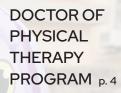
VOLUME 25 • NUMBER 3 • 2023

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

Jarerv

GO BABY GO!



WELCOME NEW MEDICAL STUDENTS p. 8 ST.OLA

PREVENTIVE MEDICINE RESIDENCY p. 10



School of Medicine and Public Health UNIVERSITY OF WISCONSIN-MADISON



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

QUARTERLY

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

MANAGING EDITOR

Kris Whitman

ART DIRECTOR

PRINCIPAL PHOTOGRAPHER John Maniaci

PRODUCTION

Michael Lemberger

Quarterly is published four times a year by the Wisconsin Medical Alumni Association (WMAA) and the University of Wisconsin School of Medicine and Public Health (SMPH).

For editorial information, call (608) 261-1034 For address corrections and to reach the WMAA, call (608) 263-4915 E-mail us at quarterly@med.wisc.edu Visit us on the web at wmaa.med.wisc.edu/quarterly/

WISCONSIN MEDICAL ALUMNI ASSOCIATION

EXECUTIVE DIRECTOR

Sarah B. Rothschild

EDITORIAL BOARD

Patrick McBride, MD '80, MPH, chair Mathew Aschbrenner, MD '06 Elizabeth Bensen, MD '92 Kathryn S. Budzak, MD '69 Christopher L. Larson, MD '75 Kyla Lee, MD '98 Gwen McIntosh, MD '96, MPH Patrick Remington, MD '81, MPH Peggy Scallon, MD '92 Jonathan Temte, MD '87 EX OFFICIO MEMBERS Robert N. Golden, MD Andrea Larson Sarah B. Rothschild Jill Watson Kris Whitman

2023-2024 BOARD OF DIRECTORS

OFFICERS Kyla Lee, MD '98, president Peggy Scallon, MD '92, president-elect Mark Fenlon, MD '84, MBA, past president Susan Isensee, MD '83, treasurer

BOARD MEMBERS

Mark Asplund, MD '82 Scott Bassuener, MD '07 Meredith Cruz, MD '05, MPH Allison J. Derrick, MD '09, MPH '09 Marvin Dingle, MD '15 (national) Kristine Flowers, MD '94 Brian Hong, MD '11 Julian Hong, MD '14 (national) Tito Izard, MD '96 Thomas Kloosterboer, MD '82 Juliane Lee, MD '94 (national) Rachel Loomans, MD '09 Patrick McBride, MD '80, MPH Gwen McIntosh, MD '96, MPH Melissa Ricker, MD '20 (fellow) Rom Stevens, MD '82 (national) Matthew Stiles, MD '03 (national) Soma Struck, MD '08 Johnny Tackett, MD '11, MHS (national) Abigail Taub, MD '12

Sarah Tevis, MD '10 (national) Ryan Wubben, MD '97 Robert Zemple, MD '12

BOARD ADVISORY COUNCIL Karen Adler-Fischer, MD '80 Mathew Aschbrenner, MD '06 Kathryn S. Budzak, MD '69 Philip Farrell, MD, PhD Donn Fuhrmann, MD '76 Kay Gruling, MD '88 Daniel Jackson, MD '03 John Kryger, MD '92 Christopher L. Larson, MD '75 Ann Liebeskind, MD '98 Steven Wiesner, MD '85

EX OFFICIO MEMBERS Robert N. Golden, MD Sarah B. Rothschild Jill Watson Kris Whitman

CALENDAR

November 2023

SUNDAY, NOVEMBER 5 Seattle Alumni Reception Dockside at Duke's

December 2023

TUESDAY, DECEMBER 12

Unfazed: The Real-Life Survival Guide to Phase 2 Health Sciences Learning Center

January 2024

WEDNESDAY, JANUARY 17

Operation: Education Health Sciences Learning Center

March 2024

FRIDAY, MARCH 15 Match Day Health Sciences Learning Center and livestream

April 2024

FRIDAY, APRIL 19 Spring WMAA Board of Directors Meeting, WMAA Scholarship Reception, and WMAA Awards Banquet

May 2024

FRIDAY, MAY 10 MD Graduate Recognition Ceremony Memorial Union and livestream

June 2024

FRIDAY, JUNE 7

Medical Alumni Day for the Classes of 1959, '64, '69, '74, and '79, and the Half-Century Society Health Sciences Learning Center and Concourse Hotel

CONNECT WITH WMAA AND ALUMNI ON SOCIAL MEDIA



Please search for @uwmedalum on Facebook and Instagram. Follow us for fun updates!



A view of the isthmus in Madison, Wisconsin, as seen from Med Flight helicopter in summer 2023. –Photo by Pete Rankin, RN

CONTENTS



DOCTOR OF PHYSICAL THERAPY PROGRAM Successful program

takes a big-picture approach to training and patient care.



WELCOME NEW MEDICAL STUDENTS

Incoming class members share a passion for community service.

- 14 Alumni Profile
- 18 Alumni Notebook
- 24 Goodbye Dear Friends
- 26 Healer's Journey
- 28 Spotlight
- 30 Awards
- 32 Faculty Profile
- 34 Research Feature
- 36 Impactful Giving
- 38 Research Advances
- 40 Perspectives



PREVENTIVE MEDICINE RESIDENCY

Trainees and alumni address a critical need in public health and preventive medicine.

ON THE COVER

A "new driver" enjoys a vehicle provided through the Go Baby Go Program, in which UW–Madison students – including those in the Doctor of Physical Therapy Program (DPT) – build and outfit cars for children whose physical limitations make it difficult to move in their environment. DPT students Tori Salaba (left) and Allison Meyer look on. –Photo by Todd Brown/Media Solutions



ROBERT N. GOLDEN, MD

Dean, University of Wisconsin School of Medicine and Public Health Vice chancellor for medical affairs, UW–Madison ur school's transformation into the nation's first school of medicine and public health was built on existing, solid foundations that support our exciting present and promising future. In this issue of *Quarterly*, you will learn about a strong pillar of that foundation – the Department of Population Health Sciences – and its highly effective chair, Maureen Durkin, PhD, DrPH.

Another glimpse into the University of Wisconsin School of Medicine and Public Health's (SMPH) history is provided in the Alumni Notebook section, which features reflections by four members of the MD Class of 1957 on their rotations at the Chicago Maternity Center. There, they learned how to deliver babies and conduct follow-up exams of newborns and moms in homes. This is an early example of our faculty and learners helping patients and populations in medically underserved areas.

You may have been drawn into another article by the cover photo of students in the Doctor of Physical Therapy Program participating in a service-learning project. Graduates of this long-standing program benefit from a "big-picture" approach that includes public and population health in their training.

The "big-picture" theme continues in the article about the Preventive Medicine Residency Program. We are proud of the program's highly competitive federal grant, attained through the leadership of the residency's new director, Elizabeth Salisbury-Afshar, MD, MPH. The fouryear Health Resources and Services Administration grant will help expand the program's partnership with federally qualified health centers and advance the greater good.

We love sharing news about our sterling faculty members. Among the highest honors available are endowed professor, chair, and fellow positions. At the Faculty Investiture Celebration, we recognized several faculty members who received these honors, along with the generous donors who made the positions possible. Their goal: advancing the recipients' dedicated efforts to understand, prevent, diagnose, treat, and eventually cure devastating diseases.

The Perspectives editorial describes how faculty members in several departments have created residency training tracks specifically to meet the needs of Wisconsin's rural communities, where physician shortages lead to poor health outcomes. Data show that training experiences in rural settings increase the likelihood that trainees will join the rural workforce after they graduate. Our programs are gaining well-deserved attention as national models for this approach.

I enjoyed reading the story about four members of the MD Class of 2010 who had myriad experiences before medical school, became housemates, and have remained lifelong friends. Since earning their medical degrees here, they have spread their wings and flown. What are the odds that four housemates would end up spanning more than 2,000 miles from Missoula, Montana, to Madison and Blue Mounds, Wisconsin, and to Asheville, North Carolina, in a wide array of specialties: plastic surgery, rural emergency care, sports medicine, and family practice?

We are proud that this year's entering medical student class is one of the most diverse in the school's history in many ways. Once again, it includes one of the highest numbers of students from Native Nations in the country. Reflecting upon the recent MD White Coat Investiture Ceremony, I appreciate the positive impact these future physicians will have for decades to come.

If these articles rekindle memories of your time at the SMPH, please consider visiting your alma mater. We will be happy to give you a personalized tour so you can add to your excitement about *your* school of medicine and public health, UW–Madison, and this beloved city as nature paints the landscape with the warm hues of autumn.

TODD BROWN/MEDIA SOLUTIONS

B eautiful fall colors are beginning to emerge in Madison, and the Wisconsin Medical Alumni Association's (WMAA) candy bowl requires a daily refill – two telltale signs that a new academic year has begun at the University of Wisconsin School of Medicine and Public Health (SMPH). Our newest class of medical students have donned their new white coats and are ensconced in their first block of the ForWard Curriculum, while our Phase 3 students are busily preparing residency program applications.

The medical students who matriculated this summer are the 11th class to be gifted stethoscopes from alumni. Several recent graduates who received stethoscopes have already become donors to the annual WMAA Stethoscope Campaign, ensuring the students who walk the path behind them have a similar warm welcome.

