

VOLUME 23 • NUMBER 4 • 2021

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

Quarterly

COOL SCIENCE

IMAGES

TRAINEES, FACULTY AND STAFF MEMBERS
RECOGNIZED FOR THEIR UNIQUE ART FORMS

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*This image is an MRI scan of the human brain.
See more Cool Science Images on page 8.*



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The Magazine for Alumni, Friends,
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MARCH 2022

Friday, March 18

Match Day*

APRIL 2022

Wednesday, April 6

Alpha Omega Alpha Banquet*

Friday, April 29

WMAA Board of Directors Meeting,
Scholarship Reception and
Awards Banquet*

MAY 2022

Thursday, May 12

MD Honors and Awards Ceremony*

Friday, May 13

MD Recognition Ceremony and
UW-Madison Graduation*

JUNE 2022

Thursday, June 2,
and Friday, June 3

Spring Alumni Weekend*
Reunions for the Classes of 1957,
'62, '67, '70 and '72, and the annual
reunion for the Half-Century Society

* Event details are subject to change based on Centers for Disease
Control and Prevention guidelines related to COVID-19 in this region.

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CALENDAR

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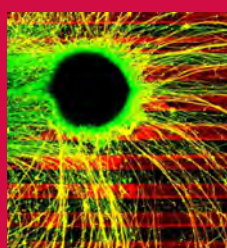
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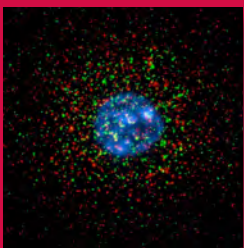
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Undiagnosed Genetic Disease Program and Clinic

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On the Cover

In this MRI scan, white matter in the human brain has been colored according to the predominant orientation of fibers to reveal pathways traversing the regions of the organ. See page 8 for details.

—Image by Jose Guerrero, PhD, Andrew Alexander, PhD, and Peter Ferrazzano, MD

ROBERT N. GOLDEN, MD



This past year has been challenging for all of us, as we ride the frightening and deadly COVID-19 roller coaster. I am profoundly appreciative and grateful for the resilience and dedication of our faculty, staff, learners and supporters as they create innovative ways to connect with each other and advance our missions. Our University of Wisconsin School of Medicine and Public Health (SMPH) community and family continue to face an unpredictable and daunting environment, without flinching.

Beginning more than 20 months ago, leaders of the Survey of the Health of Wisconsin (SHOW) embraced the opportunity to redirect their focus onto the collection of statewide data about COVID-19 (see page 4). SHOW's strong partnerships with an established cohort of research participants and with the Wisconsin Department of Health Services have produced valuable information regarding COVID-19-related needs of people and populations throughout Wisconsin.

Our UW Center for Human Genomics and Precision Medicine is making important advances. Most recently, the center's Undiagnosed Genetic Disease Program and its clinic opened, providing answers and

potential treatments for patients with rare diseases, and for families. This program, one of many exciting new partnerships with UW Health, already has been accepted into an international network in this rapidly emerging field.

So much of our growth and development has been advanced by our supporters. We honored the members of the Middleton Society in November 2021 at our annual evening of gratitude. The speakers at this virtual event, Drs. Amy Kind, Nasia Safdar and Jonathan Temte, shared their insights about the state of the pandemic, from their perspectives as local, state and national leaders in the COVID-19 response plans. We were buoyed by their optimism regarding emerging vaccine strategies, potential treatments and mitigation approaches, and we appreciated their candor regarding the need for an ongoing focus on this public health crisis and the health disparities that it has highlighted.

Our Leadership Profile centers on the Wisconsin Medicine Institute for Clinical Trials, another partnership between the SMPH and UW Health. Fortunately, we began to establish this program just prior to the onslaught of COVID-19, and thus were

prepared to participate in many of the earliest studies. Ms. Betsy Nugent and Dr. Nasia Safdar, the co-leaders of the institute, bring decades of experience and knowledge to this initiative, with a clear goal of creating one of the nation's top sites for clinical trials.

As we celebrate our new programs, we also honor the 40th anniversary of our Department of Medical Physics, one of the few among the nation's 153 medical schools. Its contributions to science and the advancement of health—including innovations in medical technology, such as digital subtraction angiography—are legendary.

We also honor the medical students, faculty members and the resident who were inducted into our chapter of the Gold Humanism Honor Society, and celebrate the nine classes of MD alumni who participated in Zoom class reunions this fall. Further, we welcomed three new members to the Wisconsin Medical Alumni Association (WMAA) Board of Directors and the new WMAA executive director, Sarah Rothschild.

You will enjoy the powerful Perspectives column written by Shiva Bidar-Sielaff, who recently became our inaugural associate dean for diversity and equity transformation. She also serves as a vice president/chief diversity officer at UW Health, and she has a track record for advancing our goals in these vital areas: fostering a culture of inclusion and respect among our patients, employees, learners and the communities we serve; and promoting equity in access to quality health care through advocacy, teaching and discovery.

I look forward to the day when COVID-19 is a frightening chapter in our history, as we complete a transition into the "new normal" that is still being defined. We are so eager to see you in person when conditions are safe to do so. In the meantime, best wishes for a healthy and happy 2022!

Robert N. Golden, MD

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

MARK FENLON, MD '84 (PG '87), MBA

One of the things I enjoy about living in Wisconsin is the change of seasons. I particularly like to experience these transitions by riding my Harley-Davidson motorcycle throughout the state. Riding, to me, is mindfulness that makes me grateful to live in such a beautiful state.

Spring always brings a sense of renewal. The transition to summer brings many rides “up north.” It’s hard to beat northern Wisconsin in the summer. Fall has its own apparent transition as trees become ablaze with color—a particularly fine time to ride. And in the winter, I enjoy the anticipation of the next warm stretch.

The Wisconsin Medical Alumni Association (WMAA) also is in transition. As chronicled in the last issue of *Quarterly*, Karen Peterson has retired after 21 years as executive director of the association. Every member of the WMAA Board of Directors likely has a story about how Karen engaged them in the work of the group, encouraging them to take on leadership roles and, more importantly, give back to the University of Wisconsin School of Medicine and Public Health (SMPH) by interacting with alumni and students. Like many, I would not have become involved without Karen’s persistent efforts. Her dedication to our alumni and her strong ability to engage students from day one has been truly outstanding. I am grateful for my opportunity to work with Karen.

I also was honored to be involved with the recruitment of her successor, Sarah Rothschild. I am confident that the transition will go extremely well and that Sarah will lead the WMAA to the next level.

Two things the WMAA has accomplished under Karen’s direction stand out to me. First, I think the Stethoscope Program is one

of the best programs the WMAA has offered. I’ve been privileged to help hand out to each new MD student a high-quality stethoscope sponsored by an alum. Students truly appreciate this meaningful gift—a symbol of their start in clinical medicine—that they can use throughout their career. I often tell the story about using the stethoscope I bought at the University Bookstore in 1980 throughout my career, although every part has been replaced at least once!

The second accomplishment that merits attention is the way in which the WMAA has supported scholarship matching programs over many years. The recent WMAA Scholarship Matching Fund has been wildly successful in bringing in gifts from alumni and encouraging multiple classes and individuals to create named scholarship funds. Medical students often express their gratitude for the help with their debt, which has soared over the years.

Unfortunately, COVID-19 has led to several transitions. Before early 2020, who would have thought that social distancing, masking and virtual events—including medical visits—would become a regular part of our lives? As the virus becomes endemic, many of the transitions it caused in our lives will become permanent. In November, I attended the virtual Middleton Society event, at which Drs. Amy Kind, Nasia Safdar and Jonathan Temte provided an excellent overview of the state of the pandemic, COVID-19 vaccines and work yet to be done. These physician leaders and others at the SMPH have led the charge nationally as we deal with the long-term effects of this ongoing public health crisis.

In my time on the WMAA Board of Directors and now as its president, I’ve learned a lot about the SMPH. The more



KEVIN CLARKE

I learn, the more impressed I am with the quality of the work, innovation and leadership provided by the school’s faculty, staff and students. I will be forever grateful for the education the SMPH provided me because all that I have comes from those years long ago in Madison.

Winter now has arrived, and sadly, my motorcycle is parked for a few months. Some transitions are difficult, and while we can’t stop them, we can embrace them. In that spirit, I’ll break out my downhill skis.

I wish you all a healthy and safe 2022. On Wisconsin!

**Mark Fenlon, MD '84
(PG '87), MBA**

*President, Wisconsin Medical
Alumni Association*



Trio of collaborators (left to right): Allen Bateman, PhD, Wisconsin State Laboratory of Hygiene; Kristen Malecki, PhD, MPH, UW School of Medicine and Public Health's (SMPH) Survey of the Health of Wisconsin; and Ryan Westergaard, MD, PhD, MPH, Wisconsin Department of Health Services and SMPH

Valuable Statewide Data

SURVEY OF THE HEALTH OF WISCONSIN PIVOTS TO ADDRESS COVID-19

When the first case of COVID-19 in Wisconsin was confirmed by the state's Department of Health Services (DHS) on February 5, 2020, the University of Wisconsin School of Medicine and Public Health's (SMPH) Survey of the Health of Wisconsin (SHOW)—a statewide research infrastructure within the school—sought to leverage its extensive health data and bio-sample collection to assist the university and state in the face of the growing pandemic.

SHOW investigators, led by the program's director, Kristen Malecki, PhD, MPH, an associate professor in the SMPH Department of Population Health Sciences, quickly mobilized their research team and study participants across Wisconsin to support the DHS's need for critical, timely data on COVID-19's spread.

Ryan Westergaard, MD, PhD, MPH, chief medical officer at the DHS and an associate professor in the SMPH Department of Medicine, approached Malecki to request SHOW's help in assessing the extent of COVID-19 exposures in the

population. Westergaard's team wanted to track seroprevalence over time and viewed SHOW as an unbiased source of data collection because the organization has a broad and diverse research cohort.

At the time, testing capacity was limited, and because many people who have COVID-19 are asymptomatic, tracing the spread of the virus could not rely solely on counting cases based on test results. Better data was needed, notes Westergaard.

Thus, SHOW launched the longitudinal Past Antibody/COVID-19 Community Survey (PACCS). Program leaders sent teams to 24 community-based sites in 10 counties, where participants from previous SHOW study cohorts completed a brief questionnaire, and phlebotomists—armed with coolers and centrifuges—collected research subjects' blood samples on site. The Wisconsin State Laboratory of Hygiene, which is part of the SMPH, tested the samples to measure antibody levels to determine whether a person had been infected by the virus that causes COVID-19.

The resulting data presented a clear and concerning picture of COVID-19's progression. In June and July 2020, among just more than 1,000 samples from adults and children age 12 and above, 1.6 percent showed evidence of prior infection. In October and November 2020, overall statewide seroprevalence grew to 6.8 percent, and by March and April 2021, this had risen to 11.4 percent.

Especially concerning were findings from particular sub-groups. By October 2020, more than 25 percent of Latino participants had antibodies. Although no children had tested positive in July 2020, 19.3 percent of youth participants were positive by March 2021. And among those who self-identified as Black or African American, seroprevalence rose from 6.1 to 20 percent across the three time points.

Westergaard and his team were able to use the data at critical moments in the pandemic's trajectory, says Malecki. According to the Morbidity and Mortality Weekly Report published by the Centers for Disease Control and Prevention in late



Several faculty and staff members gather in front of the Wisconsin State Laboratory of Hygiene building on the UW-Madison campus. Front row (left to right): Laura McCulley, MPH '20; Hannah James; Allison Rodriguez, MPH '19; Doug Esselman. Back row: Kristen Malecki, PhD, MPH; Amy Schultz, MS '15, PhD '19; Ben Young; Jen Tratnyek; Matthew Walsh, PhD '10, MPH; Maria Nikodemova, MS '11, PhD; Andrew Bersch, MS '03.

January 2021, confirmed cases reported to the DHS between early September and mid-November 2020 were increasing at a rate of 24 percent per week—the highest in Wisconsin to that point. At that time, more than 90 percent of the population in Wisconsin had no antibodies to fight COVID-19 infection, and a vaccine was still weeks to months away.

“Having statewide data that can be regionalized and stratified by a host of demographic factors is significant. When we did our second wave of serological

surveillance with past participants from the south side of Milwaukee, we saw almost a fourfold increase in antibody prevalence in those populations,” Malecki states.

This was a stark reminder of the disproportionate impact COVID-19 was having in communities that were already experiencing health inequities and inequitable access to resources.

“If you don’t have community-specific data and information, those patterns would be lost,” she observes, adding that by the end of 2020, COVID-19 was one of the three

leading causes of death in Wisconsin. Parallel to the PACCS study, SHOW quickly adapted its follow-up study to its annual health survey of state residents.

“We realized we had an incredible opportunity to leverage connections we had already established with more than 5,000 Wisconsin residents,” says Malecki. “We asked ourselves, what if we engaged people to better understand how the COVID-19 pandemic was impacting their lives?”

In answer, SHOW launched the first iteration of its online Community Impact Study, a baseline snapshot of COVID-19’s early effects on Wisconsin residents. Amy Schultz, MS '15, PhD '19, SHOW’s associate director, and Doug Esselman, SHOW’s field-team supervisor, worked with SHOW scientists and other UW-Madison faculty members, including Paul Peppard, MS '94, PhD, professor, Department of Population Health Sciences; Ajay Sethi, PhD, MHHS, associate professor, Department of Population Health Sciences; Corinne Engelman, MSPH, PhD, professor, Department of Population Health Sciences; and Lisa Cadmus-Bertram, PhD, associate professor, Department of Kinesiology, UW School of Education.

About the Survey of the Health of Wisconsin

The Survey of the Health of Wisconsin (SHOW) is a novel statewide research infrastructure established at the University of Wisconsin School of Medicine and Public Health (SMPH) in 2008. It is funded through the school’s Wisconsin Partnership Program. To date, that program has committed to SHOW more than \$22 million in awards, which have enhanced the school’s capacity to support the health research needs of investigators at the SMPH and beyond.

Initially, SHOW’s primary focus was a statewide survey of representative Wisconsin households to generate state-specific data about residents’ health. The survey included

questions on physical, mental and oral health; occupational, lifestyle and behavioral choices affecting health; and health literacy. The core set of health data maintained by SHOW is readily available to answer new research questions.

In addition, SHOW has expanded its work to support health equity research. Over the years, it has assembled a cohort of 5,846 adult and 980 minor participants from communities around Wisconsin. Its extensive health data and corresponding biological samples offer researchers unique opportunities to study how the social determinants of health intersect with the

health status of particular populations in the state. SHOW offers:

- observational and longitudinal data for cross-sectional, case-control and cohort studies of the broad social determinants of health and disease;
- biological samples including plasma, serum, DNA, urine and stool;
- expertise to efficiently support ancillary projects, ranging from minimal involvement to in-depth collaboration; and
- COVID-19 survey data to study pandemic-specific changes to social determinants of health.

The team developed a plan to safely gather data from 5,800 past participants. They also gathered input from UW-Madison faculty members who were seeking information spanning health, social sciences, and child and family development.

Nearly 1,400 SHOW participants returned the surveys, which looked at nine areas of potential impact, ranging from perceptions of the risk of COVID-19 to issues of food security, economic stability and mental health.

