Every dollar contributed to the UW System generates \$24 for our state's economy—it's an incredible investment!

As a Wisconsin Medical Alumni Association board member, physician, researcher, administrator and medical educator, I witness every day the support that our alumni and others provide to our school. We could not function without the assistance of our donors who provide financial gifts, and the alumni and other clinicians who step up to teach our students.

I am most grateful to all of you for the privilege to work with incredible students, faculty and staff. I applaud my colleagues who push me to be the best I can be. Thanks to everyone for your support of the SMPH.

On Wisconsin!

**Patrick McBride, MD '80,
MPH, FACC, FAHA**

*Associate dean for faculty
Professor, Departments of Medicine and
Family Medicine and Community Health
University of Wisconsin School of Medicine
and Public Health*



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I KNOW YOU

... OR DO I?

If you think you can identify the person in the photograph at right, send your guess to quarterly@med.wisc.edu. We'll draw one of the correct responses and announce the winner in the next issue of *Quarterly*.



For the last issue (see below), Rolf Lulloff, MD '67, won the prize drawing and will receive a gift from the Wisconsin Medical Alumni Association!

HINT: She graduated first in her SMPH class and was on the school's faculty for four decades.

ABOUT LAST ISSUE'S PHOTO:

In the past issue of *Quarterly*, 32 people correctly guessed the identity of Frank C. Larson, MD (pictured at right). The Nebraska native earned his medical degree in his home state before serving in the U.S. Army. He completed an endocrinology research fellowship and internal medicine residency at the UW School of Medicine and Public Health (SMPH).

Larson was one of the first three physicians to work at the William S. Middleton Memorial Veterans Hospital. He also served as the medical director of University Hospital's Clinical Laboratories for 30 years and was a member of the SMPH faculty from 1951 until his 1989 retirement, upon which he earned the title of emeritus professor of medicine, pathology and laboratory medicine. He died on December 25, 2007, at age 87.

Ennio C. Rossi, MD '54 (PG '61, '63), shared, "Frank was a mentor and very dear friend. We published a paper together. ... Frank was like an older brother, and he helped me weather some difficulties during residency. When he passed away, I felt strangely vulnerable. Someone who had watched my back was missing."

Eberhard Mack, MD, recalled that Larson streamlined the laboratory analysis of blood samples, adding, "He has been



a most caring physician for his numerous patients and a role model for students and residents."

Peter C. Raich, MD '64, wrote, "He always had a good story about his time at Oak Ridge Laboratories during his military service. He taught laboratory medicine to us medical students. He offered me my first job as director of the Clinical Hematology Laboratory, and I remember him as an innovative, caring boss."

Lou Bernhardt, MD '63—one of Larson's students and trainees in the Wisconsin Army National Guard—noted, "Frank was a good teacher, commander and leader."

We Want to Hear From You

Please send us information about your honors, appointments, career advancements, publications, volunteer work and other activities of interest. We'll include your news in the Alumni Notebook section of the *Quarterly* as space allows. Please include names, dates and locations. Photographs are encouraged.

Have you moved? Please send us your new address.

CONTACT INFORMATION:

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