This fall, our alumni also are answering the call to share their expertise and time in a number of ways, including serving as preceptors, interviewing prospective medical students, helping to plan regional alumni events, discussing their fields with medical students as they consider specialties, and conducting mock interviews with fourth-year medical students. If you are interested in volunteer opportunities for alumni, please contact our team at (608) 263-4915 or **wmaa@med.wisc.edu**.

The Alumni Notebook section is full of examples of the outstanding things our graduates have done since they earned their medical degrees from the SMPH. Among them is the Max Fox Award recipient, David J. Henningsen, MD '91, whom we applaud for teaching and mentoring 50 medical students since 2006 in his family medicine practice in Rice Lake, Wisconsin. This type of work helps introduce medical students to rural practice, with the goal of easing the physician shortage in underserved parts of our state.

Our Badger physician alumni are many things: caring, dedicated, innovative - this list continues with sparkling superlatives. One word you will never see on that list is boastful. And while I am sure we can all agree that is a good thing, I do want to encourage you to brag a little to us. Who better to share your accomplishments with than your alumni association? We want to celebrate your good news - your publications, new roles, the programs you are developing and leading, the ways you are serving our global village, and more. Please consider nominating yourself for one of our WMAA awards or submitting a Class Note. It is easy to do both and more on the WMAA's new website: wmaa.med.wisc.edu.

In addition to sharing your news, you can also keep your contact information updated to ensure you hear about events in your area and at your alma mater. The WMAA recently hosted an alumni event in the Twin Cities and will be hosting similar events in Seattle, Milwaukee, and other locations over the coming months.

The website also includes the new digital home for *Quarterly*, and we encourage you to check out recent features and digital issues dating back to 2016 (with plans to add more over time). To follow what is happening at the SMPH between issues of the magazine, I encourage you to add **wmaa@med. wisc.edu** to your address book in your preferred email to be sure you receive invitations and the WMAA's bimonthly e-newsletter. Please also follow us on our social media channels on Facebook and Instagram (@uwmedalum).

As you read through this issue, I hope you are reminded that you belong to a special community as alumni of the UW School of Medicine and Public Health. If you want to become more actively involved in this community, I encourage you to reach out. On, Wisconsin!



SARAH B. ROTHSCHILD Executive director, Wisconsin Medical Alumni Association

In their laboratory work, physical therapy students practice on each other with supervision from instructors. Tori Salaba (left), a second-year student in the Doctor of Physical Therapy Program, teaches palpation skills to Izi Knoernschild (right), a first-year student who is practicing on her classmate, Sophie Alberts.

FEATURE STORY

Doctor of Physical Therapy Degree

STUDENTS LEARN TO SEE THE BIG PICTURE OF PATIENT NEEDS

eff Hartman, PT, DPT, MPH '06, says he made the best professional decision of his career when he was a physical therapist practicing in Sierra Leone in 2004. He was one of only four licensed physical therapists there immediately after a brutal, 11-year civil war. The traumatized nation was under the control of United Nations peacekeepers at the time.

"None of us were from Africa, and we estimated that there were at least 250,000 to 300,000 people who needed significant rehabilitation for every one of us who was a physical therapist," recalls Hartman, who is now an assistant professor in the Doctor of Physical Therapy (DPT) Program at the University of Wisconsin School of Medicine and Public Health (SMPH). "I quickly realized that providing physical therapy for 10 to 20 patients per day was just a drop in the bucket, and it overwhelmed me."

While Hartman began to seek out other community resources to help a larger number of people, he reconnected with friends who had completed doctorates in international development from UW–Madison; they helped him recognize what he was trying to do. Fortuitously, the SMPH was just beginning its Master of Public Health (MPH) Program. In fall 2005, he enrolled full-time in that program while still working as a physical therapist at the Madison, Wisconsin-based UnityPoint-Health – Meriter. Hartman earned his MPH degree in 2006.

His lesson in Sierra Leone about the limits of individual patient care opened Hartman to expand his knowledge and skills in public health issues: data collection and analysis; systems thinking; and the social determinants of health. Today, he is the faculty advisor for the SMPH's latest dual-degree program: DPT/MPH.

In many ways, Hartman's trajectory parallels that of the DPT Program itself. One of the oldest physical therapy programs in the United States, the program was founded in 1926. Three years later, it was one of the first three physical therapy curricula to receive national accreditation. The program, which initially granted physical therapy bachelor's degrees, evolved into a master's degree program in 1999 and a doctoral degree program in 2007.

The current program includes an intense clinical-education component supplemented by service learning and ample interprofessional education. Every student must complete 42 weeks of full-time clinical education. Classroom instruction alternates with laboratory work rather than being run concurrently.

"Hands-on skills start in the students' first semester and are built upon and advanced to specific content areas throughout the curriculum," says Jeanne Duncan, PT, DPT '98, director of clinical education in the DPT Program.

In the laboratories, students practice on each other and with patients who are brought in to illustrate specific disorders. The students also have access to the UW Health Clinical Simulation Program and the Wichman Clinical Teaching and Assessment Center. These hands-on experiences provide students with the ability to improve their psychomotor, professional, and clinical decisionmaking skills prior to entering their final internships.

DPT student Julia Schiller says her labs have included working with patients who have Parkinson's Disease, multiple sclerosis, and scoliosis, as well as those who have had strokes. Students also work with pediatric patients of all ages, including some with prosthetic limbs. As a third-year student, Schiller is working through four required nine-week rotations in which she evaluates and treats patients. Each student must complete rotations in a hospital/acutecare setting, outpatient orthopedic clinic, and neurologic-based treatment setting. The DPT Program works with approximately 450 organizations across the country for clinical training.

requires attention to factors outside the mechanics of movement – issues such as cultural competency, differing communication needs among different kinds of patients at various stages of life, and interprofessional collaboration.

Sue Wenker, PT, PhD '16, an associate professor in the SMPH Department of Family Medicine and Community Health, became director of the DPT Program after Lisa Steinkamp, Sue Wenker, PT, PT, MBA, PhD '16,

retired from that role

in 2022.



PhD '16

Wenker is a board-certified clinical specialist – emerita in geriatric physical therapy who also serves as the



During a laboratory in the Doctor of Physical Therapy Program, Colleen Cobey, PT, MS EX PHYS, a faculty associate in the program, demonstrates palpation skills on Quentin Reese, a first-year student.

While the students all receive instruction in evaluation and treatment to optimize movement, a lesson interwoven throughout the curriculum is the importance of individualizing the treatment program to the patient. This interim director of the UW Center for Interprofessional Practice and Education. She is deeply involved in developing and evaluating programs that provide opportunities for various health care professionals to work together, and she

is devoted to improving care for people living with dementia.

As a young girl, Wenker spent a lot of time as her grandfather's caretaker when he moved in with her immediate family. She explains that he likely had a form of vascular dementia, which caused him to have occasional outbursts not commensurate with the circumstances. This sparked Wenker's continuing interest in communication strategies for people living with dementia.

"I have had patients' wives accompany their husbands to the clinic and tell me, 'He's making me really angry, and I think he just wants to see how far he can push me," says Wenker, noting that she often is able to point out cognitive changes that may be happening.

As a trainer for the nonprofit organization Dementia Friends, Wenker helps families and caregivers learn and adopt effective communication techniques for these patients something she also incorporates into her practice.

"Patients who have their full cognitive capacity retain information longer and follow directions," says Wenker. "But people with cognitive impairments do not have that capacity. So, we need to better understand how to communicate with them "

She continues, "For example, do not ask open-ended questions. Also, do not correct them for things they say if you can understand them, even if they don't use the right words. Our interventions are often very similar to what we do for all patients, but we use a different way to help these patients complete tasks."

As director of the DPT Program, Wenker is attuned to the broad social factors surrounding all health care professions; these include understanding and working with diverse cultures; taking a wide look beyond "the patient in front of me" to the social conditions that may have brought that patient in; and employing technology such as telehealth, artificial intelligence, and applications to extend physical-therapy care to those with barriers to access.



Third-year students in the Doctor of Physical Therapy Program

Service Learning

Opportunities for service-learning projects provide a way for DPT students to approach some of those broad topics. While all students are required to take part in service learning as part of their seminar courses, student involvement spans a broad array of organizations and programs. For instance, DPT service work can take place at MEDiC, a UW–Madison interprofessional, student-led network of seven clinics that serve people with limited or no insurance, and those who have other barriers to accessing care. MEDiC helps many health professions learners strengthen their skills, including how to work with fellow nursing, pharmacy, physician assistant, and medical students.

The DPT Program also offers a pro bono clinic, the Dewane Neurorehabilitation Clinic, through which its students and faculty members provide physical therapy services to uninsured patients who have movement problems due to brain or spinal cord injuries such as stroke, Parkinson's Disease, and spina bifida. More than 80 percent of



A team of students from the Doctor of Physical Therapy Program work on a youth-size car as part of the Go Baby Go interprofessional, service-learning project. The cars help children whose physical limitations make it difficult to move in their environment (see photo on cover). Left to right: Tori Salaba, Allison Meyer, Jess Rosenau, Ryan Scheidt, and Hannah Koziol.

first- and second-year DPT students volunteer at the clinic. Its faculty advisor, Judith Dewane, PT, DSc, says the clinic has grown tremendously, perhaps in part because it is not a one-and-done, walk-in clinic. Instead, volunteers work with patients throughout a semester or longer.