More than 80 percent of respondents reported using some form of mitigation strategy, such as maintaining social distancing and canceling travel. Across social and economic groups, those with children at home reported considerably more stress compared to those without children. While 56 percent of respondents said they had not faced delays in receiving health care, about 35 percent said they couldn't get dental care early in the pandemic, and 22 percent said the same about general medical care. Mental health emerged as another major area of concern.

"Early on, it became clear that families were struggling," states Malecki. "People reported having a lot of uncertainty and fear about COVID-19 and where it was heading, and there was so much disruption to people's lives."

As of late 2021, data from the survey's third wave have been collected, so more insights are on the horizon.

Through grant funding from the SMPH's Wisconsin Partnership Program, SHOW and many other organizations were able to adapt their work in response to the pandemic.

"It was remarkable to see SHOW quickly mobilize its staff and infrastructure to provide vital surveillance support at such a critical time in our state," notes Richard Moss, PhD, then the SMPH's senior associate dean for basic research, biotechnology and graduate studies (now retired) and chair of the Wisconsin Partnership Program's Partnership Education and Research Committee. "This valuable statewide data provides important insight into population health, and it has helped people in Wisconsin better understand the health risks and consequences of the pandemic."

**There's more online:
See show.wisc.edu**

Wisconsin Partnership Program Leadership Transition



Eileen Smith

The Wisconsin Partnership Program represents a far-reaching commitment by the University of Wisconsin School of Medicine and Public Health (SMPH) to greatly improve the health and well-being of people in Wisconsin now and for years to come. The program reaches beyond the UW-Madison campus to improve the health of Wisconsinites through innovative research and education programs and community partnerships.

After 20 years serving as the founding director of the Wisconsin Partnership Program, Eileen Smith retired at the end of 2021.

"Eileen has provided visionary leadership and incredible dedication to this groundbreaking program since its inception. During her tenure, the Wisconsin Partnership Program has awarded more than \$270 million in grant programs that advance medical and public health research; support innovations in medical education; and promote health and health equity," notes Robert N. Golden, MD, dean of the



Amy J.H. Kind, MD '01 (PG '07), PhD '11

SMPH. "The program's impact has been tremendous, resulting in nearly 550 research, education and community partnerships reaching people and communities in all 72 counties of the state—a true embodiment of the Wisconsin Idea."

As of December 1, 2021, Amy J.H. Kind, MD '01 (PG '07), PhD '11, has become the executive director of the Wisconsin Partnership Program. A professor in the SMPH Department of Medicine, Kind has served as chair of the program's Oversight and Advisory Committee. She also is the director of the UW Center for Health Disparities Research, and in December 2021, she was named the SMPH's inaugural associate dean for social health sciences and programs.

"As an international leader in the field of neighborhood-level health disparities, Dr. Kind's expertise, experience and commitment to health equity will serve to guide the Wisconsin Partnership Program into the future," says Golden.

Cool Science Image Contest

SMPH TRAINEES, FACULTY AND STAFF MEMBERS
HAVE BEEN RECOGNIZED FOR THEIR UNIQUE ART FORMS

by Chris Barncard

An annual contest at University of Wisconsin-Madison elicits a variety of art forms. In the 2021 Cool Science Image Contest, trainees, faculty and staff members of the UW School of Medicine and Public Health (SMPH) received accolades for the unique and compelling medical images featured at the right.

A panel of nine experienced artists, scientists and science communicators judged the scientific content and aesthetic and creative qualities of scores of images and videos entered in the 11th annual competition.

“The visual communication of science is critical for the transference of knowledge broadly,” says Ahna Skop, PhD, DSc, a longtime contest judge, artist, UW-Madison professor of genetics and active ambassador for science.

The Cool Science Image Contest recognizes the technical and creative skills required to capture images or videos that capably reveal something about science or nature while also leaving an impression with their beauty or ability to induce wonder. The contest is sponsored by Madison’s Promega Corporation, with additional support from the UW-Madison Division of the Arts.

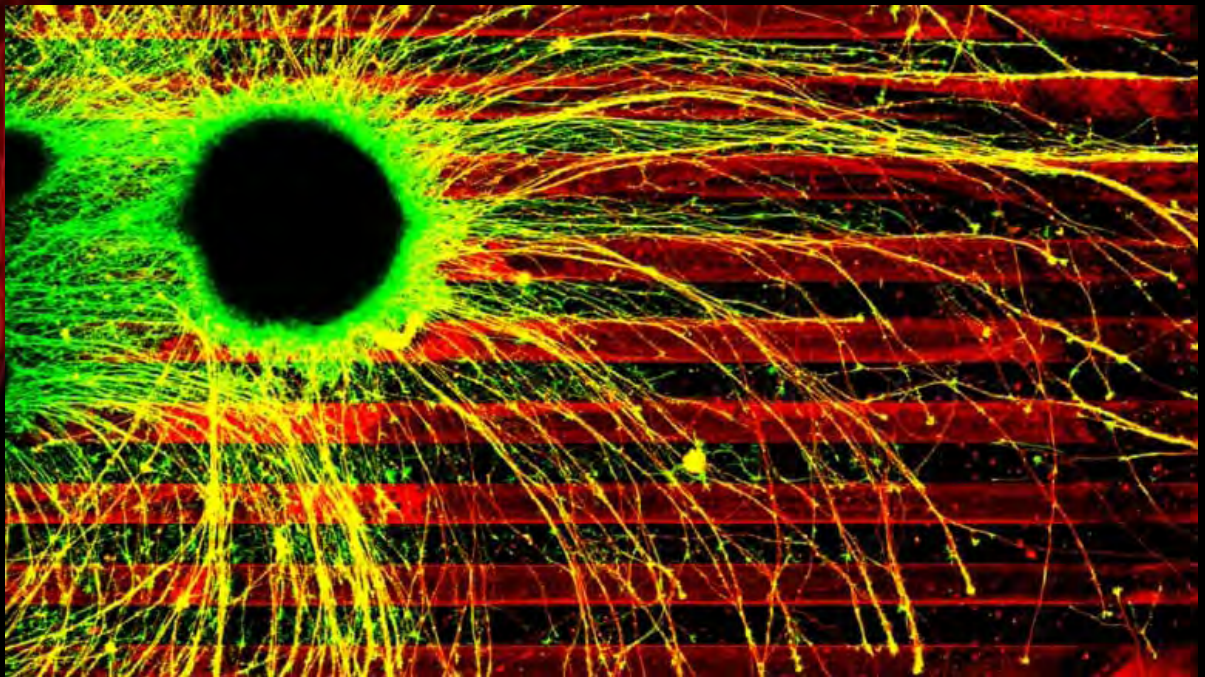
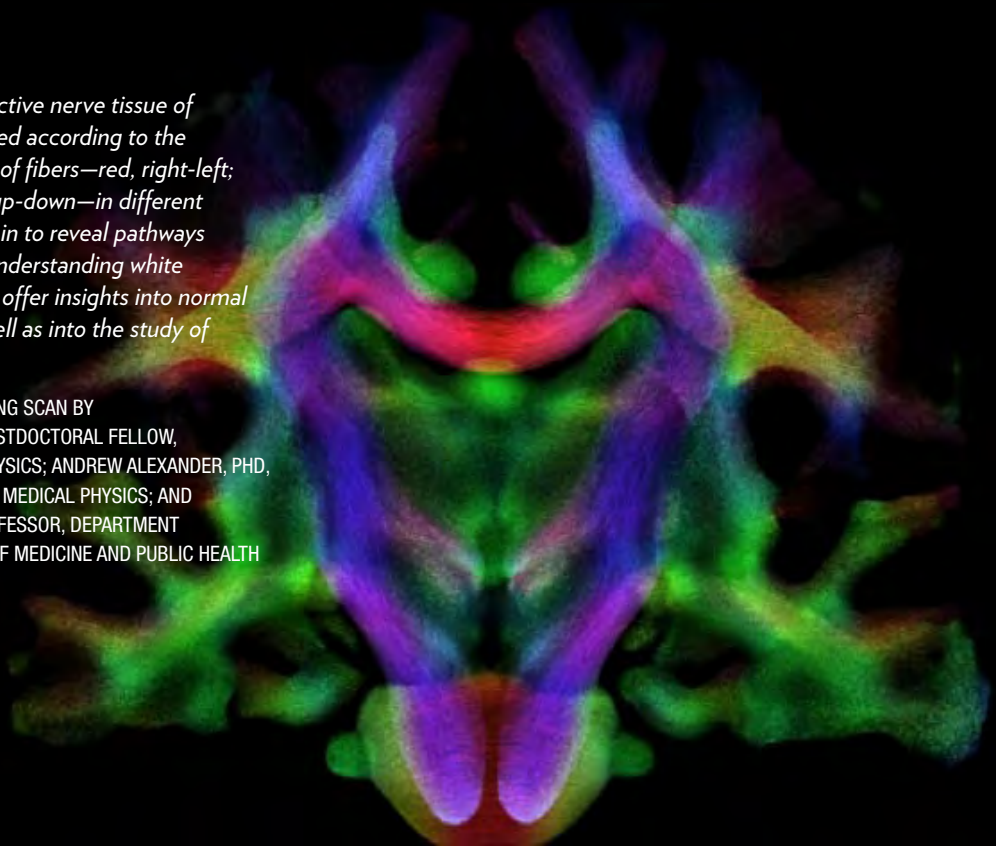
Winning entries are shared widely on UW-Madison web sites, and all entries are showcased at campus science outreach events and in academic and laboratory facilities around campus throughout the year.

Fluorescent antibodies highlight the extensive nervous system of a mouse heart. By creating maps of cardiac nerves with unprecedented accuracy, researchers can explore how those nerves influence heart function.

CONFOCAL MICROSCOPE IMAGE BY REBECCA SALAMON,
GRADUATE STUDENT, GENETICS GRADUATE PROGRAM, UW-MADISON

White matter, the connective nerve tissue of the brain, has been colored according to the predominant orientation of fibers—red, right-left; green, front-back; blue, up-down—in different regions of the human brain to reveal pathways traversing the regions. Understanding white matter organization may offer insights into normal brain development, as well as into the study of neurological disorders.

MAGNETIC RESONANCE IMAGING SCAN BY JOSE GUERRERO, PHD '20, POSTDOCTORAL FELLOW, DEPARTMENT OF MEDICAL PHYSICS; ANDREW ALEXANDER, PHD, PROFESSOR, DEPARTMENT OF MEDICAL PHYSICS; AND PETER FERRAZZANO, MD, PROFESSOR, DEPARTMENT OF PEDIATRICS, UW SCHOOL OF MEDICINE AND PUBLIC HEALTH



Stem cells engineered from a patient with tuberous sclerosis complex—an autism spectrum disorder—were used to generate cortical neurons. These neurons were plated onto a striped pattern of an inhibitory chemical (red stripes). Note that the axons (yellow fibers) from these diseased neurons freely cross the red inhibitory stripes, giving researchers the opportunity to test the effects of disease-causing mutations on axon growth. Healthy axons would precisely follow the red lanes.

CONFOCAL MICROSCOPE IMAGE BY TIMOTHY CATLETT, GRADUATE STUDENT, CELLULAR AND MOLECULAR BIOLOGY GRADUATE PROGRAM, UW-MADISON; AND TIMOTHY GOMEZ, PHD, PROFESSOR, DEPARTMENT OF NEUROSCIENCE, UW SCHOOL OF MEDICINE AND PUBLIC HEALTH

Rare Diseases

UNDIAGNOSED GENETIC DISEASE PROGRAM AND CLINIC
CATALYZE ADVANCES IN GENOMICS AND PERSONALIZED MEDICINE

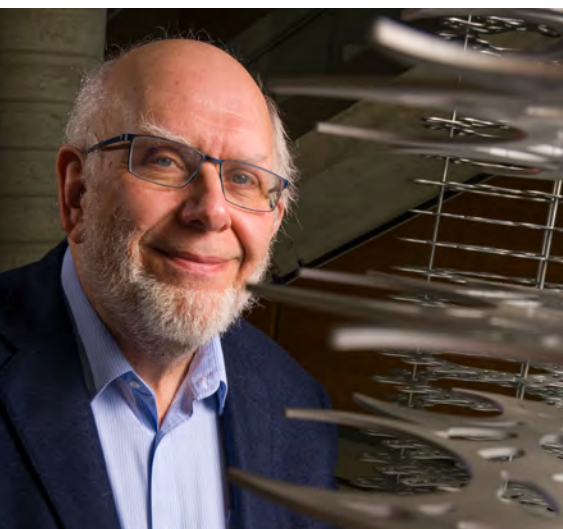
*Some rare diseases disrupt the genome itself;
this is an example from Fanconi anemia.*

M. STEPHEN MEYER, MD, PHD

by Robyn M. Perrin, PhD

During a November 2021 presentation about the University of Wisconsin Center for Human Genomics and Precision Medicine, director M. Stephen Meyn, MD, PhD, paused to reflect on how the term “rare disease”—which the National Institutes of Health attributes to any disease affecting fewer than 200,000 people in the United States—is a misnomer.

“While each individual rare disease is not very common, there are thousands of them. We estimate there may be more than 10,000 altogether,” explains Meyn, the Jan and Kathryn Ver Hagen Professor of Translational Research and a professor in the Department of Pediatrics at the University of Wisconsin School of Medicine and Public Health (SMPH). “In aggregate, rare diseases affect about eight percent of Americans and more than 450,000 people in Wisconsin.”



M. Stephen Meyn, MD, PhD

An internationally recognized clinician-scientist, Meyn studies Fanconi anemia, ataxia-telangiectasia, telomeropathies and other conditions involving genomic instability. He has done pioneering work demonstrating the utility of genome sequencing to diagnose and predict rare diseases.

Meyn urges awareness of the degree to which such disorders affect adults, as well as infants and children.

“About 75 percent of cases of rare diseases present in childhood, and

30 percent of individuals with a rare genetic disease will die before age 5,” he notes.

“As a result, we tend to think of this as a pediatric problem, but most patients who have a rare disease will survive to be adults. They need to have their condition treated properly throughout their lives.”

In July 2021, the Center for Human Genomics and Precision Medicine launched the UW Undiagnosed Genetic Disease Program and its clinic, which accepts referred patients nationwide who have undergone extensive genetic workups but whose condition remains undiagnosed.

“Fewer than 50 percent of patients living with rare inherited diseases receive a definitive diagnosis, and the time it takes to diagnose them can take years of going from one specialist to another, getting the wrong diagnosis before finally getting the right one,” he says, adding that a patient’s diagnostic journey takes an average of five or six years and involves significant hardship.

The Undiagnosed Genetic Disease Clinic is housed at UW-Madison’s Waisman Center and is led by Meyn and April Hall, PhD, CGC, assistant professor of pediatrics, in collaboration with core team members Bryn Webb, MD, associate professor of pediatrics, and Derek Pavelec, PhD ’10, director of the Bioinformatics Resource Center in the UW-Madison Biotechnology Center.

Using genomic technologies and approaches such as trio genome sequencing, RNA-Seq, epigenomic profiling and metabolomic analyses, the team assesses patient samples for disease-causing genetic variants. With an approach that Meyn describes as “beyond the exome,” they employ DNA sequencing approaches that cover the eight to 12 percent of the genome that standard genomic analyses can miss. Then, high-powered scientific crowdsourcing commences as data are safely and securely shared with experts around the world via PhenomeCentral and the Undiagnosed Disease Network International.