And while most service-learning projects end with more skilled and confident students, one long-standing outreach program typically ends with fun - smiling toddlers taking test drives in ride-on cars outfitted with colorful designs of baby sharks and other cartoons. Go Baby Go is a collaborative partnership among American Family Children's Hospital, DPT and occupational therapy students, community physical therapists, and UW College of Engineering faculty and students. Working together, they build and outfit youth-size cars for children whose physical limitations make it difficult to move in their environment. In spring 2023, nine children got their own specialized car and, along with it, the ability to learn how to move on their own.

The Dual Degree

The latest major innovation in the program – the DPT/MPH dual degree – was approved in July 2019 after Amy Schubert, PT, DPT '06, director of admissions in the DPT Program, got together with faculty and staff of the MPH Program to see how the degree

-Continued on page 37

Welcome New Medical Students

THEIR PASSION FOR SERVICE SHINES BRIGHTLY

PHOTOS BY MEDIA SOLUTIONS





Opposite page: Top row (left to right): New MD students recite the Declaration of Geneva; a family smiles for a photo. Bottom row: Students show off their white coats. Above: Top row: Medical students interact at their special events, including opening a donor-sponsored gift of a stethoscope coordinated by the Wisconsin Medical Alumni Association (WMAA) (center). Bottom row: Ryan Wubben, MD '97 (center), a WMAA board member and faculty member, welcomes students; at the WMAA-hosted Badger Cookout, students pose with Bucky.

s incoming medical students described their motivation to pursue studies at the University of Wisconsin School of Medicine and Public Health (SMPH), a common theme is their desire to give back to their communities. This passion was on full display as the newest Doctor of Medicine (MD) cohort participated in their White Coat Investiture Ceremony on August 25, 2023.

The ceremony welcomes them to the medical profession and underscores the value of compassion and humanism in medicine. Receiving their first white coat symbolizes for many a dream long in the making.

Among the 171 new MD students, the majority hail from Wisconsin, the others represent at least 19 states, and half earned their undergraduate degree from a UW System institution. A third of the classmates are members of racial or ethnic groups that are underrepresented in medicine, and 14 percent were the first in their family to earn an undergraduate degree. According to Association of American Medical Colleges data, the SMPH is one of the leading MD programs in the United States for enrolling Native American students, with seven Native students representing six Native Nations in the incoming MD cohort.

Noting that the integration of public health into the MD curriculum provides insights into critical issues in health care, Dean Robert N. Golden, MD, told the students, "You will learn how to promote health, as well as diagnose and treat illness. You will learn how to take the pulse of a community, in addition to the pulse of your patient. As you discover the beautiful complexities of organ systems, you will also learn about the messy inefficiencies of health care systems. And we hope to instill in you a commitment to continue to fight against health disparities, recognizing that access to healthy living and health care is a fundamental right."

6

/

Elizabeth Salisbury-Afshar, MD, MPH

Preventive Medicine Residency

ADDRESSING A CRITICAL PUBLIC HEALTH NEED

hile much has changed in the world of public health since the University of Wisconsin School of Medicine and Public Health (SMPH) launched its Preventive Medicine Residency Program nearly a decade ago, the program's commitment to training Wisconsin's next generation of physicians has not wavered.

The Preventive Medicine Residency – with the full name of the specialty being public health and general preventive medicine – is a small but mighty program that has racked up numerous successes and graduated 16 residents. January 2023 brought a passing of the directorship torch from Patrick Remington, MD '81, MPH, professor emeritus, Department of Population Health Sciences, to Elizabeth Salisbury-Afshar, MD, MPH, associate professor, "In clinical medicine, we are trained to think about the person sitting in front of us and advocate for them. In preventive medicine, we are trained to think about the entire population."

-Elizabeth Salisbury-Afshar, MD, MPH

Departments of Family Medicine and Community Health, and Population Health Sciences. She had served as the Preventive Medicine Residency's associate program director since July 2022. With an overarching goal to improve the public health physician workforce in the state, the residency program received initial accreditation in 2014 and full accreditation in 2016 with zero citations, a rare score to achieve.

Salisbury-Afshar frames preventive medicine as training physicians in population health. She says the field aims to develop policies, systems, and resources to improve health and wellness, rather than prescribe medications.

"In clinical medicine, we are trained to think about the person sitting in front of us and advocate for them," she says. "In preventive medicine, we are trained to think about the entire population. I may have \$10 million and need to serve a population of 100,000. It is a different kind of thinking when you take what you have and make it go as far as possible for the population being served."

Career Evolution

While earning her medical degree at Rush University Medical College in Chicago, she completed rotations at the public Cook County Hospital. There, she realized early on that many patients needed something she could not prescribe.

"Individuals were in need of housing, living-wage jobs, safe communities, and healthy foods," she says. "I was involved in national advocacy work in medical school, and I had some mentors in Washington, DC, who helped me explore my passion for how these systems interact and how to influence policy. That led me to preventive medicine."

Salisbury-Afshar then completed residencies in family medicine at Illinois Masonic Medical Center in Chicago, and in preventive medicine at Johns Hopkins in Baltimore, Maryland. During the latter, she worked with the city and state health departments; her work in those departments focused on addiction, which piqued her interest in pursuing board certification in addiction medicine, in addition to family medicine and preventive medicine/public health. Even while working in public health, she has always maintained a clinical practice. She previously worked as the medical director and director of addiction services at a Chicago-based, federally qualified health center (FQHC) dedicated to providing care for individuals experiencing homelessness.

In addition to her work in public health departments in Baltimore and Chicago, Salisbury-Afshar has gained more than 13 years of experience working at FQHCs. These community health care providers are funded by the federal government to provide care in medically underserved areas. In particular, the centers receive funding from the Health Resources and Services Administration (HRSA) Health Center Program.

When Salisbury-Afshar joined the SMPH faculty in summer 2020, she immediately set to work providing clinical care and performing research, but she was interested in getting involved in preventive medicine training and, broadly, in public health.

"As soon as I arrived at UW-Madison, I learned about the Preventive Medicine Residency and looked for a way to get involved," she says.

And her involvement began at the perfect time. Remington recalls how Salisbury-Afshar initially presented a seminar to the preventive medicine residents, and this cemented her interest in the residency program.

Today at the SMPH, Salisbury-Afshar wears many hats. In addition to serving as the Preventive Medicine Residency Program director, she practices at Madison's Access Community Health Centers, consults on addiction medicine at UW Health, and serves as a core faculty member in the UW Addiction Medicine Fellowship Program. She conducts research on the implementation and evaluation of addiction-related programs. And she serves as medical director of harm reduction services for the Wisconsin Department of Health Services Division of Public Health.

"This combination of public health, clinical work, and research is my happy place," Salisbury-Afshar says.

Remington comments, "She has served in leadership roles in public health and is a practicing clinician, which is a rare combination of talents. Dr. Salisbury-Afshar shares her experience as a clinician with our residents, who continue seeing patients during our program. She has all the elements to lead this program, and I know the future is bright."

The Big Picture

Learners in the Preventive Medicine Residency focus on clinical approaches to prevention and public health, and to community health, says Salisbury-Afshar, who embodies the SMPH's integration of medicine and public health. Residents are challenged to approach a problem; understand the data behind it; plan a practice or service; and consider how it can be built, implemented, and scaled. Applicants to the program must have completed one or more years of a clinical residency before applying. Some join while they are in the middle of another residency, while others complete another residency first. The two-year program admits two residents per year, so there are four residents at any given time.

"Some physicians decide early that purely clinical medicine isn't for them," Salisbury-Afshar says. "Others do a full residency and then decide to extend their training. Still others complete a clinical internship knowing they want to apply to the Preventive Medicine Residency as soon as possible. We welcome all of them."



Elizabeth Salisbury-Afshar, MD, MPH, practices at Madison's Access Community Health Centers.

The program's first year focuses on classroom learning, and residents complete full-time coursework to earn a master of public health (MPH) degree from the SMPH – thus, every residency graduate holds an MD and an MPH or equivalent degree. Students who already have an MPH have time to complete additional practicum rotations.

Trainees spend the second year completing a variety of rotations. After required rotations at the Wisconsin Department of Health Services and Wingra Family Medical Center, the sky's the limit. Residents who want to focus on community work can partner with a local community organization, while those who are interested in data and research may explore a more traditional research project.

An upcoming project will be a collaboration with a local fire department to answer questions related to cancer screenings. A resident will work to understand why firefighters have higher rates of cancer compared to the general population and determine whether additional cancer screenings and surveillance may be needed.

"The projects our residents take on are meaningful to the partner," Salisbury-Afshar says. "The residents don't approach the projects as dropping in for three months, but instead they ask partners what questions and problems they have, so they can try to develop and implement a lasting solution or process."

Federal Grant Support

The individual attention and diverse training experiences residents receive in their rotations are almost unparalleled. However, the funds to pay residents are constantly in short supply.

Because preventive medicine residency graduates' careers are not typically focused on clinical care, the program does not receive federal funding the way clinical residencies are funded. While the program got off the ground thanks to funding from the Wisconsin Partnership Program, it is constantly having to be creative and seek additional support. Often, funding is pieced together through generous philanthropy or partnerships with other organizations, such as the William S. Middleton Memorial Veterans Hospital, where residents complete clinical rotations. Remington and Salisbury-Afshar say they have profound appreciation for



Members of the Preventive Medicine Residency Program faculty and staff pose with the 2023 residency graduates (two in center). Left to right: Parvathy Pillai, MD, MPH, associate program director; Patrick Remington, MD '81, MPH, program advisor; Jeremy Mihajlovich, DO, MPH '22 (PG '23); Sara Doyle, MD, MPH '22 (PG '23); Elizabeth Salisbury-Afshar, MD, MPH, program director; and Kelly Coffey, MS, program manager.

the Wisconsin Partnership Program and other supporters.