“UW-Madison is becoming part of an international network of researchers and clinicians that focuses on rare genetic diseases,” Meyn says. “We’re working to



April Hall, PhD, CGC



Bryn Webb, MD



Derek Pavelec, PhD



Jacalyn McHugh

give patients access to the latest technology and expertise here at the UW School of Medicine and Public Health, and also from this global community.”

The UW Undiagnosed Genetic Disease Program also has an important partnership with the Wisconsin State Laboratory of Hygiene.

“The initial genome sequencing is done on a research basis, but the confirmation of any findings is done at the Wisconsin State Laboratory of Hygiene, which is certified to do so. This is how we can return results to patients on a clinical basis,” explains Hall.

Cultivating such collaborations has been an essential function of the Center for Human Genomics and Precision Medicine since it was founded in 2018. The expanding ecosystem of genomics and precision medicine units at UW-Madison spans technical infrastructure, research and academic programs at the SMPH, the UW College of Engineering and the recently established Center for Genomic Science Innovation. Scholars in the UW Law School and La Follette School of Public Affairs focus on developing precision medicine policies.

Meyn and colleagues also have established partnerships with other institutions such as the Hospital for Sick Children in Toronto, Canada; the Stanford Metabolic Health Center in Stanford, California; Rady Children’s Hospital in San Diego; and 10 children’s hospitals

—continued on page 37

Welcome New WMAA Board Members

CRUZ, STRUCK AND TACKETT DEVOTE THEIR TIME AND TALENT

As of July 1, 2021, three University of Wisconsin School of Medicine and Public Health (SMPH) alumni joined the Wisconsin Medical Alumni Association (WMAA) Board of Directors for their initial three-year terms. The new members are:

- Meredith Cruz, MD '05
- Soma Struck, MD '08
- Johnny Tackett, MD '11, MHS

Sarah B. Rothschild, WMAA executive director, applauds Cruz, Struck and Tackett, along with all of the continuing board members, for their dedicated service to help advance the SMPH's missions.

Meredith Cruz, MD '05

Your current practice?

I am an associate professor at the Medical College of Wisconsin in Milwaukee, and I specialize in maternal-fetal medicine at Froedtert Hospital in Wauwatosa, Wisconsin. I am also the director of the Maternal-Fetal Medicine Fellowship.

Your fondest memory of the SMPH?

My fondest memories include the time spent with my tank mates in gross anatomy laboratory, neuroanatomy lectures and clinical rotations all over the state, including La Crosse. I remember all the hours I spent studying with my "bud," Dr. Matt Zussman, who goes by "Zuss." The best memories were socializing after exams and snowboarding in Idaho with the awesome friends I made in medical school.



TODD BROWN/MEDIA SOLUTIONS

New members of the WMAA Board of Directors (left to right): Johnny Tackett, MD '11, MHS; Meredith Cruz, MD '05; and Soma Struck, MD '08

SMPH faculty member you most remember and why?

I still remember my neuroanatomy class and laminated flashcards like it was yesterday, and I owe it all to Dr. John Harting!

He was a phenomenal teacher and was always full of energy!

Your hobbies and interests?

I enjoy working out and Latin dancing, and have competed in Latin dance in

Canada and Miami. I am one belt away from a black belt in Tae Kwan Do. I also enjoy watching sports, especially the Milwaukee Bucks, Green Bay Packers, Milwaukee Brewers and, of course, our UW Badgers!

Family update?

My husband, Matthew Wojtecki, and I have two grade-school-age children, Kameron and Makayla. We are busy with family Tae Kwan Do, piano and our kids' sports, which include soccer, basketball, dance, tennis and baseball.

Goals for the WMAA?

I would like to help get Milwaukee alumni together for WMAA-sponsored events in our region. These events could be social or community service. I also want to learn about all the ways I can help give back to the school and spread this same information amongst the Milwaukee alumni.

Soma Struck, MD '08

Your current practice?

For the past five years, I have been practicing as a hospitalist at St. Mary's Hospital in Madison. I also serve as the medical director for continuing professional development there.

Your fondest memory of the SMPH?

My fondest memory of the SMPH is the camaraderie of our Class of 2008. Despite having a class of more than 100 students, I felt like I knew each person individually, and this gave me a wonderful sense of community during an academically challenging time.

SMPH faculty member you most remember and why?

I remember Dr. Patrick McBride well. He became the dean of students during my first year of medical school, and he was very engaged with our class. He was such an advocate for students, took the time to get to know each of us personally and valued us as individuals.

Your hobbies and interests?

I am lucky to live close to my family and my in-laws, so spending time with family is a huge part of my down time.

Family update?

My husband, Dr. Aaron Struck, and I have two children. Our daughter, Neena, is 5 years old; and our son, Bobby, is 4 years old. We also have two dogs. The low level of chaos in the house between the kids, animals and activities keeps us on our toes and helps bring some perspective to how I practice medicine.

Goals for the WMAA?

My goals for the WMAA include continuing to support robust engagement of medical students during their time at the SMPH. I think it is important for them to hear from a diverse group of alumni about the practice of medicine and to know that the WMAA is here to support and mentor them in a variety of ways during their training and beyond.

Johnny Tackett, MD '11, MHS

Your current practice?

After completing my surgical training in July 2020, I began my first attending position as a pediatric surgeon at Mount Sinai Hospital in Manhattan. I am an assistant professor of surgery and pediatrics at the Icahn School of Medicine. In addition to my clinical practice, I serve as a faculty coordinator of basic science surgical education, the faculty champion of well-being in the surgery residency and a member of the Icahn School of Medicine Admissions Committee.

Your fondest memory of the SMPH?

During the summer between my first and second years of medical school, I worked with Donna Katen-Bahensky (former CEO, UW Health) and Jeff Poltawsky (former president, American Family Children's Hospital) to found the Wisconsin Dance Marathon, which raises money to support

the patients and families at the American Family Children's Hospital. This experience, along with my surgical clerkships, heavily influenced my decision to pursue a career in pediatric surgery.

SMPH faculty member you most remember and why?

Dr. Peter Nichol, associate professor of surgery, took me under his wing during my pediatric surgery sub-internship and helped me become an integral part of the team. He mentored me throughout my residency, fellowship and first job search, giving me excellent insight. I always will remember how he used humor to build relationships with patients and families.

Your hobbies and interests?

I'm obsessed with theater and make regular stops around New York City to catch a Broadway, off-Broadway, or off-off-Broadway show. I also love to travel with my husband and explore new restaurants.

Family update?

I started dating my husband, Adam Wallenfang, the summer after my first year of medical school. We were married six years later in Middletown, Connecticut. After he finished his English and secondary education programs at UW-Madison, he has been teaching for 10 years in Connecticut, Miami, and now New York City. We live with our goldendoodle, Bucky, on the Upper East Side.

Goals for the WMAA?

As the New York City board member, I hope to engage alumni in our metropolitan and tri-state area so they are inspired to come together to celebrate memories of our education at the SMPH and to support the education of current and future Badger docs!

Fall Class Reunions

SPIRIT IS STRONG AMONG BADGERS

While most agree they would rather meet in person, members of nine University of Wisconsin School of Medicine and Public Health's (SMPH) MD classes held online reunions in fall 2021. The Wisconsin Medical Alumni Association (WMAA) worked with class representatives to plan and host reunions for the Classes of 1976, '81, '86, '91, '96, 2001, '06, '11 and '16.

Among those representatives was Don Selzer, MD '96, MS, FACS, FASMBS. While he was disappointed that he and former classmates would not be able

to see Madison, visit the SMPH or meet face to face, the virtual event meant he could attend without the long drive from Indianapolis after his teaching duties.

"An in-person meeting may have drawn some people who didn't make the effort to attend the virtual reunion. But with the ongoing risks of the COVID-19 pandemic, I am certain some people who attended the virtual event would not have attended in person," he observes.

Selzer says he enjoyed the opportunity to submit memorabilia and to view old photos and publications like the

Medical Muse, Prothrombin Times and programs from the Class of 1996's third-year skits, titled *Dante's Infernal Medicine*.

He concludes, "The virtual event wasn't necessarily worse than an in-person option. It was just different."

WMAA Executive Director Sarah B. Rothschild says she and her staff will continue assessing public health guidelines for events and will welcome people in person when it's safe to do so. In the meantime, they are grateful for the flexibility among alumni to meet either way.



Class of 1976

Top row (left to right): Donn Fuhrmann, Ron Woerpel, Elke Werner, John Schwartz, John McCullough. Second row: Samir Abdo, Allen Kemp, Suzanne Toce, Michael Holick, Richard Heuser. Third row: Jud Hunt, Kerry Gloss, Curtis Hancock, Bill Charboneau, Teresa Quinn. Bottom row: Jacalyn DiCello, Jim Zach, Liz Gabay, David Goetz, Michael Stiennon.



**Class of
1981**

Top row (left to right): Marc Williams, Don Rezek, Kevin Wienkers, Ed Lesnefsky, Keith Meyer. Second row: Karen Cowan, Paul Askins, Scott Gylling, Al Cheung, Patrick Remington. Third row: Linda Bavisotto, Wanda Miller-Hance, Jeffrey Brown, Lori Ventura, Juanita Halls. Bottom row: Ellen Schumann, Sandra Kamnetz. Not pictured: Scott Peschke.



**Class of
1986**

Top row (left to right): Anne Eglash, David Moen, Diane Mayland, Diane Roston. Second row: Elizabeth Petty, John Meurer, Mary Schroth, Michael Braun. Bottom row: Michael Neuman, Paul Wurst, Stephen Fox.



Class of 1991

Top row (left to right): Mary McSweeney, Anna Yonker-Sell, Dave Henningsen, David Rentmeester. Second row: Ken Chiou, David Queoff, Kim Peterson and Kristin Sanders-Gendreau, Mary Chang. Bottom row: Milka Mandich, Brita Lundberg, Betsy Trowbridge, Jonathan Berkoff.

Class of 1996

Top row (left to right): Don Selzer, Charles Vega, Gwenevere McIntosh, Craig Wilkerson, Kristine Spiewak. Second row: Jane Lykins, Kari Sheldon, Anne Jacobson, Erica Meyer, Percy Lo. Third row: Lori Wendricks, Brad Smith, Allison Pritchett, Amy Johnson, Jennifer Rho. Bottom row: John Babalola, Anne Champeaux, Kristin Miller (Hering).

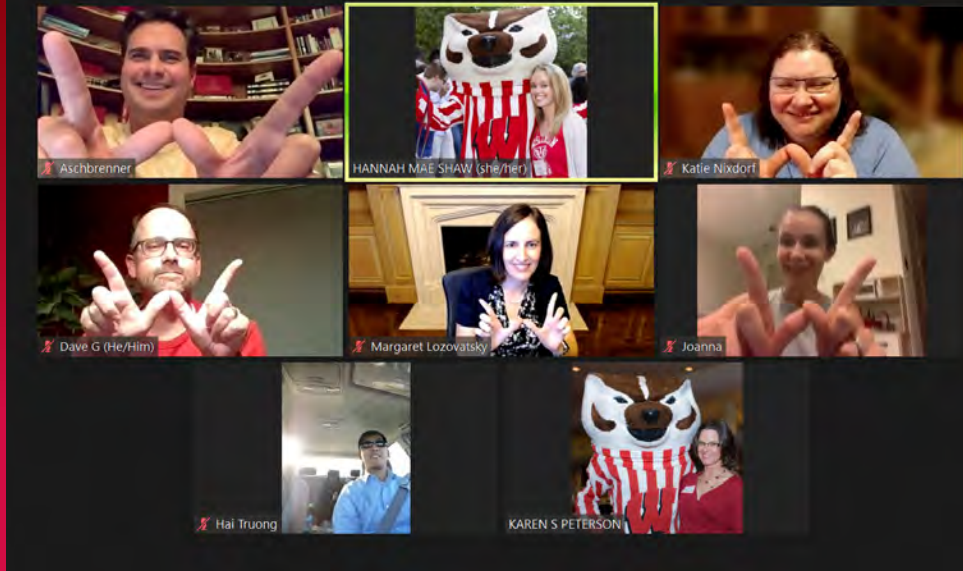


Class of 2001

Top row (left to right): Mike Zwank, Hannah Shaw (WMAA), Lyssa Chacko, Russell Fredrickson, Aimee Becker. Second row: Andreas Ostenso, Jani Jensen, Ben Pofahl, Melissa Williams, Meghan Walsh. Bottom row: Janis Tupesis, Amy Kind, Vita Kaplan, Jelena Svircev, Sarah Rothschild (WMAA).

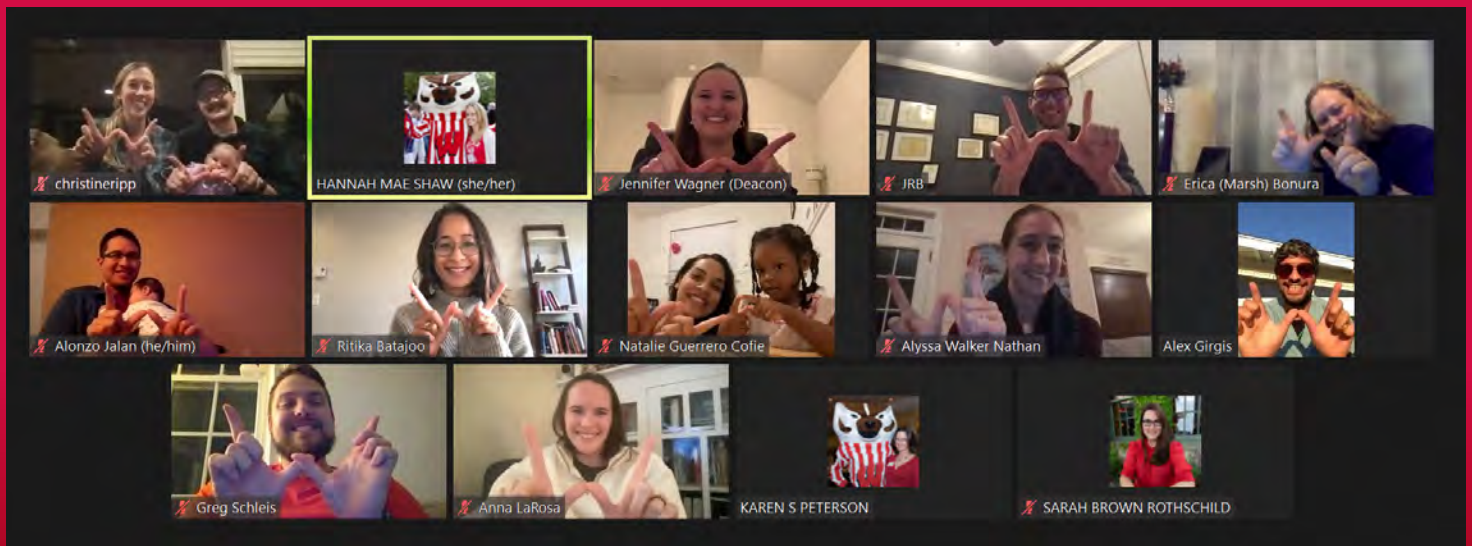
Class of 2006

Top row (left to right): Mathew Aschbrenner, Hannah Shaw (WMAA), Kathryn Nixdorf.
 Second row: Dave Gazeley, Margaret Lozovatsky, Joanna Beros. Bottom row: Hai Truong, Karen Peterson (WMAA).



Class of 2011

Top row (left to right): Matthew Lee, Hannah Shaw (WMAA), Michael Hartung, Jessica Hawley.
 Second row: Renee Kursel, John Truong, H. Clay Dean, Brian Hong. Bottom row: Robyn Gilbertson, Karen Peterson (WMAA).



Class of 2016

Top row: Christine Ripp and Phillip Mercier, Hannah Shaw (WMAA), Jennifer Deacon, Josh Bakke, Erica Bonura.
 Middle row: Alonzo Jalan, Ritika Batajoo, Natalie Guerrero Cofie, Alyssa Nathan, Alex Girgis. Bottom row: Greg Schleis, Anna LaRosa, Karen Peterson (WMAA), Sarah Rothschild (WMAA).



NATHANIEL A. CHIN, MD '10 (PG '16)

I am an assistant professor in the Department of Medicine, Division of Geriatrics, at the University of Wisconsin School of Medicine and Public Health (SMPH), and the medical director of the Wisconsin Alzheimer's Disease Research Center and the Wisconsin Registry for Alzheimer's Prevention study. I also am the associate director of the UW Health Geriatric Memory Program and run a clinic two days each week.

My patients are age 65 and older with any form of memory or thinking complaint, including Alzheimer's disease.

I am building a chronic care management model that focuses on palliative care for patients living with dementia. I collaborate with brilliant researchers to search for therapies aimed at eventually preventing dementia.

I have diagnosed patients at the earliest stage of change and cared for them throughout their course. Providing support, yet being unable to stop the cognitive and functional decline, has been humbling. I am inspired by the strength of patients and families as they embrace each new issue.

I chose this specialty after watching my father die of Alzheimer's disease. Although I never considered geriatrics in medical school at the SMPH or during my internal medicine residency at the University of California, San Diego, my father's disease changed my views. Ironically, I met my boss, Dr. Sanjay Asthana, when I was a medical student, and later, he convinced me to do a geriatrics fellowship at UW Health and offered me this faculty position.

I am a medical-science committee member of the Wisconsin Alzheimer's Association and the Alzheimer's



Foundation of America. At the SMPH, in a certificate program, I teach others how to incorporate palliative care into patient care strategies.

Geriatric medicine has never been more important because 10,000 Baby Boomers turn 65 years old each day. I love this field because we are involved in clinical care, research, leadership and policy.

ALEXIS M. EASTMAN, MD '10 (PG '13, '14)

I did all my training at the University of Wisconsin School of Medicine and Public Health (SMPH) and UW Health, and then I joined the faculty.

In my first year of medical school, I participated in a program that matched local senior citizens with student partners who would interview them and attend medical appointments with them. My partner was a retired researcher who told me hilarious stories about some of my attendings' student escapades. I was hooked on the field of geriatrics!

Now, the bulk of my clinical time is geriatric primary care. I also have a pre-operative clinic and a rural outreach memory diagnostic clinic, and I serve as the medical director of Badger Prairie Health Care Center in Verona, Wisconsin. I feel deeply connected to my patients, and my favorite moments are when I can help someone navigate the aging process and meaningfully improve their quality of life. Sometimes, this is as simple as stopping an unnecessary medication and "curing" a side effect. Other times, it's facilitating an in-depth conversation on

a new diagnosis or aging physiology, or creating a plan for proactively aging well. In the clinic, I'm always working toward "geriatric nirvana," in which we've maximized someone's health so well that at our visits, we can simply check on things and then spend time really exploring the big picture of their individual health.

What I love about geriatrics is the complexity, comprehensive nature and team-based approach. Every day, I get to think "outside the textbook" and work with my team to come up with individualized care plans that



reflect the unique physiologic changes and challenges of aging, and the broader holistic needs and goals of my patients. Even better, my patients have a wealth of experience, and I am constantly learning from them. It's a great specialty for anyone who has boundless curiosity, loves complexity and enjoys working as part of a team.

PATRICIA HARRIS, MD '95, MS '01 (PG '01, '02, '08)

My role at the University of California, Los Angeles, of all the places I've been, reminds me most of University of Wisconsin-Madison's philosophy and spirit.

I'm a geriatrician, and my average patient is about 88 years old. I manage cognitive decline and many chronic conditions, such as heart failure, diabetes, Parkinson's disease and severe arthritis for my patients. I have focused on making home visits to frail elders, so a lot of what I do focuses on including the patient's entire family and

caregivers in understanding medical and social issues that arise with advanced age.

On the bright side, a 99-year-old patient just left for Hawaii with his new love interest. His vibrancy is inspiring. On a more somber side, I met a husband and wife in the hospital after one of them fell and broke a hip, but the other had to come along due to self-neglect. Through a lot of work to arrange for a team of home care workers and my ability to make medical home visits, they went home instead of to a facility where the hospital social workers were

likely to place them. They are still my patients six years later!

Having earned my medical degree at the University of Wisconsin School of Medicine and Public Health and completed my residency and fellowship at UW Health, I'd happily do it all over again.

I chose geriatrics because I love the stories that older people tell me, I enjoy the challenge of a medically complex patient whose conditions do not adhere to what we learn in textbooks, and I appreciate helping people and their loved ones experience



the most comfortable death possible.

My specialty is intellectually challenging and personally fulfilling. The fastest growing demographic is the older person, and we are just beginning to understand the medical needs of that group, as they are no more "simply older adults" than children are "simply young adults."

Class Notes

Compiled by Andrea Larson

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

Class of 1970

Timothy J. Peterson will serve as immediate past chair of the Accreditation Association for Ambulatory Health Care (AAAHC) Board of Directors for the 2021-2022 term. AAAHC leadership consists of a peer-based team with extensive experience in various facets of patient-centered ambulatory care to help drive the association's strategic initiatives. Peterson specializes in primary care and has gained valuable insight through his more than 30 years in private practice. From 1987 to 1998, he served in various roles at the Thomas-Davis Medical Centers, ultimately serving as president and chief executive officer. Subsequently, he served as the medical director for Pima Health System, was vice president of medical affairs for Bridgeway Health Solutions and served as medical director of UnitedHealthcare Community Plan, for which he oversaw the care for long-term care members in Arizona. Peterson now is a quality management and quality improvement consultant in that state's Division of Developmental Disabilities.

Class of 1976

Dial Hewlett retired from the pharmaceutical industry in July 2019. Since then, he has served as medical director of disease control and deputy commissioner of the Westchester County



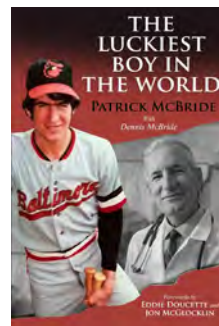
Department of Health in White Plains, New York. He is the principal investigator for a U.S. Health and Human Services grant called Advancing Health Literacy to Enhance Equitable Community Response to COVID-19, and he received the Infectious Disease Society of America Citation Award in September 2021. Hewlett also is involved in educational activities concerning the COVID-19 pandemic and vaccines through service in national organizations. The photo below is from his time at UW-Madison when he was on the Wisconsin track team, which won the Big Ten Championship in 1969. Pictured are (left to right): Mark Kartman, Mark Winzenried, Larry Floyd and Dial Hewlett.



Class of 1980

Patrick McBride published a memoir, *The Luckiest Boy in the World*, in November 2021.

As a youth, he worked in supporting roles for several professional sports teams, through which he met famous athletes, politicians and celebrities. The book describes growing up in a struggling Irish Catholic family in Milwaukee, Wisconsin, and finding mentors in professional sports who gave him the



confidence to apply to medical school. In addition, McBride notes that his mentors at UW-Madison and the UW School of Medicine and Public Health (SMPH) helped prepare him for the success he had in his career as a preventive cardiologist at UW Health and a professor of medicine at the SMPH, as well as his role as the school's associate dean for students. He also is grateful for his family.

Class of 1981

Marc S. Williams is the new president of the American College of Medical Genetics and Genomics (ACMG), the national professional organization for



clinical and laboratory genetics professionals. He has been actively involved with the ACMG for more than 20 years. During one of his early volunteer positions with the college, as chair of the Economics of Genetic Services Committee from 2000 to 2006, he helped publish the first genetic services reimbursement manual, which is still in use today. That publication became a transformative resource for a broad array of groups. Williams also served on the ACMG Board of Directors from 2007 to 2013 and as vice president for clinical genetics from 2009 to 2013, and he organized and then chaired the Special Interest Group on Quality Improvement in Clinical Genetics. Williams is a member of numerous national professional societies, including the American College of Medical Informatics (ACMI). He is one of only three individuals who have dual board certification in clinical genetics and clinical informatics, and he is the only board-certified clinical geneticist who also has been elected

as a fellow of the ACMI—a mark of his contribution to informatics research. In 2013, he was recognized by *Bio-IT World* with the Best Practice Award in Genomics Grand Prize for co-leading a project that tested a genome-phenome analyzer as a point-of-care tool to help clinicians improve diagnosis. Currently, Williams volunteers with numerous local, state and national medical informatics associations and groups. He is a professor at Geisinger Commonwealth School of Medicine and an adjunct professor of biomedical informatics at the University of Utah.

Class of 1983

David A. D'Alessio has been appointed the incoming editor in chief of *Diabetes*, the American Diabetes Association's (ADA) flagship peer-reviewed research journal. D'Alessio is a professor of medicine at Duke University, director of the Division of Endocrinology and a staff physician at the Durham Veterans Administration Medical Center. In addition to his roles at the Duke University School of Medicine, D'Alessio has consultative practices in the lipid and endocrinology clinics at Duke Hospital and the Durham VA Medical Center. He also has held faculty positions at the University of Washington and University of Cincinnati. His primary research interest is in the regulation of glucose tolerance and abnormalities that lead to type 2 diabetes, and he has research funding from the National Institutes of Health and the Veterans Administration.



Class of 2004

Tim Cordes, a board-certified general and addiction psychiatrist, has been appointed associate director of psychiatry

at UW-Madison's University Health Services (UHS), which he joined in 2018. Cordes also is a clinical associate professor with the UW School of Medicine and Public Health (SMPH). In his new UHS role, Cordes will oversee a team of eight psychiatry providers, nurses and nurse practitioners. The psychiatry clinical service had more than 4,300 patient visits during the 2020-2021 academic year. Cordes earned his medical and doctoral degrees from the SMPH.



Class of 2011

Erica Knavel Koepsel is a member of the 2021 cohort of the UW School of Medicine and Public Health's (SMPH) Centennial Scholars and Centennial Clinicians Programs. An assistant professor in the SMPH Department of Radiology's Section of Interventional Radiology, her clinical interests include MRI-guided interventions and thermal tumor ablation, while her research focuses on removing cancer and developing new MRI intervention programs. The Centennial Scholars and Centennial Clinicians Programs are designed to support departments in hiring and supporting the development of faculty from diverse groups that experience health disparities in Wisconsin. Faculty from these communities serve as visible and available role models for students and trainees, especially those from underrepresented minority backgrounds.

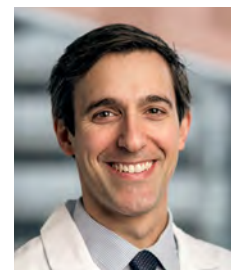


Meghan Walsh received the 2021 Parker J. Palmer Courage to Lead Award, which honors designated institutional officials

(DIOs) who have demonstrated excellence in overseeing graduate medical education (GME) programs at their sponsoring institutions. DIOs have authority and responsibility for GME programs in a teaching hospital, community hospital or other type of institution. Walsh is the chief academic officer at Hennepin Health System in Minneapolis.



Benjamin Weston received the Pandemic Hero Award from the Wisconsin Policy Forum in November 2021. He was honored for his work to create the



Milwaukee (Wisconsin) County COVID-19 Dashboard and an Evaluating Vulnerability and Equity (EVE) model. In March 2020, the Milwaukee County Office of Emergency Management created the dashboard to visualize the ever-changing landscape of the pandemic, including totals for confirmed cases, hospitalizations and deaths; daily case data; and a breakdown of all by race and ethnicity. The tool helped evaluate the effectiveness of response policies, particularly relating to communities of color. In March 2021, the office added the EVE model to drive prioritization in distributing vaccine doses to vulnerable residents. Weston is an associate professor in the Division of EMS Medicine, Department of Emergency Medicine, Medical College of Wisconsin, Milwaukee; chief health policy advisor, Milwaukee County; and director of medical services, Milwaukee County Office of Emergency Management. In medical school, he earned his MD and master of public health degrees through the path of distinction in public health, and he now speaks to current students in that path.

In Memoriam

Jack A. Peterson, MD '52
Waukesha, Wisconsin
August 17, 2021

David L. Lawrence, MD '56
Fond du Lac, Wisconsin
October 3, 2021

William C. Rouman, MD '56
Elm Grove, Wisconsin
October 7, 2021

Glenn A. Meyer, MD '60
(PG '65)
Dousman, Wisconsin
July 26, 2021

William E. Anderson, MD '63
(PG '65)
Haugen, Wisconsin
September 12, 2021

Alan L. Gordon, MD '63
New York, New York
February 27, 2021

Bruce C. Kirkham, MD '66
Egg Harbor, Wisconsin
July 30, 2021

Norval E. Bernhardt, MD '67
Madison, Wisconsin
September 12, 2021

H. Curtis Hutchens, MD '67
Duluth, Minnesota
September 27, 2021

James G. Moede, MD '73
(PG '76)
Elroy, Wisconsin
October 13, 2021

Jeffrey D. Davis, MD '74
Verona, Wisconsin
September 30, 2021

Former Faculty Member
Manucher J. Javid, MD
Madison, Wisconsin
November 8, 2021

Goodbye Dear Friend

MANUCHER J. JAVID, MD

Internationally recognized neurosurgeon Manucher J. Javid, MD—emeritus professor, University of Wisconsin School of Medicine and Public Health (SMPH)—died at age 99 on November 8, 2021, in Madison, Wisconsin.

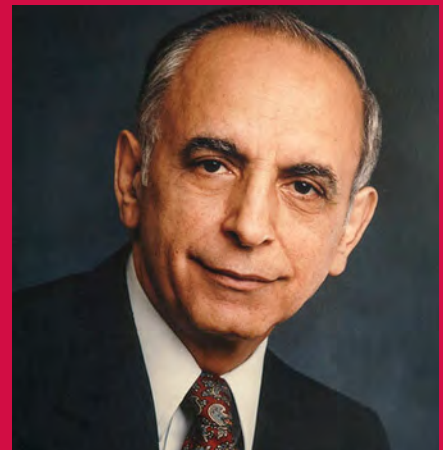
Born in Tehran, Iran, Javid earned his medical degree at the University of Illinois College of Medicine, Chicago. He completed post-graduate training there and in Boston at the Lahey Clinic, New England Medical Center and Massachusetts General Hospital.

In 1953, Javid joined the Division of Neurosurgery in the SMPH Department of Surgery, becoming its second full-time neurosurgeon. Nine years later, he became the division's second chief. In that role, he expanded the clinical and research faculty.