As the residency approaches the end of its first decade, its program leaders are thrilled to have received a highly competitive grant from the HRSA, part of the U.S. Department of Health and Human Services. The grant is targeted for preventive medicine residencies, and less than 20 programs receive a grant each cycle. With more than 50 preventive medicine residencies in the country vying for limited funding, receiving the grant – or not – can mean the difference between continuing or closing.

Salisbury-Afshar says a residency alum, Collin Pitts, MD, MPH '20 (PG '21), helped with the enormous effort of putting together the grant application. Remington recalls applying for the grant in previous years and getting approved – but ultimately being told there were insufficient funds. But in the most recent cycle, there was a new requirement that applicants must do some training at an FQHC, and Remington and Salisbury-Afshar felt the stars aligning.

"For me, personally, it was the perfect fit because I've worked in federally qualified health centers for the past 13 years," says Salisbury-Afshar. "And we were lucky that the SMPH already had a partnership with Wingra Family Medical Center, which is an FQHC that is part of Madison's Access Community Health Centers."

The residency program's goal in partnering with Wingra Family Medical Center is to support the clinic's qualityimprovement work in the residency's areas of focus. For example, residents are trained in epidemiology and biostatistics, and they can help the clinic with data analysis and interpretation to support quality-improvement efforts.

Having started in May 2023, the fouryear HRSA grant provides \$400,000 each year to help pay resident and faculty salaries, MPH tuition, and other training expenses.

Additionally, through the HRSA grant, the Preventive Medicine Residency has been able to add a preventive medicine fellow each year – a position to which a graduating resident can apply, with the goal of further training and ideally a future role in the state. Another benefit of the HRSA grant is the ability to retain Remington as an advisor so he can continue sharing expertise from his four-decade career in this field.

Alumni Success

Although the Preventive Medicine Residency Program is small, its alumni know how to punch above their weight. Several alumni work in governmental public health and administrative leadership roles in hospitals and health systems. Others enter industry roles at pharmaceutical and technology companies. And some stay in Wisconsin and keep their connections to the SMPH, serving in leadership roles of all kinds.

For instance, alumni Karina Atwell, MD, MPH '15 (PG '14, '16), an assistant professor in the Department

-Continued on page 27

Circuitous

Journeys,

Meaningful

Careers

FOUR LIFELONG FRIENDS SHARE ADVENTURES AND PHILOSOPHIES

> Celebrating their 2010 medical school graduation in the Boundary Waters (left to right) are Vincent Laurence, MD '10; Rebecca Cramer, MD '10, MPH; Joseph Hansen, MD '10; and Stephen Almasi, MD '10 (PG '13).

by Beth Pinkerton

hen four members of the University of Wisconsin School of Medicine and Public Health (SMPH) Class of 2010 – Stephen Almasi, MD '10 (PG '13); Joseph Hansen, MD '10; Vincent Laurence, MD '10; and Rebecca Cramer, MD '10, MPH – began their medical school journeys, they had amassed years of unique life experiences. An unassuming brick house on Kendall Avenue brought them together as lifelong friends.

Initially, Almasi invited Hansen and Laurence to move into that house after his previous housemates graduated.

Later, Cramer took Almasi's place when he moved in with his future wife,

Anne Kolan, MD '09 (PG '12, '13). The house continued to be a central gathering place for the original and new housemates, plus Kolan and Hansen's girlfriend, Theresa Morgan.

"It was a wonderful place. I remember other students making comments like, 'Wow, this is a real house,'" Hansen shares. "Most of our furnishings were Vince's stuff, but we all had homes and full lives before medical school, and we wanted to recreate as much of that as we could. Then a garden became another centerpiece of our lives."

Designed by Laurence and maintained by all, the garden plot in Eagle Heights kept them well-fed.



The house the friends shared on Kendall Avenue

"The plot was legendary. We made a trellis and fence," Laurence says. "We



The friends' garden plot in Eagle Heights

weren't doing the bar scene, and we lived really well."

The group had two freezers in the basement – one filled with blanched vegetables and tomato sauce, the other with venison and organic meat acquired by Hansen, who once traded venison for salmon with then-Associate Dean for Students Patrick McBride, MD '80, MPH.

Gathering around the dinner table kept the friends sane, they say.

"Everyone had wild schedules, and we were always in and out, but a lot of the time we would have dinner together, and we would sit around and talk," Cramer recalls. "It really helped get me through the last year of medical school, when things were really challenging."

They also shared their individual passions with one another. Almasi completed an Ironman Triathlon as a second-year medical student, and Hansen and Laurence biked the route with him and cheered him on. Laurence introduced Hansen to rock climbing, and the two often headed to Devil's Lake after exams. Cramer, Hansen, and Laurence frequently ran to Picnic Point, and Cramer took the group to a pool where they learned how to roll whitewater kayaks for an emergency exit. The four friends celebrated their medical school graduation with a canoe trip in the Boundary Waters.

Cramer reflects, "It was touch and go as to whether we were going to all make it until finally Vince put his foot down and said, 'We need to have a grand adventure!' So, we loaded up the canoes, and as we were driving north, it started snowing – in May! Nevertheless, we persisted! Fishing licenses weren't available until June, and it was freezing out, but it's a story I'll always remember."

Laurence and Cramer now live out of state, but Hansen and Almasi still call Wisconsin home. Although in-person visits are infrequent, Laurence calls the group "soulmates."

Almasi married Kolan, and Hansen married Morgan, and the couples have kids close in age so they connect as families a few times a year. Almasi and his family saw Laurence on a trip to Montana in summer 2023. Cramer gets together with Hansen and Almasi when she returns to Madison to visit her parents, who have maintained the beloved garden for the past 15 years, and they send Laurence a photo of the plot every year. Cramer says Laurence is always there in spirit – and he once sent her a picture he won in a raffle because it reminded him of her.

Each friend makes a conscious effort to carve out time for their individual passions – it's what helps them feel whole and able to provide the best patient care during challenging times.

"When you see a patient in crisis, have to share a difficult diagnosis, or help negotiate difficult treatment decisions, it takes emotional and physical energy," Almasi says. "To care for people in a sincere way means giving something of yourself. To sustain that ability, you must take care of yourself and replenish your energy stores. In other words, you have to do something that fills your bucket."

Almasi: From Endurance Athletics to Family/ Sports Medicine

"As an individual with diverse interests, I had a hard time finding my path," says Almasi, noting that while he did not follow a direct line to medical school, his passion for endurance



athletics led him to become a family and sports medicine physician.

Almasi originally thought he would follow his father's footsteps and become an engineer. After earning a UW–Madison bachelor of science degree in engineering in the top 20 percent of his class, he realized that his internshiprelated experiences in corporate culture did not feel like the right fit.

He had loved his undergraduate physiology courses – which aligned with his drive to push himself physically when running, biking, cross-country skiing, and swimming – so Almasi chose to earn a master of science in integrative physiology degree at the University of Colorado at Boulder. When considering career options, a friend who was in medical school suggested it might also be a good path for Almasi.

"I had always been intimidated by the idea of medicine, but seeing friends go through medical school was reassuring. It made me think, 'These are just normal people, you can do this, too,'" he shares.

The outdoor life in Colorado was appealing, but the culture did not click with Almasi's Midwestern roots. Having grown up in Waukesha, Wisconsin, and wishing to live near his family, he chose Madison for its earthy vibe, easy access to the outdoors, and top-ranked SMPH.

After earning his medical degree, Almasi completed a residency in the SMPH Department of Family Medicine and Community Health and a fellowship in primary care sports medicine at the University of Iowa Department of Family Medicine. In 2014, he returned to Madison, where he practices at Group Health Cooperative of South Central Wisconsin.

-Continued on next page

Noting that he was drawn to family medicine and sports medicine for their human-centered focus, Almasi says, "These fields are a little bit folksy. You need to be up-to-date on the science, but both are about how you relate to and communicate with people."

He enjoys the wide range of patients and the focus on prevention in family medicine, and his patients in sports medicine often see him for overuse injuries – something to which he can relate.

Almasi just completed his second Ironman Wisconsin and has finished 16 American Birkebeiners – the storied 55-kilometer cross-country ski competition that runs from Cable to Hayward, Wisconsin.

He and Kolan – a family medicine physician at UW Health and a clinical assistant professor in the SMPH Department of Family Medicine and Community Health – both practice part-time as a way to keep work-life balance. As Almasi says, "Finding medicine after a long path perhaps offered more perspective on how I wanted my career to fit into my life."

Hansen: From Wildfire Management to Emergency Medicine

Hansen's love of the great outdoors fuels his passion for rural emergency medicine and emergency medical services (EMS). Growing up in a remote area near



Eau Claire, Wisconsin, hunting and fishing are in his DNA. And while others may share his passion for rock climbing, canoeing, backpacking, and gardening, he may be the only person in the Class of 2010 who has fought wildfires.

After completing an undergraduate degree in biology at Grinnell College in Iowa, Hansen worked as a wildland firefighter for the Maryland Department of Natural Resources and served as an AmeriCorps volunteer through two fire seasons. He moved to St. Louis to do prairie restoration for the Missouri



Left to right: Stephen Almasi, MD '10 (PG '13); Rebecca Cramer, MD '10, MPH; Vincent Laurence, MD '10; Joseph Hansen, MD '10

Botanical Garden for two years before he began yearning to do something else.