Javid helped the division evolve to department status in 1989 and became the inaugural chair. Ultimately, he served the division/department for 45 years and led it for 33 years. He retired in 1998.

Robert Dempsey, MD, the Manucher J. Javid Professor and chair of the Department of Neurological Surgery, says Javid was beloved by his patients. He trained myriad medical students and 36 residents, and his research contributed to many areas, including his groundbreaking work on osmotic therapy for brain edema, which has saved countless lives.

A scholar of world religions, Javid was deeply spiritual of Bahá'í Faith. Also, he was a dedicated member of the Madison Downtown Rotary since 1968. In 2018, that organization created and bestowed upon him the Mitch Javid Award



for his contribution of sponsoring the most members in the club.

Javid believed in the Rotary's four-way test: Is it the truth? Is it fair to all concerned? Will it build goodwill and better friendships? And will it be beneficial to all concerned?

"The entire SMPH community and beyond will deeply miss Dr. Javid," says Dempsey.

Gold Humanism Honor Society

VIRTUAL CEREMONY RECOGNIZES INDUCTEES

Each fall, the University of Wisconsin School of Medicine and Public Health (SMPH) honors the induction of fourth-year medical students into the Gold Humanism Honor Society (GHHS). The society is one of many programs sponsored by the Arnold P. Gold Foundation, which is devoted to elevating the principles of humanism in medicine.

Students are selected by classmates to be inducted into the society. Those inductees then elect two faculty members and a resident to join the GHHS. The induction introduces new members to others who can serve as friends and mentors.

The Gold Foundation established the GHHS in 2002 to recognize rising fourth-year medical students who have demonstrated exemplary attitudes and behaviors characteristic of the most humanistic physicians.

“The mission is to recognize and encourage the development of humanism, compassion, integrity, respect and service toward patients and colleagues,” SMPH Dean Robert N. Golden, MD, shares. “We recognize that these aspects of a physician are as important as academic and technical excellence, and we encourage our students and ourselves to develop them.”

In an August 2021 virtual ceremony, the SMPH inducted these people into the GHHS:

Fourth-Year Medical Students

- Karina Teresa Barretto
- Maxwell Butler
- Kallie Chen
- Christie Cheng
- Daniel Montes
- Trevor Cooper
- Julia DeSantis
- Thomas Enright
- Jake Faultersack
- Sofia Haile
- Jose Bien Rafaelo Hernandez



KRISTEN KOENIG/MEDIA SOLUTIONS

Fourth-year medical student Thomas Enright (left) receives his GHHS pin from Joaquin Alfonso Villaruz, a fellow honoree.

- Ben Kannenberg
- Lena Law
- Nancy Ly
- Elian Massoud
- Sean Mortenson
- Hasan Nadeem
- Angela Olvera
- Shruti Rajan
- Sydnee Rausch
- Kevin Rymut, BSN
- Rutvi Shah
- Paul Skelton
- Aniruddha Srivastava
- Joaquin Alfonso Villaruz

Resident and Faculty Members

- Salma A. Aljamal, MD, resident, Obstetrics and Gynecology, Aurora Health Care
- Ankoor Biswas, MD, Internal Medicine, Aurora Health Care
- Carol Diamond, MD, associate professor, Department of Pediatrics; Diamond also received the GHHS Leonard Tow Award

For more information and to see a video of the GHHS induction ceremony, go to <https://go.wisc.edu/smphwhitecoat>

GHHS PLEDGE

I pledge by all that I hold dear as a physician:

- I will care for my patients with compassion, respect, empathy, integrity and clinical excellence;
- I will listen to my patients with my whole being;
- I will advocate for each patient as a unique individual;
- I will serve as a role model and mentor to promote humanism in health care;
- I will remember always the healing power of acts of caring;
- I will dedicate myself to joining with others to make health care optimal for all.

Middleton Society

VIRTUAL CELEBRATION EVENT

STEADFAST SUPPORTERS AND PRESENTERS CARRY ON(LINE)

When addressing the gathering of the Middleton Society—the most ardent supporters of the University of Wisconsin School of Medicine and Public Health (SMPH)—on November 19, 2021, Dean Robert N. Golden, MD, described the “bright side” of the virtual format, including the ability to welcome people from nearly half the states in the nation without the need for travel or potential parking woes.

Next, referencing observations by the Department of Medical History and Bioethics faculty members, Golden said the 1918 influenza pandemic had a dramatic impact on the then-fledgling medical school, and he predicted that positive impacts will continue to arise out of the COVID-19 pandemic.

“Often, out of adversity come dramatic growth and opportunity. The unprecedented challenges of the 1918 Pandemic and World War I—coupled with the eventual establishment of a hospital in Madison and a nationwide move to expand and strengthen medical education—created momentum to expand our two-year, pre-clinical medical curriculum into the leading comprehensive programs of today,” he shared.

And pointing to questions being asked about the COVID-19 pandemic, such as

“Although the challenge of the pandemic continues to be great, our momentum is strong. Opportunities for action abound locally and nationally to address COVID-19-related health disparities.”

—Amy J.H. Kind, MD '01 (PG '07), PhD '11

how to improve the public health delivery system; encourage consistent adoption of virus-mitigation measures such as masking and social distancing; and prevent an unexpected future outbreak from exploding into another global pandemic, Golden said, “Ultimately, your support will help us find answers to these important questions. Your partnership in our quest to accelerate discovery, education and clinical care is a cornerstone for advancing the health of Wisconsin, our nation and the global village.”

The school's staff and faculty have worked tirelessly as they cope with the challenges imposed by COVID-19. Among them are the keynote speakers: Nasia Safdar, MD, PhD '09 (PG '00, '02),

professor, Department of Medicine; Jonathan Temte, MD '87, professor, Department of Family Medicine and Community Health; and Amy J.H. Kind, MD '01 (PG '07), PhD '11, professor, Department of Medicine.

“These speakers are national leaders whose work benefits people and populations close to home and far beyond Wisconsin. They rapidly pivoted from their already full plates to lead the battle against COVID-19 and the devastating impact of health disparities that plague our most vulnerable populations,” Golden noted.

As an expert on patient safety and health care-associated infections, Safdar provides leadership in many areas of the SMPH, UW Health and the William S. Middleton Memorial Veterans Hospital. She also is the inaugural research director of the Wisconsin Medicine Institute for Clinical Trials.

Safdar described challenges that health systems face with COVID-19, the impact of the overwhelmed health systems on the population's health and how health care systems have risen to meet those challenges.

Temte is the school's associate dean for public health and community engagement. He has been deeply involved in the public health-related COVID-19 response at all levels, ranging from local school districts



Guest speakers at the Middleton Society virtual event (left to right): Nasia Safdar, MD, PhD '09 (PG '00, '02); Jonathan Temte, MD '87, pictured with his foster kitten, Burdock; and Amy J.H. Kind, MD '01 (PG '07), PhD '11

to national policy advisory boards. With many years of experience serving on the U.S. Advisory Committee on Immunization Practices, he is serving on the U.S. Centers for Disease Control and Prevention's (CDC) COVID-19 Vaccine Work Group.

He shared that when compared to all the other infectious diseases for which vaccines exist, COVID-19 is as common as influenza and nearly as deadly as smallpox. This places COVID-19 at the high end of public health importance. He applauded the remarkably quick timeline of COVID-19 vaccine development, testing and deployment, which was achieved without sacrificing the evaluation of safety—an essential and highly important factor for a new vaccine.

Temte then described the complex relationships between SARS-CoV-2 virus transmissibility, vaccine effectiveness, a goal of herd immunity, and how all of this is challenged by the emergence of new variants. He wrapped up with considerations of where we are going, how we'll get there, and what to expect in the months and years to come as our nation and world adapt to SARS-CoV-2.

He said, "The pandemic has shown the power of public health measures and the limits of human behavior. As a highly mutable virus, SARS-CoV-2 is here to stay, and we'll need to learn to live with it."

Kind is the associate dean for social health sciences and programs, inaugural director of the new UW Center for Health

Disparities Research and executive director of the Wisconsin Partnership Program. Internationally recognized for her work on the social determinants of health and mechanistic health disparities, she described rampant health disparities in Wisconsin and the nation; the impact of disparities on COVID-19; and the best approaches for addressing them.

"I am filled with optimism when I hear about the remarkable research that is leading us forward and when I see the brave, dedicated health care providers who make daily sacrifices in caring for patients and their families."

—Dean Robert N. Golden, MD

She commented, "The COVID-19 pandemic has further highlighted long-standing health disparities experienced disproportionately by certain populations in the United States. For example, the CDC determined that Hispanic patients are at the highest risk for COVID-19 hospitalization across all regions of the nation. And in Wisconsin, poverty has been linked to intensive care unit admissions for COVID-19."

Kind continued, "In my area of mechanistic health disparities research, there is a strong philosophy of moving beyond describing the problem to embracing methods that promote action toward eliminating health disparities through clinical interventions and social policy."

Noting that several SMPH programs are responding to these needs, she stated, "Although the challenge of the pandemic continues to be great, our momentum is strong. Opportunities for action abound locally and nationally to address COVID-19-related health disparities. It is a unifying cause that needs us all, and the UW School of Medicine and Public Health remains at the forefront of this mission."

Concluding, Golden said, "Progress against the pandemic has been impressive in many ways, but we still are facing substantial challenges. I am filled with optimism when I hear about the remarkable research that is leading us forward, and when I see the brave, dedicated health care providers who make daily sacrifices in caring for patients and their families. I hope we will soon return to a 'new normal,' with a deeper appreciation of the importance of both medicine and public health, and an even deeper commitment to advancing our missions of clinical care, research, education and service."

Encouraging Mental Health Trainees

KARGES FAMILY AND RAIZMAN
VELASQUEZ SHARE A VISION

I MATCHED!

in

Psychiatry

at

UW - Madison



@wisconsinmatchday
#WisconsinMDL
#UWSMPHMatchDay



Or Raizman Velasquez, MD '21, MPH '20

by Beth Earnest

Before Or Raizman Velasquez, MD '21, MPH '20, started her medical school clinical rotation on the mental health unit at University Hospital in Madison, Wisconsin, she had never thought much about the importance of mental health and psychiatry in the medical field. Then, working side by side with residents on the unit, she listened to patients' stories and watched how their doctors cared

for and about them. That experience sparked an interest in psychiatry that grew as she took more electives.

Now, Raizman Velasquez—who earned her medical degree from the University of Wisconsin School of Medicine and Public Health (SMPH) in May 2021—is in her first year of a psychiatry residency at UW Health. And she was helped along the way by a scholarship specifically designed for a student like her.

Steve Karges, PhD, and Lynn Karges, PhD, who live in Janesville, Wisconsin, created the Karges Family Psychiatry Scholarship at the SMPH because they understand firsthand the importance of a community having quality psychiatric providers. Their daughter, Kimberly Karges, now 42, has autism and has suffered from mental health challenges since she was a teenager. While she has encountered kind, caring providers, her parents also struggled



Steve Karges, PhD (standing), Kimberly Karges (left) and Lynn Karges, PhD

at times to find a psychiatrist when she was in a medication crisis.

“One of our daughter’s providers was in private practice, and when that position was eliminated, we had to hunt for a new psychiatrist,” says Lynn Karges. “I made at least 30 calls, and none of them worked out.”

While Kimberly Karges has since been able to move past her crisis and is on a new medication regimen, her parents haven’t stopped wondering why it is so difficult to find psychiatric help. They decided to fund a scholarship at the SMPH in the hopes that it would encourage more medical students to pursue psychiatry.

Raizman Velasquez was the first medical student to receive their scholarship. Originally from Chile, she and her family moved to the United States when she was 7 years old, and they lived in California and Minnesota before settling in Indiana. She received her bachelor of science degree in biology from Indiana University in Bloomington, and subsequently

took a gap year to pursue several health care volunteer opportunities in Chile and Rwanda.

At the SMPH, Raizman Velasquez chose to enroll in the combined MD/master of public health (MPH) degree program. She completed her MPH in spring 2020 and took a short break before returning for her final year of medical school. At that time, the nation had largely shut down because of the COVID-19 pandemic, so Raizman Velasquez decided to spend her time volunteering.

She followed up on an e-mail she received from the Latino Medical Student Association about a clinic in Chicago that was seeking a bilingual volunteer to do contact tracing for people who were diagnosed with COVID-19.

“I thought it would be a great opportunity to give back to the Latinx community,” says Raizman Velasquez.

During her time volunteering in this capacity with Howard Brown Health, she received a list of patients to call every week. She helped each patient complete a survey

that asked questions about the patient’s situation—date of tests, symptoms and with whom they had been in contact right before and during their illness. She was then tasked with the challenge of getting contact information for those people, which proved to be difficult. While patients were receptive to questions about their own experiences, they were hesitant and unwilling to provide information about their friends, family members and co-workers.

“This showed me how much work the medical and public health institutions have yet to do to gain the Latinx community’s trust,” Raizman Velasquez observes. “I have learned a lot about how minority communities have a significant level of distrust in the government and medical institutions due to historical events, and with this volunteer work, I experienced firsthand how this distrust can affect these communities and their health.”

Following her psychiatry residency, Raizman Velasquez plans to become a child and adolescent psychiatrist and work in underserved communities where she can use her language skills to address cultural and language barriers.

She first met Steve and Lynn Karges during a Zoom meeting after she received the scholarship.

“That was a really big deal for me—just hearing their family’s story and why they wanted to provide financial relief for medical students,” she says. “It made the scholarship that much more meaningful.”

For the Karges family, Raizman Velasquez was exactly the right candidate to receive their scholarship.

“She fit our dream,” reflects Lynn Karges. “She has the passion, the empathy and the focus, and she wants to work with the underserved. It’s perfect for our goals.”

The Kargeses plan to continue to add money to their scholarship fund so they can help more medical students.

“I hope our scholarship helps people consider going into psychiatry,” Lynn Karges explains. “That’s what an awful lot of other people in the world need and can’t access.”

PLEASE TURN
OFF THE N₂
BEFORE
LEAVE

Four

Decades of

Innovation

DEPARTMENT OF MEDICAL PHYSICS
SHINES IN TECHNOLOGY DEVELOPMENT,
CLINICAL CARE AND EDUCATION

John R. Cameron, PhD '52, founding chair of the Department of Medical Physics

by Alyssa Mohr

In the not-too-distant past, clinical medical imaging could rely only on simple X-ray images on film. Back then, unfortunately, patients often had to undergo “exploratory surgery” to investigate illnesses beyond what physicians could learn from common clinical evaluations and X-rays. And while radiation therapy has been a tool to treat cancer for nearly 100 years, the initial methods were in their infancy. Advances beyond the early days of medical imaging and gamma-ray treatments have relied heavily on the involvement of physicists in medicine.

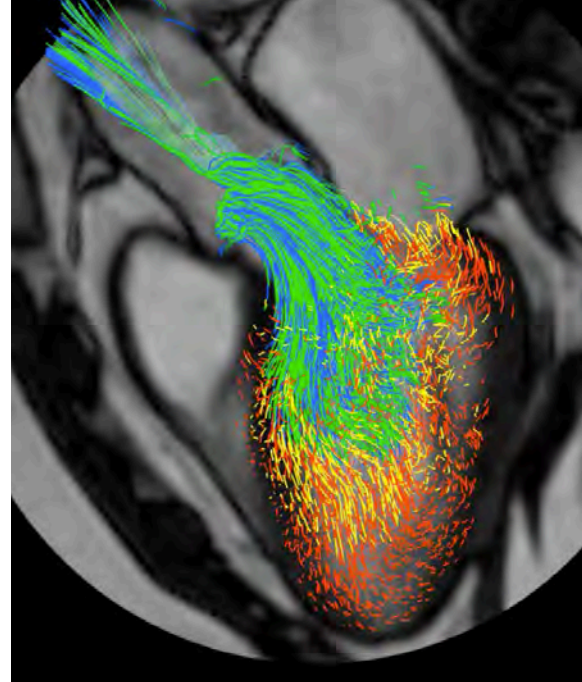
Advancements in understanding how to safely use X-ray and gamma-ray radiation—and how to protect patients from excess exposure—have led to X-ray computed tomography (CT) imaging and positron emission tomography (PET) imaging, as well as advancements in radiation therapy and treatment planning. Physicists also have been integral to the development and advancement of magnetic resonance imaging (MRI) and the use of high-frequency sound waves (ultrasound) in medical imaging.

While medical imaging and radiation therapy for cancer treatment have become

mainstream in nearly every U.S. health care facility, we pause to reflect upon researchers in the Department of Medical Physics at the University of Wisconsin School of Medicine and Public Health (SMPH) who contributed to and/or invented many aspects of today’s technology, including solutions for accurate diagnosis and optimized treatment of human disease. These teams of investigators are among the masterminds who made these celebrated technologies a reality throughout the department’s 40-year history.

Medical physics is the application of physics concepts and methods to diagnose and treat human diseases. The field combines and applies physics and math to medicine, and it is the foundation of radiology, radiation oncology and nuclear medicine. Faculty and staff in the Department of Medical Physics play an increasingly vital role in the discovery of diagnostic techniques and promising treatment modalities.

A distinguishing feature of the Department of Medical Physics is its setting within a top-tier research institution. With long-standing, close collaborations with departments across the SMPH, UW College of Engineering and other UW-Madison units, as well as with industry partners, the



In this 4D (3D spatial and time) image of blood flow in the heart, the length and color of the streamlines indicate “smoothness” and direction of flow.

Department of Medical Physics is at the forefront of building relationships to advance research, patient care and education.

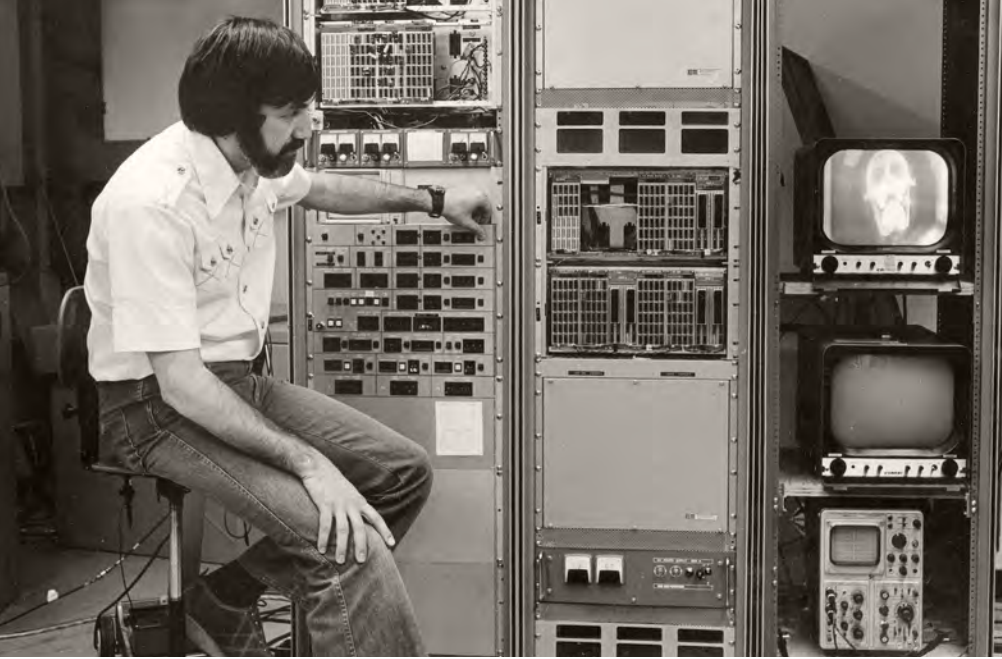
As the first stand-alone medical physics program in the United States, established in 1981, the Department of Medical Physics also trains the next generation of medical physicists through its graduate, residency and fellowship programs.

Further, notable faculty members have successfully patented and licensed numerous inventions, including:

- digital subtraction angiography, a type of X-ray fluoroscopy technique used in interventional radiology to visualize blood vessels in a bony or dense soft tissue environment;
- TRICKS high-speed MR angiography, a technique that tracks blood flow;
- Pinnacle radiation treatment planning software, now used worldwide;
- Tomotherapy, a system that delivers precise doses of radiation to tumors while allowing physicians to monitor treatment with a built-in CT scanner;
- Lunar bone mineral densitometry, which is used to detect osteoporosis; and
- ultrasound tissue-mimicking materials that are used in machine calibration, medical imaging research and surgical simulation,



Lindsay Bodart, PhD '21, views 4D cardiac ultrasound images from her thesis research.



Charles Mistretta, PhD, demonstrates radiological equipment in the early 1980s.

and ultrasound of phantoms that mimic the properties of human tissue.

The department's faculty members are among the top royalty recipients at the Wisconsin Alumni Research Foundation—UW-Madison's patenting and licensing organization—which helps advance transformative discoveries to market.

Yet, medical physicists' important work generally goes unseen by patients. Akin to the wizard from the Wizard of Oz, they use their skills "behind the curtain" to make sure patient care, including personalized medicine, is effective, accurate and efficient.

Virtually all U.S. hospitals now have medical physicists on staff to ensure quality in imaging techniques and to help administer radiation therapy. Calling upon their understanding of molecular biological processes, the SMPH's medical physics researchers are key leaders in studying how radiation affects the body; developing new radiation safety procedures; and researching options for the detection, evaluation and treatment of human diseases such as cancer, mental illness, organ failure and neurodegenerative diseases.

Housed primarily in the Wisconsin Institutes for Medical Research, the

department is conveniently attached to the Health Sciences Learning Center and Clinical Science Center, which are home to the SMPH and University Hospital, respectively.

"Together with our clinical colleagues, we advance state-of-the-art patient care by developing, validating and translating to the clinical environment novel imaging systems, minimally invasive techniques, personalized treatments and early treatment assessment. Our board-



Timothy Hall, PhD '88

certified clinical faculty members provide expert medical physics services to clinical facilities in Madison, the state of Wisconsin and beyond," notes Timothy Hall, PhD '88, interim chair of the Department of Medical Physics, who joined UW-Madison to do research as an undergraduate and earned his master's and doctorate there before he returned to campus to join the faculty in 2003.

Hall's research involves using ultrasound to describe the collagen microstructure of tissues, which provides a sense of how the tissue is organized, and how soft the tissues are (an objective surrogate for manual palpation), along with other properties.

"From information like this, we hope to reduce the need for serial biopsy to track tissue changes with disease progression or treatment," he says. "There also might be situations where this information is sufficient to avoid biopsy or even be used for disease detection and classification."

The Department of Medical Physics' history started in 1958, when John R. Cameron, PhD '52—who founded and became the first chair of that department—took on a unique joint appointment between the Department of Physics and Department of Radiology. Cameron soon began attracting physics students to study and perform research in the new area of applied physics. This process accelerated after Cameron obtained a research grant from the Atomic Energy Commission to study

In this 2012 photo—an example of the medical physics-related science seen by patients—Scott Perlman, MD (PG '85), and Christine Jaskowiak, Department of Radiology, talk to a patient who is undergoing a PET/CT scan.



thermoluminescent dosimeters and funding from the National Aeronautics and Space Administration for his work measuring bone minerals in vivo.

Cameron always credited the growth and success of the young Department of Medical Physics to John Juhl, MD (PG '49), former chair of the Department of Radiology, and colleagues in the Department of Physics for their support in allowing him the capacity to engage in this new era of research opportunities. Even today, many of the 30 faculty members in the Department of Medical Physics hold affiliate appointments in one or more clinical departments. These include the Departments of Radiology, Human Oncology, Psychiatry, Pediatrics and Medicine. Several faculty members also have joint appointments in nuclear engineering, electrical engineering and/or biomedical engineering in the UW College of Engineering.

Continuing to grow the Department of Medical Physics, Cameron recruited talented physicists—many from the UW Department of Physics—including Frank Herbert (Herb) Attix, who, with Paul M. DeLuca Jr., PhD, advanced knowledge about the interaction of ionizing radiation with matter, specifically with implications for instrumentation and radiological physics measurements; Charles (Chuck) Kelsey, PhD, who pioneered ultrasound techniques in medicine; Charles (Chuck) Mistretta, PhD, who established quantitative imaging techniques and led the team that invented digital subtraction angiography; Paul Richard (Dick) Moran, PhD, who developed methods to measure blood flow and motion in the human body using MRI; and Robert Jerome (Jerry) Nickles, PhD '68, who did pioneering work in the area of PET imaging and the use of particle accelerators for radionuclide production for nuclear medicine. It is through these and similar ongoing investigations that research has evolved to answer the call of achieving better patient care. Such collaborations also led to technologies and processes that push forward the benchmark of what medicine can do.

Many start-up companies have roots in the Department of Medical Physics. Examples are:

- Lunar BMD
- Tomotherapy
- Pinnacle Treatment Planning Software
- Standard Imaging

—continued on page 37

Pogue Becomes the New Chair

As of January 2022, Brian Pogue, PhD, is the new chair of the Department of Medical Physics at the University of Wisconsin School of Medicine and Public Health (SMPH).

An expert on innovations in medical imaging systems, Pogue has been a professor at Dartmouth College for 25 years. His National Institutes of Health-funded research centers around medical physics and biomedical engineering. This work relates to advanced optical tools that allow for advances in surgical and radiation therapy guidance, photodynamic therapy, molecular imaging and theranostics—the cutting-edge combination of the principles of therapeutics and diagnostics.

“I regard the Department of Medical Physics at the University of Wisconsin School of Medicine and Public Health as one of the crown jewels in medical physics and look forward to continuing its strong traditions,” says Pogue. “We are perfectly poised to strengthen the department even further by focusing on those aspects of medical physics where discoveries and inventions lead to engineering devices and entrepreneurship activity. This pathway advances fundamental research as well as translational tools that change the field of medicine. The education model represents the premier experience for any medical physics graduate student.”

Pogue earned his doctoral degree in medical physics from McMaster University in Canada. He completed a research fellowship at Harvard Medical School and Massachusetts General Hospital before joining the Dartmouth faculty.

Having published more than 400 peer-reviewed journal articles and taught classes in electrical and biomedical engineering, Pogue directed the master and doctoral programs in engineering intermittently from 2004 through



Brian Pogue, PhD

2019, with a four-year term as dean of graduate studies for Dartmouth College.

In 2015, he established Dartmouth's medical physics doctoral program, which is accredited by the Commission on Accreditation of Medical Physics Education Programs, and he co-founded the college's Center for Imaging Medicine, where engineers work inside the Dartmouth-Hitchcock Medical Center.

Pogue holds 12 patents with another 12 pending, and he has co-founded and led two companies. One of them, DoseOptics LLC, is advancing the world's only camera system to image radiation dose in patients receiving radiotherapy. His accolades include being elected as a fellow of the Optical Society of America, the International Society for Optics and Photonics (SPIE), and the American Institute for Medical and Biological Engineering. Additionally, he is the editor-in-chief of the *Journal of Biomedical Optics*, published by SPIE.

“We are delighted to welcome Dr. Pogue as chair of our storied Department of Medical Physics,” notes SMPH Dean Robert N. Golden, MD. “His background as a highly productive researcher, deeply respected mentor and teacher, and innovative entrepreneur will contribute to the continued evolution of this world-renowned department.”

Kalin Earns 2021 ISPNE Bruce McEwen Lifetime Achievement Award

Ned Kalin, MD, received the 2021 International Society of Psychoneuro-endocrinology (ISPNE) Bruce



McEwen Lifetime Achievement Award.

Kalin is the Hedberg Professor and chair of the Department of Psychiatry at the University of Wisconsin School of Medicine and Public Health. He is a founding co-director of the HealthEmotions Research Institute and the Lane Neuroimaging Laboratory, and he is an affiliate scientist at the Wisconsin National Primate Research Center and the Harlow Primate Laboratory.

His research focuses on uncovering basic mechanisms that relate stress to the development of psychopathology. The aim is to develop novel, scientifically informed strategies to treat anxiety disorders, with a special focus on early-life and preventive interventions for young children.

Named for a pioneering neuroscientist in the biology of stress, the prestigious Bruce McEwen Lifetime Achievement Award recognizes outstanding scientists in the field of psychoneuroendocrinology. This award joins many honors in Kalin's career, including most recently the Institute of Living/Hartford Hospital 2020 C. Charles Burlingame Award for compelling contributions to the field of psychiatry throughout his career. In 2013, he was inducted as a distinguished fellow in the American Association for the Advancement of Science; and two years later, he was elected to the National Academy of Medicine. In 2019, Kalin was named editor-in-chief of the *American Journal of Psychiatry*.

Carlsson to Chair Federal Advisory Council on Alzheimer's Disease

Cynthia Carlsson, MD (PG '98, '00, '03), a professor of medicine at the University of Wisconsin School of



Medicine and Public Health (SMPH), will serve as chair of the U.S. Department of Health and Human Services (HHS) Advisory Council on Alzheimer's Research, Care and Services for the next two years. She completed a two-year term as one of the 12 non-federal members of the council.

The council was formed in 2011 to create a national strategic plan to address the rapidly escalating Alzheimer's disease crisis. It works to coordinate research and services across agencies; accelerate the development of treatments for various dementias; improve early diagnosis and coordination of care; reduce ethnic and racial disparities in rates of dementia; and coordinate with international efforts to fight these conditions.

At UW-Madison, Carlsson is the director of the Wisconsin Alzheimer's Institute, which focuses on outreach, education, advocacy and service to improve the lives of those with dementia and of their families. She also is the clinical core leader of the Wisconsin Alzheimer's Disease Research Center. Her extensive research has focused on vascular risk factors and treatments for cognition, as well as Alzheimer's disease biomarkers in people who are at risk for dementia. She is a geriatrician who cares for veterans with memory problems at the William S. Middleton Memorial Veterans Hospital in Madison.

Team to Use Stem Cells to Study Brain Development in Down Syndrome



Although researchers know a lot about individuals with Down syndrome, they do not have a good understanding of how brain development in Down syndrome is different.

Thus, investigators at the Waisman Center, University of Wisconsin-Madison, are developing a research model based on human induced pluripotent stem cells to study how prenatal changes to brain development result in intellectual disability in people with Down syndrome. They plan to build an atlas of the prenatal cortex in Down syndrome and identify the types of neurons, synapses and molecular pathways that are altered.