In 2004, Hansen began graduatelevel ecology coursework at the University of Minnesota, but he missed the human connection. He found his volunteer work in an emergency department compelling, scientifically challenging, human-centered, and an overall great fit. So, he switched gears and called upon skills he learned through AmeriCorps to start a hazardous-tree-removal company to support himself while he completed pre-medical coursework.

Recalling his interview at the SMPH, Hansen knew that was where he wanted to be; he says, "The facility was brand new, the people were amazing, and I thought, 'I'll be so lucky if I get in here.'"

Not only did he enter the Class of 2010, his peers selected him as their graduation speaker – a testament to Hansen's work ethic and character.

Residency took Hansen to the Milwaukee-based Froedtert and Children's Hospital of Wisconsin, where he later served as the chief emergency medicine resident physician. He also served as a flight physician for the Flight for Life emergency helicopter transport program out of Waukesha and as a base physician for Milwaukee County EMS. Though practicing medicine in a major metropolitan area was challenging and interesting, Hansen felt called to get back to his small-town roots.

In 2013, he joined Madison Emergency Physicians, an independent practice that serves community hospitals and medical centers primarily in southern Wisconsin. He lives in Blue Mounds, Wisconsin – population 994 – with his wife and two children, and he splits his time between Upland Hills Health in Dodgeville, where he is the medical director of its Emergency Department, and St. Clare Hospital in Baraboo, Wisconsin; he also works at SSM Health St. Mary's Hospital – Madison a few times per year.

In addition, Hansen's role as medical director for eight rural EMS groups reflects everything he loves about rural life – wide-open spaces, living among families who have been there for generations, and a blend of selfsufficiency with reliance on neighbors.

"My EMS crews are volunteers and take turns being on call. When a pager goes off, they go help their neighbor or a stranger," he observes. "Despite the challenges to local economics and rural America, they show up. It is inspiring to work with people who are passionate about serving others."

Laurence: From Woodworking to Plastic Surgery

Noting that he entered medical school at age 45, Laurence paraphrases Grateful Dead lyrics as he says, "What a long, strange trip it's been, and that's kind of okay with me."



Service in the U.S. Marines after high school changed the trajectory of Laurence's life. When he graduated high school in 1978, he was renting a room in Florida and working for \$2.10/hour.

"I wasn't moving forward, and I needed a kick in the pants. I excelled in boot camp, and suddenly, I thought, 'I can actually do stuff.' The concept of being challenged and proving to myself that I could achieve things wasn't in my background," Laurence says.

He went on to earn a bachelor's degree, magna cum laude, in English literature at New York's Vassar College. Next, he established a career as a writer and editor for magazines and catalogs related to his true passions: woodworking, landscaping, and gardening.

As a master carpenter who loved working with his hands, he wondered if there was a way to use his skills for the greater good. While moving from woodworking to surgery seemed like a stretch, it also made perfect sense.

"You have to know what your tools are capable of and understand the steps involved in making something. There's feedback one gets when working with tools that also occurs in surgery," says Laurence. "You're working with a material and becoming comfortable and familiar with its properties. That's an experience people may not have if they haven't worked with their hands."

He devoted three and a half years preparing for this major career shift. He completed pre-medical coursework at Western Connecticut State University. He earned his Emergency Medical Technician-B certification with Emergency Training Resources in Danbury, Connecticut, and he worked as a research assistant with Yale University School of Medicine's Department of Anesthesiology. Laurence says he felt like he won the lottery when he was accepted into the SMPH.

After earning his medical degree, Laurence still had eight years of training ahead: six years as a plastic surgery resident at University of California, Irvine, and two as a reconstructive microsurgery fellow at the world-famous Chang Gung Memorial Hospital in Taiwan, where he was in a class of fellows from around the globe. Once back in the United States, he completed a fellowship in orthopedic hand surgery at the University of Pittsburgh School of Medicine.

With his training over, the Massachusetts native was looking to settle in a rural area surrounded by natural beauty. In 2018, Laurence moved to Missoula, Montana – a large town in a state with ample wide-open spaces – where he is the only plastic surgeon at Providence St. Patrick Hospital. Referring to himself as "a country plastic surgeon," he is on call for facial trauma 122 days a year, with just him and two maxillofacial surgeons covering all of western Montana, from Canada to Idaho.

"People have asked me if my long journey was worth it, and the answer is yes – maybe not financially, but definitely for my life experiences," Laurence says. "I've gotten to do incredible things, and I feel mine is a life well-lived."

Cramer: From Research in Africa to Family Medicine in Asheville

Cramer's path to family medicine was fueled by a sense of adventure. After earning an undergraduate degree in biology from Macalester College in St. Paul, Minnesota,

her primary goal was to find a way to get paid to travel.

Initially, her work as a research assistant for Population Services International (PSI) – a global health, non-profit organization based in Washington, D.C. – took her to sub-Saharan Africa. PSI had a presence in Benin, Kenya, and Uganda to promote the use of condoms and to research individual beliefs around HIV and condom use to prevent HIV transmission. Cramer worked in a clinic, analyzed data, and trained local research staff.

Her next stop was Atlanta, where she completed a master of public health degree at Emory University. She worked on HIV research teams in Zambia and completed clinical rotations at the Rwanda Zambia HIV Research Group Clinic and the University Teaching Hospital in Lusaka, Zambia.

Soon, she found herself at the proverbial fork in the road related to what she could do in research – pursue a doctorate or a medical degree.

"It was clear that the interpersonal aspect was the most satisfying and important to me. After seeing how transformative antiretroviral therapy can be for patients – I saw people go from looking like walking skeletons to being healthy and productive – I felt like medicine was the best fit for me," Cramer says.

The Madison native chose the SMPH for many reasons, among them that Wisconsin's more than 15,000 lakes and 84,000 miles of rivers and streams fed her soul. A whitewater rafting guide and a "hard-core," Class 4/5 whitewater kayaker, Cramer spent every possible weekend opportunity on the water with UW Hoofers and traveled to the Southeast to kayak. When applying to residencies, she prioritized programs in regions with access to the sports she loves.

Cramer completed a family practice residency at the Mountain Area Health Education Center in Asheville, North Carolina, a place she continues to call home. Since 2014, she has practiced at Community Family Practice.

"I enjoy hearing people's stories, and I enjoy the negotiation of treatment plans. I find the interpersonal parts of my career interesting, and I am fascinated by family medicine. I continue to see medical conditions I have never seen before and that I have to figure out," she says. "What keeps me going are the relationships I have had with patients I have seen since I graduated from my residency. Children I delivered are now 10 years old!"

In short, Cramer says being a physician feeds her soul.

"Like most things in life, I happened into this. Allowing life to happen and being open to it is what gets you where you want to be."



Learning to Deliver Babies

FOUR CLASS OF 1957 MD ALUMNI SHARE THEIR MEMORIES

First three interviews by Sue Arneson; curation and editing by Kris Whitman

During rotations at the Chicago Maternity Center Maxwell Street Dispensary, medical students from the University of Wisconsin School of Medicine and Public Health (SMPH), Northwestern University Medical School, and Chicago Medical School provided home deliveries in a medically underserved neighborhood on the near-west side of the city. Families there often lacked transportation and had limited resources.

These vignettes illustrate an educational and practical approach to care for patients in underserved communities in the 1950s. From all available accounts, the MD Class of 1957 was the last SMPH cohort to travel to Chicago for this public health obstetrics training. Grateful for their experiences in the Windy City, E. Dolf Pfefferkorn, MD '57, Theodore (Ted) Fox, MD '57, John E. McKenna, MD '57, and E. Richard Stiehm, MD '57, wanted to share their memories. Recorded interviews were conducted before Pfefferkorn and McKenna passed away in 2020 and 2023, respectively.

Clockwise from top: E. Dolf Pfefferkorn, MD '57, at the C&S Trading Company at the corner of Maxwell and Halsted Streets, where upper-level dorms housed medical students; physician and nurse teams at the Chicago Maternity Center; Paul E. Poenisch, MD '57, in Chicago.







"The history of medical education and the important roles that compassionate medical students have played in the lives of individuals and communities are vividly captured in these compelling stories. Community-based clinical education programs, like the one described here, are vital to the training of physicians and have been designed to support the health of the individuals they served. Over the years, increased awareness of inequities in health care access has impacted how clinical education is delivered and has emphasized the importance of community-engaged partnerships. Like medical schools across the country, the UW School of Medicine and Public Health has increasingly applied a health-equity lens and patient-centered approach to supervised clinical learning opportunities that offer high-quality care for patients and populations."

–Elizabeth M. Petty, MD '86 (PG '89), senior associate dean for academic affairs, SMPH, and professor, Department of Pediatrics We would spend one month in Chicago doing home deliveries and two-week check-ups, and we came back several months later to do follow-up visits. The first deliveries were anxiety producers because we had never done it before, and we were relegated to being the doctor in the house, the deliverer, and the resuscitator. For the most part, this went really well. We had backup, usually by a resident from the Chicago Medical School, but they could be anywhere from 15 minutes to an hour away.

Most deliveries seemed to come at night. We would get called in order and were paired with a medical student from Chicago. We would get our black bag, and the family would be notified that they needed to have lots of hot water, a stack of newspapers, and clean sheets available. We could stay in the house for anywhere from one to 24 hours depending on the progress of labor and how things went after the birth.