Funded by an \$11 million Transformative Research grant from the National Institutes of Health, their efforts may reveal how brain development in individuals with Down syndrome differs from typically developing individuals, identify features that will help understand their intellectual disability and find potential targets for therapy.

Anita Bhattacharyya, PhD, professor of cell and regenerative biology, UW School of Medicine and Public Health (SMPH), and Su-Chun Zhang, PhD '91, professor of neuroscience and neurology—co-principal investigators of the study—are working with Daifeng Wang, PhD, professor of biostatistics and medical informatics and computer science, and André Sousa, PhD, professor of neuroscience, as well as researchers at the University of Washington-Seattle and Seattle Children's Hospital.

Pictured above, left to right, are Wang, Bhattacharyya, Zhang and Sousa.

Pulia to Lead Study of COVID-19's Impact on Antibiotic Prescribing

Michael Pulia, MD, MS, an assistant professor of emergency medicine at the University of Wisconsin School of Medicine and Public Health, will



lead a \$2.4 million, five-year research effort with a grant from the Agency for Healthcare Research and Quality (AHRQ) titled "Characterizing the ImPact of COVID-19 on Antibiotic PreScribing in Acute Care and IDentifying Resilient Stewardship Strategies (POISED)."

As the pandemic continues to overwhelm health care systems nationwide, one area of particular concern is its impact on antibiotic prescribing and the related acceleration of bacterial resistance. The extent to which COVID-19's unprecedented stress to the health care system has and will continue to affect antibiotic stewardship is unknown.

Pulia's team will examine trends in antibiotic prescribing and bacterial resistance during the pandemic using data from a nationally representative group of U.S. hospitals. The results will be combined with input from front-line health care providers and stewardship teams to develop a toolkit to enhance antibiotic stewardship resiliency during operational upheaval.

The interdisciplinary team includes representatives from the U.S. Centers for Disease Control and Prevention and Nicole Werner, PhD, director, Wisconsin Institute for Healthcare Systems Engineering.

"I am incredibly excited to work with this accomplished group of collaborators to address the impact of COVID-19 on bacterial resistance," Pulia says. "We are poised to learn critical, time-sensitive lessons about how to build resiliency into antibiotic stewardship efforts."

Kindig Selected for Population Health Excellence Award

David Kindig, MD, PhD, received the 2021 J. Michael McGinnis Leadership Excellence Award from the International



Association of Population Health Sciences (IAPHIS) in October 2021.

The award recognizes a leader whose accomplishments, commitment, values and contributions best reflect the mission of the IAPHIS, a membership organization that brings together scientists from different disciplines to advance population health. It was established in 2016.

Kindig is an emeritus professor of population health sciences at the University of Wisconsin School of Medicine and Public Health (SMPH) and emeritus vice chancellor for health sciences at UW-Madison. He was a founding co-chair of the Roundtable on Population Health Improvement of the Institute of Medicine, to which he was elected as a member in 1996. At the SMPH, he also was the co-principal investigator on the Robert Wood Johnson Foundation grant, under which the nationally renowned County Health Rankings were developed. The rankings provide a county-by-county snapshot of the many factors that influence health.

Early in his career, Kindig became the first director of the National Health Service Corp. His more than 40 years of commitment to advancing population health through education, research, policy and administration also includes chairing the federal Council of Graduate Medical Education and serving as a senior adviser to former U.S. Health and Human Services Secretary Donna Shalala, PhD.

Kind Becomes Associate Dean for Social Health Sciences and Programs

Amy J.H. Kind, MD '01 (PG '07), PhD '11, is the University of Wisconsin School of Medicine and Public Health's (SMPH) inaugural



associate dean for social health sciences and programs. A professor of medicine at the SMPH, she is an international leader in the field of health disparities research.

Kind will oversee SMPH initiatives that identify factors leading to health differences that are closely linked with social, economic and/or environmental disadvantage. These include the Center for Health Disparities Research, the Wisconsin Partnership Program and the Milwaukee-based Center for Community Engagement and Health Partnerships. She also will facilitate collaborations between basic, clinical and social scientists and serve as a resource for researchers.

Kind's appointment builds on several earlier initiatives. In 2021, she led the team that founded the Center for Health Disparities Research at UW-Madison. In 2018, she also led development of The Neighborhood Atlas, a health-disparities resource that visualizes data at the neighborhood level. The atlas has been accessed more than 500,000 times.

Health disparities are preventable differences in disease burden and access to and quality of health care due to physical, environmental and social exposures that people face.

"Dr. Kind is a remarkably strong and effective leader," says Robert N. Golden, MD, dean of the SMPH. "She possesses incredible depth and breadth of expertise in areas that are vitally important to the advancement of our school's vision."



The Strength of Clinical Trials

SAFDAR AND NUGENT JOIN FORCES TO
ENHANCE PATIENT CARE OFFERINGS

*Left to right: Nasia Safdar, MD, PhD '09 (PG '00, '02),
and Elizabeth "Betsy" Nugent, MSPH, CCRP*

by Kaine Korzekwa

It's not every day that you find perfectly complementary visionaries who can successfully co-lead an initiative. But that is what the University of Wisconsin School of Medicine and Public Health (SMPH) and UW Health found in Elizabeth "Betsy" Nugent, MSPH, CCRP, and Nasia Safdar, MD, PhD '09 (PG '00, '02), as they joined forces to play vital roles in the academic medical center's clinical trials enterprise and established the Wisconsin Medicine Institute for Clinical Trials.

The two have traveled different paths—they grew up in different countries, earned different degrees and experienced different career trajectories—but they are united by a fascination and commitment to the power and importance of clinical trials in advancing medicine and public health.

After earning a master's degree in public health from the University of Colorado Health Sciences Center, she helped lead management and innovation in clinical trials for the health care and research giant Kaiser Permanente in its Colorado region. She also is a certified clinical research professional, indicating excellence in the ethical conduct of clinical trials.

In September 2019, Nugent moved her career to the SMPH and UW Health, where she is the inaugural director of clinical trials development and accreditation, chief clinical research officer and director of the Wisconsin Medicine Institute for Clinical Trials.

"I'm a roll-up-your-sleeves type of person who gets in there and figures out a situation and how to streamline it, and that captured the attention of the team when I interviewed here," says Nugent. "I was very eager to get started, and I was a bit starstruck to be coming to the same place that houses scientists, such as Dr. Thomas Rockwell 'Rock' Mackie, who have inspired me."

Nugent also is motivated by the innovations that clinical trials exhibit and their important role in pushing medical science forward. The opportunity to be able to see firsthand these incredible discoveries gets her out of bed each morning.

"When you think about it, every device, every medication, every vaccine and every treatment that's on the market had to go through a clinical trial," Nugent observes. "Being on the cutting edge of making people's lives better is so exciting to me."

"When you think about it, every device, every medication, every vaccine and every treatment that's on the market had to go through a clinical trial. Being on the cutting edge of making people's lives better is so exciting to me."

—Betsy Nugent, MSPH, CCRP

Safdar's route to becoming a physician-scientist included earning her medical degree from Aga Khan University Medical College and completing a psychiatry internship at Sir Ganga Ram Hospital, both in Pakistan. In 1997, she moved to Madison, Wisconsin, where she completed a residency in general medicine and fellowships in infectious diseases and women's health at UW Health. Since then, she also has earned a master's degree in population health sciences and a doctorate in clinical research at the SMPH.

A professor in the SMPH Department of Medicine, Safdar has more than 15 years of experience working with clinical trials. In September 2021, she was named the inaugural associate dean for clinical trials at the SMPH and the inaugural research director of the Wisconsin Medicine Institute for Clinical Trials. She directs investigator-initiated and multi-site research for the UW Institute for Clinical and Translational Research and is the chief of research at the William S. Middleton Memorial Veterans Hospital. As an internationally recognized expert in hospital-acquired infections, she has led multiple trials to explore whether novel interventions like fecal microbiota transplantation can be used to treat *Clostridium difficile* intestinal infections. Her

seminal work includes discovering the role of multiple health system elements in contributing to the spread of *Clostridium difficile* infection.

"With a clinical trial, the idea is you have a gap that needs to be addressed so you design a very rigorous study to answer the specific question and improve patient care," Safdar explains. "I've experienced what it takes to put together a clinical trial, and I want to help others navigate the process."

The Wisconsin Medicine Institute for Clinical Trials focuses on expanding this type of research at UW-Madison, creating the optimum environment for investigator-initiated studies and industry partnerships. Industry partners, including many that have spun out of UW-Madison, often bring important treatments, drugs and devices to the table, Nugent says, emphasizing that building and maintaining these relationships is critical.

As the institute has begun to take shape, Safdar and Nugent have been using the philosophy "if you build it, they will come." Nugent is building the clinical trials infrastructure by managing operations and making sure the organization has adequate training, facilities and equipment. And Safdar is engaging scientists to come forward with their ideas for clinical trials and ensuring that care teams stand ready to assist in administering the investigations.

"Our goal is to enhance patient outcomes by building a diverse portfolio of clinical trials that allows patients in our system and beyond to participate in those trials so they can access the benefits," notes Safdar. "To do this, you must have an infrastructure that makes the work easier to do and have clinicians prepared to take it on."

Clinical trials are a narrow sliver of clinical research, usually with the goal of getting approval from the U.S. Food and Drug Administration, Nugent says, adding that the SMPH and UW Health are involved in all phases of clinical trials.

The process includes ever-increasing complexity and innovation. For instance, in integrated clinical trials, the investigation is a treatment option for patients. According to Safdar, the COVID-19 pandemic also increased the use of adaptive designs for

trials, in which information is gathered on multiple interventions and data are analyzed in real time. As the data show some interventions are ineffective, they can be let go and the trial focus shifted to more promising treatment options.

“Clinical trials are changing,” Nugent says. “These powerful methodologies were not regularly used just 20 years ago.”

Many elements of clinical trials have become household names during the COVID-19 pandemic, as an anxious world watched the incredible progress on therapies and vaccines against the novel virus. The SMPH and UW Health have been hubs for these trials, carrying out tests on convalescent plasma therapy, an antibody cocktail developed by Regeneron Pharmaceuticals, the COVID-19 vaccine produced by AstraZeneca and more. Nugent assisted in these trials, and Safdar led a study to determine whether a common oral and nasal antiseptic would help prevent COVID-19 infections in health care workers.

“Our goal is to enhance patient outcomes by building a diverse portfolio of clinical trials that allows patients in our system and beyond to participate in those trials so they can access the benefits.”

–*Nasia Safdar, MD, PhD '09*
(PG '00, '02)

UW Health physicians also awaited results of clinical trials done by others throughout the world. The way results are disseminated has started to change, notes Safdar, who uses social media to hear from others about effective treatments as soon as possible.

“To quickly and efficiently identify potential treatments, the only answer was to turn to clinical trials,” Safdar explains. “The fact that many institutions, including ours, were able to do that in a very short time frame told us that it could be done. And that’s something we want to carry forward

after the pandemic to other conditions and diseases that clinical trials need to address.”

Beyond COVID-19, trials in numerous areas have been taking place at the SMPH and UW Health. Nugent says there are 1,315 open trials that span cancer, cardiovascular and lung diseases, Alzheimer’s disease and other diseases of aging, infectious disease, neurology, pediatrics and more.

She and Safdar are strongly committed to the most important part of clinical trials: the patients. They spend a lot of time speaking to individuals about their decision to enroll in a trial and to the broader community about the importance and power of clinical trials.

“We need patients to partner in clinical trials because that’s the only way to move medicine forward,” Nugent shares. “Fortunately, in the last several years, there has been a lot more transparency around clinical trials. We aim to discuss the science with patients, get them engaged, and hear their thoughts and perspectives. I often share with patients the personal experiences my family and I have had with clinical trials.”

Making patients part of the equation also helps researchers recruit a diverse set of participants for clinical trials, a factor that is incredibly important to the research outcome. Involvement by people from groups that have been traditionally underrepresented—such as Black and Latinx individuals, and those who identify as LGBTQ+ and non-binary—is necessary for successful clinical trials. A poor trial can result in medications and interventions that do not work for the broad population, Safdar explains.

“It’s critical to involve a diverse set of participants because you want the results of

the trial to be applicable to all populations that can benefit from it,” she says. “Unless you have proper representation, it’s unlikely that the results will be particularly useful for those who weren’t part of it. We are actively working to remove barriers to access for clinical trials so we can ensure diversity.”

Safdar and Nugent also stress the value of making sure all health care providers understand and keep up with clinical trials. The SMPH and UW Health have made some trials accessible across Wisconsin and beyond, so conversations with all patients are important when conventional treatments are not effective.

“Results of trials everywhere may change how you provide care for patients,” shares Safdar. “Keeping up with the field, particularly areas that are evolving quickly, will make you a better physician because you will know about the latest and greatest and how you can change your practice in response.”

Nugent and Safdar look forward to continuing to work together to further the success of clinical trials and make the process seamless at the SMPH and UW Health, and for patients. Their co-leadership roles seek to break down hierarchies and foster the most collaborative environment possible.

“I’m very proud of the leadership team that we’ve brought together,” Nugent declares. “We are dedicated to good science, and we hold the same values. Nasia, the clinical trials leadership team and the investigators we work with are some of the most amazing leaders I could ever hope to collaborate with in clinical research.”



Undiagnosed Genetic Disease Program and Clinic *continued from page 11*

composed of the Sanford Children's Genomic Medicine Consortium, based in Sioux Falls, South Dakota.

The Center for Human Genomics and Precision Medicine's latest effort in rare diseases is a collaboration with the Division of Genetics and Metabolism in the SMPH Department of Pediatrics that resulted in creation of the UW Center for Rare Diseases. The center is co-led by Meyn and Kim Keppler-Noreuil, MD, professor, Department of Pediatrics, and chief of that department's Division of Genetics and Metabolism—an international expert in the genetics/epidemiology of rare congenital disorders and somatic vascular and overgrowth disorders.

The Center for Rare Diseases provides comprehensive medical genetics, multispecialty services and state-of-the-art diagnostics and clinical trials for a broad spectrum of patients in Wisconsin and the rest of the United States who are living with rare diseases. In November 2021, it was designated by the National Organization for Rare Disorders as one of 31 Centers of Excellence in the nation.

"We are excited to join the Center of Excellence network, and with the National Organization for Rare Disorders, we are committed to providing comprehensive, patient-centered care," Keppler-Noreuil

notes. "This is an exciting step to advance medical breakthroughs, improve care planning, and support patients, families and physicians."

The Center for Human Genomics and Precision Medicine has been increasing capacity through an expanded research facility and new investigators. In February 2020, the center and its laboratories moved into its new space of more than 9,000 square feet in a new section of the Wisconsin Institutes for Medical Research building. Soon, an additional 9,000 square feet will be added to University Hospital to support clinical research, clinical genomics and diagnostics. The center also has helped departments recruit 15 faculty members whose research programs are devoted to areas such as genome pathology and development of new diagnostic tests.

"This has been an exciting time with new faculty members developing programs, such as our Precision Medicine Research Service and planning our first Precision Medicine Symposium in 2022," says Jacalyn McHugh,



Kim Keppler-Noreuil, MD

assistant director, Center for Human Genomics and Precision Medicine.

All of this work builds on a strong historical foundation in precision medicine. For example, the Precision Medicine Molecular Tumor Board at the UW Carbone Cancer Center provides a forum for clinicians, pathologists and scientists to discuss and analyze tumor genotypes and molecular abnormalities in order to recommend therapies tailored to individual patients. The board's scope is unique.

"We're not the only institution with a molecular tumor board, but we are one of only a few now handling cases statewide, and we were among the early ones to do so," says Meyn.

The tumor board soon will begin providing expanded pediatric oncology consultations due to a new collaboration with the Hospital for Sick Children.

Having trained or been affiliated with eight different institutions throughout his career, Meyn points out that UW-Madison has unique qualities that can drive success.

He shares, "As far as our distinctiveness is concerned, we have strong international ties, which is unusual, and we're pioneers of technology. We have a technological edge because we have such strong science on this campus."

Four Decades of Innovation in Medical Physics *continued from page 31*

- Radiation Measurements, Incorporated
- Marvel MedTech
- TherVoyant
- AIQ Services
- Medical Physics Publishing

With these successful spin-off companies, a plethora of successful patented contributions to medicine and more than 900 graduate program alumni, the Department of Medical Physics has proven to be a significant contributor to the discovery of new technology, as well as the training

of radiologists and the next generation of medical physicists.

Throughout its years of growth and change, the department continues to rank among the top medical physics graduate programs in the nation.

Reflecting on the Department of Medical Physics' rich history with masterminds "behind the curtain," Hall concludes, "While I am immensely proud of our department's achievements past and present, I firmly believe the future is even brighter."



Ian Marsh, PhD '21, describes an X-ray image to youth participants at the 2019 UW-Madison Science Expeditions.

Fasting Prompts Full Benefit of Calorie Restriction

Over the last few decades, scientists have discovered that long-term calorie restriction provides substantial benefits to animals. But a new study in mice finds that calorie restriction alone is not enough; fasting is essential for mice to derive the full benefit.

Many of the advantages originally ascribed to calorie restriction alone—including better blood sugar control, protection from frailty in old age and longer lifespans—all require fasting as well. Mice who ate fewer calories without fasting didn't see the changes.

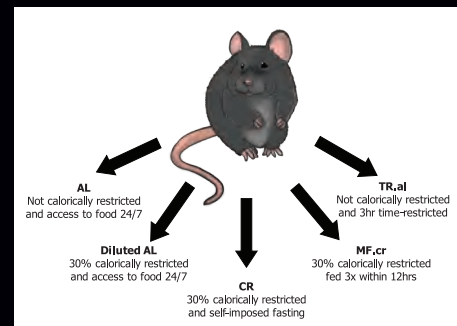
Recent research was led by Dudley Lamming, PhD, an associate professor in the Department of Medicine at the University of Wisconsin School of Medicine and Public Health, and colleagues at UW-Madison and other institutions. The team published findings in *Nature Metabolism*.

To distinguish between the effects of restricted diet versus fasting, Lamming's group designed multiple diets. One group of mice ate as much as they wanted whenever they wanted. Another group ate the full amount, but in a short time. And the other two groups

received about 30 percent fewer calories either once a day or throughout the day.

Fasting alone, without reducing the amount of food eaten, was just as powerful as calorie restriction with fasting. Also, fasting alone improved insulin sensitivity and reprogrammed metabolism to focus more on using fats as an energy source.

Surprisingly, mice that ate fewer calories but never fasted showed better blood-sugar control but died about eight months earlier on average compared to mice that ate as much as



HEIDI PAK/DEPARTMENT OF MEDICINE, DIVISION OF ENDOCRINOLOGY, DIABETES AND METABOLISM

they wanted, suggesting that calorie restriction alone may be harmful.

Lamming hopes the new study can shape future work trying to answer whether fasting improves human health.

Study May Predict Paclitaxel Treatment's Success

Paclitaxel (Taxol) has long been a standard oncology drug, but only about half of breast cancer patients treated with it see their tumors shrink or disappear. There is no way to know who will benefit. However, a recent study may change that.

An analysis of patient samples analyzed by a University of Wisconsin School of Medicine and Public Health (SMPH) research team has uncovered a key feature that renders breast cancers either vulnerable or resistant to paclitaxel treatment. The finding could be used to help

identify patients most likely to benefit.

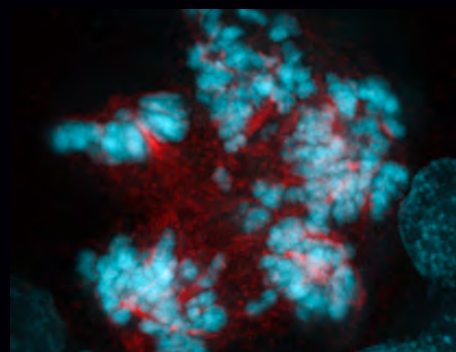
The results were published in *Science Translational Medicine*. Beth Weaver, PhD, an associate professor in the Department of Cell and Regenerative Biology, led the team. Weaver also is a member of the UW Carbone Cancer Center.

When a cell divides, the original cell's chromosomes are equally distributed between two daughter cells. If the process goes awry, this distribution becomes unbalanced, and the daughter cells have an incorrect amount of genetic material. This "chromosomal

instability" can encourage cells to divide unchecked. However, if the imbalance is extreme, the cells die.

The researchers found that patients with cancers showing chromosomal instability were more sensitive to paclitaxel and had better tumor suppression.

An earlier SMPH study found that paclitaxel amplified misdistribution in dividing cancer cells rather than preventing them from dividing. The team hypothesized that paclitaxel may exert anti-cancer effects by causing and exploiting chromosome instability.

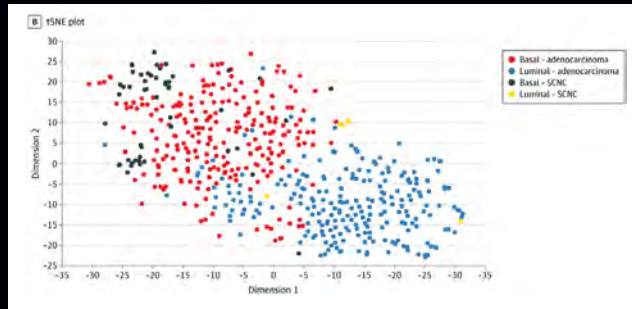


The findings may represent a major step forward in understanding the drug. Even though non-chemotherapy treatments are in development for breast cancer, paclitaxel is likely to remain a cornerstone of therapy. There's a huge advantage to identifying which patients will benefit.

Study Identifies Subtypes of Prostate Cancer

Building on earlier studies that discovered breast cancer subtypes were also clinically relevant subtypes of localized prostate cancer, researchers have identified gene expression signatures that can divide metastatic prostate tumors into two types: luminal and basal.

Luminal tumors responded better to testosterone-blocking treatments, while basal tumors did not benefit as much from hormone treatment and included the aggressive small-cell neuroendocrine prostate cancer.



“These subtypes are important because they respond to hormone therapy differently,” says Shuang Zhao, MD, assistant professor of human oncology, University of Wisconsin School of Medicine and Public Health (SMPH), who helped direct the research. “We wanted to know if the pattern extended to metastatic disease.”

Published in *JAMA Oncology*, the work was co-led by Zhao, Rahul Aggarwal, MD, University of California, San Francisco, and Nicholas Ryzdzewski, MD, radiation oncology resident, UW Health. Earlier, Zhao’s team published a report identifying luminal and basal subtypes in localized prostate cancer.

The current study looked at metastatic cancer, which is more lethal than its localized version. Using data from multiple national studies, the team assembled the largest metastatic prostate cancer cohort to date: 634 samples.

Comparing the patterns that determine whether the tumor is basal or luminal, Zhao’s team identified those types for metastatic cancer. The team also found that hormone therapies seemed to work better in the luminal tumors than in the basal tumors. They hope to develop a test that would make clinical trials more feasible.

Breaking Down Biofilm Helps Eradicate Infection

One of the most effective ways for microbes to evade our attacks is the biofilm matrix, a sticky goo that encases clusters of pathogens. This defense works; biofilms form readily on medical devices like catheters. Highly resistant to drugs, they cause infections costing tens of thousands of lives in the United States annually. There are no antimicrobials approved to treat them.

David Andes, MD (PG ’95, ’99), a professor of medicine and medical microbiology at the University of Wisconsin School of Medicine and Public Health, and collaborators

conducted a study identifying key proteins in biofilms of the fungus *Candida albicans*. The team published findings in *Nature Communications*.

While *Candida* generally poses no problem to healthy people, it can readily infect the immunocompromised. The newly identified proteins have a dual function: controlling how *Candida* resists antifungals and helping disperse the biofilm throughout the body.

Biofilms are composed of a complex soup of secretions, including proteins. When the researchers created *Candida* mutants unable to make these proteins, 13 of the 63 tested became more susceptible to

the antifungal fluconazole in lab tests.

Venous catheters left in place for months to deliver medication are prone to becoming sources of infection. The research team also investigated whether the 13 drug-sensitive fungal mutants tested remained susceptible to fluconazole in a rat model involving catheters. The drug cut fungal populations down by thirtyfold or more.

The dispersal issue remains problematic. When cells spread from the biofilm, infection risk increases significantly. The researchers found 17 mutants that affected dispersion, most promoting it. Three of these



mutants led to a more than tenfold increase in the spread of *Candida* to the rat kidneys.

Further complicating the picture is the finding that two of the mutants were more susceptible to antifungals and more likely to disperse to the kidneys.

Diversity and Equity Transformation

CREATING A PATH AND TAKING A JOURNEY TOGETHER



Ever since I started at UW Health as its first Spanish medical interpreter in 1997, I've been focused on building bridges that help connect cultures. Now that I am the inaugural associate dean for diversity and equity transformation at the University of Wisconsin School of Medicine and Public Health (SMPH), I'm viewing this opportunity as the biggest bridge yet to connect more people than ever.

The Office of Diversity and Equity Transformation integrates the work at the SMPH and UW Health to align our mission of advancing health and health equity throughout patient care, research, education and community service. With the leadership of Dean Robert N. Golden and support of numerous other individuals, we will create connections to enhance the faculty, staff and learner experience.

I deeply believe that in order to achieve the transformational change needed to create a diverse, inclusive and equity-centered SMPH, we must move from transactional work to authentic relationships. Thus, as a first step in our relationship building, I am sharing a bit about myself so you can get to know me a little better.

I was born in Iran in a family of connectors, learners, teachers and creators. My paternal grandmother, who came from a small village, did not know how to read or write, but she sure knew the importance of always living with compassion and love. My maternal grandmother was one of the first women to go to the university in Iran. She was an original feminist, and she made sure I knew as a woman that I could do and be anything to which I put my effort.

My relatives also are courageous immigrants. I left Iran as a young child with my mother and brothers amid the Iranian Revolution. My father stayed behind thinking that the unrest would be temporary, and we would be able to return soon. We ended up in Valencia, Spain, and my mother was suddenly the sole parent for three young children in a new country, not speaking the language and not knowing the culture. This is the time of my life when I learned how it feels to be “the other”—the one who doesn't know how to act, who doesn't fit in, who doesn't know how it's all going to turn out or even how to get through the day.

After spending most of my childhood and adolescence in Spain—where my father eventually was able to reunite with our family—I was granted a scholarship to come to the United States for graduate school. I fell in love with this country, of which I am now a citizen. My love for this nation also means that I want the United States to live up to its promise. I have often heard I need to blend in or assimilate into the “melting pot.” I refused to perpetuate this Eurocentric concept that prioritizes one culture over others, white over Brown and Black. Instead, I have dedicated the past 25 years to actively dismantling racism and all forms of bigotry. I strive daily to diminish for others the barriers I so vividly recall facing myself. I have discovered one key to this is building authentic relationships with people from very diverse places and perspectives.

My years of experience have shown me that with passion; strong leadership; an amazing and dedicated diversity, equity and inclusion (DEI) team; and committed colleagues, we really can change experiences and outcomes for Black, Indigenous, Latinx and other people of color, for LGBTQIA+ people and for other historically marginalized communities. The new office builds on the work already done at the SMPH and enables joint, focused strategies that will have a deeper impact at both the SMPH and UW Health than was previously possible. It makes me excited for the work to come. Specific early initiatives include:

- expanding the breadth and reach of professional development and training programs for faculty and staff;
- intentionally supporting Black, Indigenous, Latinx and other people of color and LGBTQIA+ faculty and staff;
- embedding the systemic application of an equity lens across policies and processes; and
- creating a DEI community of practice for basic sciences and clinical departments.

I often get asked how I am able to do this heavy and emotionally taxing work. This is not a job for me, this is a calling. It represents my core values. We can and must do better to transform systems so we can truly be who we say we want to be: an anti-racist organization that takes active and meaningful action to create a diverse, equitable and inclusive community where faculty, staff and learners thrive. The adage “it takes a village” is so true. We each have a role to play. My role as your associate dean is to create the path and build the bridges for us to take this journey together.

Shiva Bidar-Sielaff

Associate Dean for Diversity and Equity Transformation, UW School of Medicine and Public Health; Vice President/Chief Diversity Officer, UW Health



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), Simeon H. Wall, MD (PG '70), won the prize drawing and will receive a gift from the Wisconsin Medical Alumni Association!



HINT ABOUT PHOTO ABOVE:

She is a collector of photos and history about her classmates and alma mater.



ABOUT LAST ISSUE'S PHOTO:

In the last issue of *Quarterly*, 33 people correctly identified the photo of Louis C. Bernhardt, MD '63 (PG '68, '70), who retired from a long career practicing cardiovascular, thoracic, general and vascular surgery at Dean Clinic and St. Mary's Hospital in Madison. He earned

his medical degree and completed a surgery residency and cardiothoracic surgery fellowship at the University of Wisconsin School of Medicine and Public Health (SMPH), leading into numerous faculty appointments there. As an SMPH adjunct clinical professor, he continues to mentor medical students and residents.

Bernhardt's former medical school classmate and lab partner, Katherine Galos, MD '63—one of few female medical students at the time—credits him with being supportive of her during stressful times in medical school.

"Being [an SMPH] graduate opened up unique opportunities for me," she wrote. "And being die-hard clinicians, Lou and I have continued to practice into our 80s!"

About Bernhardt, Harvey Bock, MD '71, shared, "He influenced many medical students to consider general, cardiovascular and thoracic surgery due to his enthusiasm, skills and fellowship."

Francis W. Parnell, MD, FACS (PG '67, '70), who became an intern when Bernhardt was a resident, wrote, "Working with Dr. Bernhardt was one of my favorite memories from my years in Madison."

Peter Clagnaz, MD (PG '80, '83), described Bernhardt as "the smartest, most compassionate and most generous physician I have ever known."

Sean Shannahan, MD (PG '02)—whose dad, J. Michael Shannahan, MD (PG '76), was Bernhardt's practice partner—recalled doing rotations with Bernhardt and said, "He always seemed to enjoy being a doctor and teaching."

William Scheftner, MD '68, called him "Leaping Lou Bernhardt, MD" and noted, "He was known for his energy and knowledge, and he was the boss on 2-W (old University Hospital) for my first clinical rotation. ... His great surgical career is simply a matter of record!"

**PLEASE SHARE
YOUR NEWS!**

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 *Quarterly* magazine as space allows. Please include names, dates and locations. Photographs are encouraged.

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