This was a most interesting time. Delivering babies on your own taught you a lot in a big hurry. Afterward, I was glad to get home to my wife, Carol.



E. Dolf Pfefferkorn, MD '57, practiced family medicine with obstetrics in Colby, Wisconsin.

The first week we were there, they gave us a course on how to set up and how to boil your instruments over the stove with a plate. At that time, I hadn't done any obstetrics work other than reading about it.

For my first case, the baby was born without any trouble, but the placenta did not deliver, and the patient began to bleed. The resident came and did a manual removal of the placenta. They brought blood and gave it to her. She did fine, but I was really scared to death.

Then on another case, I knocked on the door, and when the pregnant woman answered the door, I said, "I'm Dr. Fox from the Maternity Center." She looked at me and said, "I sent for a doctor, and they sent me a boy." I probably looked like I was about 16. And I said, "Don't worry, I'm really smart." And then I started to pray that everything would go OK. Everything went fine, and she had a nice baby.

Many times, when we would go out on a call, we would be at the home for at least 12 hours because the woman's labor did not progress quickly. And other times, things would go very rapidly. That's just the way obstetrics works.



Theodore (Ted) Fox, MD '57, practiced family medicine with obstetrics in Antigo, Wisconsin.

Much of the learning process of going to Chicago was because a lot of things could be done outside of the major university hospital setting, including obstetrics. The people there were nice, and they were always glad to see us, even if they thought we were pretty young.

The building on Maxwell Street had one phone, and the person staffing the phone would notify the "next up." They sent us out in twos, usually when someone was in labor, their water had broken, and they had decided – earlier, with their prenatal care service – that they could deliver at home.

What did we know about obstetrics? We knew you had to have the "tincture of time." A baby comes when a baby comes, and everything is OK. You can't beat that for a good feeling.

We never knew for sure what was going to be at the head of the stairs, but I enjoyed it. You would see people at their best and sometimes at their not-sobest. And I think we all sweated a little bit. But it didn't deter me from delivering probably about 2,000 babies in my career.



John E. McKenna, MD '57, practiced family medicine with obstetrics in Antigo, Wisconsin.

Excerpt from memoir:

In Madison, nearly every pregnant woman had a private obstetrician. Thus, medical students received no hands-on experience delivering babies there. You can't learn to deliver a baby by listening to a lecture or watching a delivery. Remedy: a month rotation at the Chicago Maternity Center that specialized in home deliveries – by medical students! Each team of two medical students toted a large, black suitcase of medical supplies. The "CMC" initials on the suitcase provided the team with recognition as health care professionals and respect within the community, as the mission of the center was well known.

My most memorable experience was arriving to a delivery to find the newborn baby lying between the mother's legs, with the placenta still attached. The baby had appeared 15 minutes before our arrival. We tied and cut the cord, cleaned and bundled the baby, and checked its temperature – only 95.5 degrees F. Solution: turn the kitchen oven on and hold the baby in front of the open oven where the air warmed the baby. After an hour, the baby's temperature was 98 degrees.



E. Richard Stiehm, MD '57, held academic roles in pediatrics at the SMPH and University of California, San Francisco and Los Angeles.



JONATHAN VU, MD '12 (PG '16, '17)

am working at UnityPoint Health-Meriter Hospital's Child and Adolescent Psychiatry Unit in Madison, Wisconsin. I typically work with adolescents with severe depression or anxiety who need to be hospitalized for safety, or younger children who are so aggressive that they cannot be kept safe at home.

Following my graduation from the University of Wisconsin School of Medicine and Public Health, I completed a psychiatry residency and a child and adolescent psychiatry fellowship at UW Health in Madison.

The most memorable case that I've had was during my residency. In the outpatient clinic, I met a patient who was a young woman with bipolar disorder, and she had been hospitalized years prior and stabilized with multiple antipsychotic medications and other sedating medications. She was suffering from Parkinsonism and cognitive slowing caused by overmedication, and as I helped her taper off some of her medications, she became a different person. She told

me that her young child exclaimed "Mama, you're not staring at the wall anymore!"

I participate in the American Academy of Child and Adolescent Psychiatry, and I attend the organization's annual meetings whenever I can.

Although the subspecialty of child and adolescent psychiatry was not on my radar during medical school, I chose this field because it was the most enjoyable rotation I had during my residency. I would tell any interested medical students that this specialty is great



because you can make a lasting change early in a person's life.

PAUL H. WURST, MD '86

ver the past year, I closed my online practice in child, adolescent, and adult psychiatry to assume the position of medical director at White Sands Alcohol and Drug Rehabilitation Center in Fort Myers, Florida.

The most common diagnoses that I have treated include ADHD, autism spectrum disorder, eating disorders, and mood disorders. I have consulted with burn units, cancer centers, detention centers, and community action treatment teams at community mental health centers, and I have had various teaching roles. Social media-driven psychiatric cases – including psychogenic Tourette's syndrome, pseudoseizures, eating disorders, and sexual addictions – are the most recent memorable cases I have seen. A few cases involving social media influencers have been quite complicated.

My interest in psychiatry started in high school and college while I was working as an orderly at various facilities around Madison, and my first exposure to child psychiatry occurred in the second year of my residency.

I completed an internship and PGY-2 year at the University of Wisconsin School of Medicine and Public Health's Milwaukee Clinical Campus. I transferred to the University of South Florida to complete residency training and fulfill my commitment to the U.S. Air Force. While stationed at MacDill Air Force Base, I served as a major/ chief of mental health services in Operation Desert Storm and Operation Desert Shield. I completed my child psychiatry fellowship, including research and a role as the chief fellow, at the University of South Florida.

For those interested in child psychiatry, I recommend participating in the American Academy of Child and Adolescent Psychiatry.

For half of my career, there were no cell phones



or internet. Social media presents new dilemmas, such as suicide risk, substance abuse, and social anxiety, including school phobia, for our young patients. Participating in the mental health process of these young patients requires caring, nurturing clinicians.

CATHERINE (KATIE) J. STEINGRAEBER, MD '11 (PG '16)

s an assistant professor at the University of Minnesota, I see patients in several clinics, but my "home base" is at the Masonic Institute for the Developing Brain. I split my clinical time between Integrated Behavioral Health, where I work with primary care residents to increase their comfort level managing patients with mental health diagnoses, and our Pediatric Neurodevelopmental Disorders Clinic, where I see patients with autism spectrum disorder (ASD), intellectual disabilities (ID), genetic disorders, and complex medical conditions.

I remember a 6-year-old child with ASD and ID who was struggling significantly with emotional and behavioral dysregulation to the point they were no longer able to attend school. Our clinic team was able to educate both the patient's family and school about strategies to help keep this child calm and engaged; pull in additional therapy services, including occupational therapy and speech-language therapy; and provide appropriate psychotropic medications so this child was able to successfully return to and even enjoy school.

I really struggled when choosing a specialty!

Ultimately, I chose to do a general pediatrics residency at the University of Utah prior to completing an adult psychiatry residency at UW Health in Madison. I completed a child psychiatry fellowship at the University of Minnesota. I participate in the American Academy of Child and Adolescent Psychiatry, as well as its state chapter in Minnesota.

This specialty has the potential to be incredibly rewarding. There is significant variety in the types of patients I see, as well as what each day looks like. On an average day, in addition to seeing patients, I often consult with general



pediatricians, subspecialists, family members, therapists, and teachers.

Class Notes

CLASS OF 2019

Gabrielle Waclawik

received the 2023 Department of Medicine Resident Outstanding Research Award at the University



of Wisconsin School of Medicine and Public Health (SMPH). She is the Vogelman-Carnes Family Endowed Chief Resident in the Department of Medicine. Waclawik's training and involvement in the Internal Medicine Residency Program's Health Equity Pathway has allowed her to contribute to projects on colorectal cancer screening disparities and perform research as a resident. At national meetings, she has shared innovative presentations, one of which was selected for a trainee award; she is working on the related manuscript to submit to a notable journal.

Lindsey Boyke completed a Non-Operative Pediatric Orthopedic Fellowship in the SMPH Department of Orthopedics and Rehabilitation in June 2023; in August 2023, she joined that department's faculty as an assistant professor. She also is a non-operative pediatric orthopedic physician at American Family Children's Hospital.

CLASS OF 201/

Nathan Zapolsky is the assistant medical director and trauma liaison at Maimonides Health and an assistant professor of emergency medicine with academic appointments at Hofstra Northwell, Mount Sinai, and the State University of New York Downstate College of Medicine, all in New York. Zapolsky is a former assistant program director of the emergency medicine residency at Maimonides and the former emergency department director of simulation at Staten Island University Hospital. He completed an emergency medicine residency at Mount Sinai Beth Israel. His primary clinical, simulation, and research concentrations have been on integrating residency education and emergency department operations, with a focus on post-cardiac arrest and ethics, physician finance, and reproductive health justice.

> **CLASS OF** 2012

Kathryn (Kerry) Gannon-Loew has ioined the University of Wisconsin School of Medicine and



faculty as an assistant professor in the Department of Pediatrics' Division of General Pediatrics and Adolescent Medicine. In July 2023, she opened a clinic for the treatment of teens and young adults with substance-use disorders. Gannon-Loew came to her new position following an adolescent medicine fellowship at the Nationwide Children's Hospital in Columbus, Ohio, that addressed this health issue, and she saw the opportunity to continue the work in Wisconsin. The clinic is housed in UW Health's Teenage and Young Adult Clinic in Middleton

CLASS OF 2010

Alexis **Eastman** is the

first recipient of the Aging Advocacy Award from AgeBetter, Inc., a non-profit organization based in Madison, Wisconsin, The



award honors an advocate for older adults and someone who devotes volunteer and professional time promoting healthy aging and preventing ageism. Eastman is an associate clinical professor in the SMPH Department of Medicine's Division of Geriatrics and Gerontology.

> **CLASS OF** 2009

Amy Hernandez is the co-editor of Expeditionary Surgery at Sea: A Practical Approach, which is the only collaborative, comprehensive, 750-page textbook



written by members of the maritime surgical team for members of that team. It was published in spring 2023. Hernandez lives in San Diego, California, and her most recent deployment was on the USS Makin Island (LHD8) in June 2023.

Ellen Selkie

was named the director of pediatric fellowship programs in the SMPH Department of Pediatrics. She is an assistant



professor in the Division of General Pediatrics and Adolescent Medicine.

CLASS OF 2006

Margaret Lozovatsky

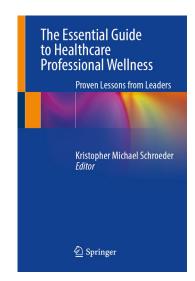
won the Changemaker in Health Care Physician Executive of the Year Award from the Healthcare Information



and Management Systems Society and Association of Medical Directors of Information Systems. She is a senior vice president and chief health informatics officer for Novant Health in Charlotte, North Carolina. Lozovatsky also practices medicine as a pediatric hospitalist.

CLASS OF 2003

Kristopher Schroeder edited The Essential Guide to Healthcare Professional Wellness: Proven Lessons from Leaders. The book, which will be available to purchase in October 2023, was crafted because health care professionals throughout the world heed a calling that compels them to devote

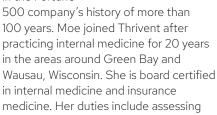


their lives to treating patients. While this work is generally rewarding, these professionals frequently fall victim to stressors and barriers that impact their ability to function at work, the longevity of their careers, and the quality of their relationships outside the hospital. The book outlines readily available sources of help. Sections are dedicated to work-life balance, family, finances, faith, resiliency, and recovery. This book aims to serve as a source of solace and inspiration that should help to reinvigorate and extend successful careers.

CLASS OF 1992

Ronelle

Moe was named chief medical director at Thrivent Financial. She is the first female to hold that position in the Fortune



mortality and morbidity risk when issuing life and disability insurance policies; providing medical opinions on claims for which nondisclosure is an issue; and providing ongoing medical education to the company's underwriters. Moe lives in De Pere, Wisconsin, with her husband and two sons.

Check Out the New WMAA and Quarterly Websites!



See You at Homecoming View event details →

New websites for the Wisconsin Medical Alumni Association (WMAA) and *Quarterly* magazine have launched. The sites were redesigned to better meet your needs. Benefits of the new WMAA site include:

- an updated events calendar;
- opportunities to volunteer;
- simple ways to support University of Wisconsin School of Medicine and Public Health and WMAA funds; and
- an easy process to nominate yourself for a WMAA award or the board of directors.

The new site for the magazine has an expanded archive of articles and a robust search feature to locate content published in the past.

Find the WMAA site at **wmaa.med.wisc.edu** and use the "*Quarterly*" button in the top navigation bar.

Goodbye Dear Friends

RONALD L. NUMBERS, PHD

world-renowned scholar, Ronald L. Numbers, PhD, died on July 24, 2023, at age 81, in Madison, Wisconsin. A professor emeritus in the Department of Medical History and Bioethics at the University of Wisconsin School of Medicine and Public Health (SMPH) and an affiliate faculty member in the Department of History in the UW College of Letters and Science, he was regarded as a thoughtful and cheerful colleague.

Numbers' work focused on the historical and sociological relationships between science and religion. He wrote six books and contributed to or edited nearly 40. His upbringing and early career in the Seventh-day Adventist Church influenced much of his work.

Numbers earned a doctorate in the history of science from University of

California, Berkeley. In 1974, he joined UW–Madison, his academic home since then. He served as chair of the SMPH Department of the History of Medicine, established in 1950 as the second of its kind in the nation. An SMPH program focused on medical ethics was founded in 1973 and is the oldest of its kind within a medical school. In 2002, the department changed its name to the Department of Medical History and Bioethics to incorporate both fields, and Numbers served a second time as chair.

At UW–Madison, Numbers was named the William Coleman Professor of the History of Science and Medicine, and the Hilldale Professor of the History of Science and Medicine. He served as president of national organizations and received a Guggenheim Fellowship, among other honors.



ROBERT STREIFFER, PHD/UW-MADISON

"We lost a dear friend and colleague. Ron Numbers was a kind, enthusiastic mentor to students and faculty members. His legacy for the history of medicine and science is unparalleled," shares Richard Keller, PhD, chair, Department of Medical History and Bioethics.

SANDRA L. OSBORN, MD '70

Badger at heart and an enthusiastic supporter of the University of Wisconsin School of Medicine and Public Health (SMPH) and Wisconsin Medical Alumni Association (WMAA), Sandra L. Osborn, MD '70, passed away on August 1, 2023, in Madison, Wisconsin. She was 86 years old.

Born in Davenport, Iowa, Osborn earned a mathematics master's degree at UW–Madison before pursuing her childhood dream of earning her medical degree from the SMPH. She completed two years of a pediatric residency at University of Iowa and the final year at UW Hospital and Clinics (now UW Health) in Madison. She practiced pediatrics at East Madison Clinic, which merged with Dean Clinic; she continued practicing there and at St. Mary's Hospital until she retired in 2002.

Osborn served as president of the WMAA Board of Directors from 2006 to 2008, and she devoted years of service on the WMAA Advisory Council and the *Quarterly* Editorial Board. In 2011, she received the WMAA Service Award. She also served as vice president, president, and emeritus president of the Wisconsin Medical Society.

"Dr. Osborn was a dedicated alumna who continuously sought opportunities to serve her alma mater. She will be long remembered for her contributions to the WMAA, the school, and generations of students," reflects WMAA Executive Director Sarah B. Rothschild.

Known for her ready smile, Osborn also was highly regarded by colleagues and patients.

"Besides being an excellent physician and medical leader, Sandra enjoyed the arts, especially music. I will always be thankful for her introducing me to the Lyric Opera in Chicago, and we made many trips because neither of our spouses liked opera," says Paul A. Wertsch, MD '70; he and Osborn were MD Class of 1970 co-representatives.



Osborn asked that memorials be directed to the WMAA Stethoscope Program made payable to "UW Foundation" with a note to direct the gift as a tribute to the WMAA Stethoscope Fund #112587891. Mail checks to UW Foundation, U.S. Bank Lockbox Box 78807, Milwaukee, WI, 53278-0807. Gifts also can be made online at give.wiscmedicine.org/stethoscope.

LINCOLN F. RAMIREZ, MD, PHD

nown as a student of the world, Lincoln F. Ramirez, MD, PhD, passed away on August 7, 2023, in Madison, Wisconsin. He was 84 years old and was an emeritus professor in the University of Wisconsin School of Medicine and Public Health (SMPH) Department of Neurological Surgery.

Ramirez earned his medical and doctoral degrees at University of Illinois Medical School, where he met his wife of 50 years, Carolyn L. Bell, MD, now an SMPH professor emerita. They moved to Boston and completed their residency training before relocating to Madison, where they lived since 1979.

Ramirez joined the SMPH Department of Neurological Surgery and made many contributions there and at UW Health. He was considered an outstanding teacher and mentor for medical students and residents. For many years, Ramirez oversaw the successful Neurological Surgery Residency Program. He also conducted research in epilepsy and movement disorders. In 2018, the Lincoln F. Ramirez Neurosurgery Operative Skills Laboratory was dedicated in his honor to ensure continued anatomic education for future neuroscientists.

Ramirez had passions for opera, the art of lawn care, downhill skiing, bird watching, and cooking, but his greatest love was that of his family. He took pride in sharing his passions with them and in their accomplishments.

"Dr. Ramirez's work was an inspiration to all of us. He lived a life epitomized by his remarks at the opening of the Lincoln F. Ramirez Neurosurgery Operative Skills Laboratory, where he encouraged us to improve our patients' outcomes, saying 'the study of the brain is a privilege, and the practice of neurosurgery is an honor," recalls Robert J. Dempsey, MD, chair, Department of Neurological Surgery.



Ramirez's family is directing donations to the Neurological Surgery Research and Education Fund #132582512. Checks can be made payable to "UW Foundation" with a note about that fund. Mail checks to UW Foundation, U.S. Bank Lockbox Box 78807, Milwaukee, WI 53278-0807. Gifts also can be made online at supportuw.org/ giveto/neuroanatomylab.

In Memoriam

Greta H. Camel, MD '49 May 26, 2023 Saint Louis, Missouri

Robert J. Samp, MD '51 August 12, 2023 Middleton, Wisconsin

Harold G. Danford, MD '52 June 20, 2023 Omaha, Nebraska

Ralph N. Olsen, MD '54 July 9, 2023 West Bend, Wisconsin

Edward J. Pezanoski, MD '54 July 30, 2023 Green Bay, Wisconsin

Orrin N. Arneson, MD '56 May 22, 2023 Rice Lake, Wisconsin Gordon L. McComb, MD '58 September 11, 2021 Salem, Oregon

Jack M. Perlman, MD '60 February 27, 2023 Louisville, Kentucky

Mark D. Biehl, MD '62 May 17, 2023 Jackson, Wisconsin

Ronald E. Burmeister, MD '62 July 20, 2023 Rockford, Illinois

Walter F. Piering, MD '62 July 3, 2023 Waukesha, Wisconsin

George A. McAuley, MD '63 May 25, 2023 Los Angeles, California Frank M. Weinhold III, MD '66 June 19, 2023 Stilwell, Kansas

Michael J. Padwick, MD '67 June 6, 2023 St. George, Utah

Thomas F. Taylor, MD '67 May 26, 2023 Oconomowoc, Wisconsin

Thomas N. Roberts, MD '68 March 10, 2023 La Crosse, Wisconsin

Lucy Salomon, MD '68 May 21, 2023 San Francisco, California

John E. Yount, MD '68 July 5, 2023 Portland, Oregon Eric S. Jacobson, MD '70 August 4, 2023 Lottsburg, Virginia

Sandra L. Osborn, MD '70 August 1, 2023 Madison, Wisconsin

FORMER FACULTY MEMBERS

Ronald L. Numbers, PhD July 24, 2023 Madison, Wisconsin

Lincoln F. Ramirez, MD, PhD August 7, 2023 Madison, Wisconsin



Reflections of a White Coat

by Sarah Reck, MD '06

few years ago, while cleaning my house, I came across white coats from each phase of my career. I am not sure why I had kept one from each place I had worked because they were useless outside of the institution bearing each organization's name. However, I felt nostalgic as I recalled the millions of things I had learned and seen while cloaked in that fabric.

I distinctly remember the beautiful fall day in Madison, Wisconsin, when I attended the White Coat Ceremony for the MD Class of 2006. Walking across the stage to receive my long-anticipated white coat was the culmination of years of hard work and perseverance. I was finally crossing the threshold into the noble career of medicine!

Little did I know how the meaning of that white coat and my many emotions about it would evolve. That first white coat represented the beginning of my career and life-long learning process. The pockets of the short white coat were quickly crammed with the manuals that I grasped the first times I was asked to write an admission history, to jog my memory of all the important things I needed to include.

By graduation from medical school, that white coat had become worn, and the manuals had become dog-eared while I committed to memory the information they held. These were signs that I was ready to graduate and don the long white coat of a newly minted doctor.

My first long white coat bore the emblem of the Indiana University Department of Surgery, where I had matched into a general surgery residency. Again, the pockets were shoved full of learning tools, including some relics of my medical school days to help alleviate the trepidation that comes with an internship.

Interns were required to wear these coats any time we were not in the

operating room, meaning all the time. Thus, it didn't take long for that white coat to get broken in with wrinkles and coffee stains. My "career" as a surgeon lasted only a year because I decided to transfer to an anesthesiology residency for my PGY-2 year. However, during my year in the white coat of a surgeon, I learned more than I could have imagined.

My next white coat bore the purple emblem of the Northwestern University Department of Anesthesiology. Like at Indiana University, residents were required to wear white coats any time we were not in the operating room.

Yet, because anesthesiology residents are always in the operating room, this coat was rarely worn other than to Friday grand rounds and pre-operative visits with patients.

During my months staffing intensive care units (ICU), the coat would resurface because I spent time rounding and walking the floors outside the operating rooms. The pockets were filled with patient lists, ICU guidelines, and scraps of paper on which I'd jot teaching points for medical students and on which attending physicians had scribbled mini-lectures to me, a juxtaposition between student and teacher, a transition point in medical education that everyone endures, realizing how much they've learned and how much more there is to know.

My first job after my residency was at the Medical College of Wisconsin (MCW). I acquired two new white coats, but in the first few years, they were worn only when I ran to see a patient on the floor, as it helped establish professionalism upon walking into the room.

After a few years, I took on a new role in the pre-operative clinic. There, I was required to wear my white coat all day, every day when I saw patients. It felt odd to wear a white coat (and real clothes) all day. And, although there was a lot of information to learn in this new role, the only things that filled my pockets were my cell phone and stethoscope.

After several years at MCW, I moved to a job at a non-academic hospital. As a staff anesthesiologist, I do not own a white coat. I spend my days in the operating room and procedure suites, where sterility demands the donning of only scrubs. Instead of a white coat, I can be found wearing a blue scrub jacket as an additional layer of warmth.

Initially, I felt saddened by my lack of a white coat, as though I was less professional without one. But, over time, that feeling has been replaced by the realization that I no longer care about my white coat. I am confident in who I am and my abilities as a physician. As a wellestablished doctor in my hospital, I do not need to have my name on a white coat, I simply walk into a room and say, "Hi, I'm Dr. Reck, the anesthesiologist. How can I help?" The confidence to know how to handle whatever problem faces me takes the place of a material white coat.

ABOUT THE AUTHOR

Sarah (Olson) Reck, MD '06, is an anesthesiologist at Advocate Aurora Hospitals (Summit location). She currently practices the full scope of anesthesia care

except cardiac anesthesia. In addition to working full-time as a clinician, she enjoys writing, particularly medical prose.

Seeking Submissions to Healer's Journey

Healer's Journey, a section of *Quarterly* magazine, showcases creative work by members of the University of Wisconsin School of Medicine and Public Health (SMPH) family. We seek prose, poems, and photographs that are moving, humorous, or unusual and that reflect personal experiences in our world of healing.

Guidelines are as follows: Manuscripts, subject to editing, can be no longer than 1,000 words. Photos must be high resolution. Subject matter should relate to any aspect of working or studying at the SMPH or in the medical field generally.

Send submissions to quarterly@med.wisc.edu or via mail to: Managing editor *Quarterly* magazine Wisconsin Medical Alumni Association 750 Highland Ave. Madison, WI 53705

Preventive Medicine Residency Continued from page 13

of Family Medicine and Community Health, is a leader in medical student and resident education; and Maria Mora Pinzon, MD, MS (PG '17, '22), an assistant professor in the Department of Medicine, performs health services research in dementia care.

Another alumna, Jasmine Zapata, MD '13, MPH '17 (PG '16, '18), is an assistant professor in the Department of Pediatrics who also serves as chief medical officer and state epidemiologist for community health for the Wisconsin Department of Health Services. She says the Preventive Medicine Residency was "an incredible launching pad" for her career, and she learned skills that helped pave the way for her community-based research and state public health role.

"I am so grateful I found a program that was supportive of my long-term dreams and passion for public health and social determinants of health," Zapata says. "The program was amazing and a great addition to my pediatrics training. I am excited about the future of preventive medicine and all the possibilities it has opened for my own future, as well." "I am so grateful I found a program that was supportive of my longterm dreams and passion for public health and social determinants of health."

> –Jasmine Zapata, MD '13, MPH '17 (PG '16, '18)

Keller is the New Chair of Medical History and Bioethics

In July 2023, Richard Keller, PhD, became chair of the Department of Medical History and Bioethics at the University of Wisconsin



School of Medicine and Public Health (SMPH). The department's 13 faculty members engage in research, teaching, and service in the history of medicine and public health, clinical and research ethics, and public health ethics.

A department faculty member since 2002, Keller focuses on the historical and societal dimensions of medical and public health crises, such as climate change, natural disasters, widespread disease, and colonialism.

He has authored several acclaimed books, including *Fatal Isolation: The Devastating Paris Heat Wave of 2003* and *Colonial Madness: Psychiatry in French North Africa,* plus nationally published articles about data related to the COVID-19 pandemic and natural disasters. He also has developed courses on the history and sociology of global health and medicine.

"I am excited about the future of this incredible department under Dr. Keller's leadership," says SMPH Dean Robert N. Golden, MD. "His dedication will guide the advancement of both the science and the art of caring for people and populations."

Keller earned his doctorate in history from Rutgers University in New Jersey and completed an Andrew W. Mellon Postdoctoral Fellowship at Washington University in St. Louis. He was selected for the Big Ten Academic Alliance Academic Leadership Program and the William Koren, Jr. Prize from the Society for French Historical Studies, among other honors.

Scerpella is the New Chair of Orthopedics and Rehabilitation

Tamara Scerpella, MD (PG '90), became chair of the Department of Orthopedics and Rehabilitation at the



University of Wisconsin School of Medicine and Public Health (SMPH) in July 2023.

The Ballantine Endowed Professor for Orthopedic Research, she has served as chief of the department's Division of Sports Medicine, and as vice chair, senior vice chair, and interim chair of the department. The department has more than 50 faculty members who provide clinical care for all types of musculoskeletal disorders. Its orthopedic program frequently ranks in the top 20 programs nationally according to U.S. News & World Report.

Through Scerpella's advocacy for gender diversity in orthopedic surgery – the least diverse medical specialty – women comprise 37 percent of faculty in the department.

Having earned her medical degree from the University of Iowa Carver College of Medicine, she completed an orthopedic surgery residency at UW Health, worked in private practice, completed a sports medicine and arthroscopic surgery fellowship in Baltimore, served on the State University of New York Upstate Medical University faculty, and in 2010, joined the SMPH faculty. Among other accolades, she earned the Woman in Science Award from the American Medical Women's Association.

"Dr. Scerpella is exceptionally well positioned to chart the exciting future of this important department," says SMPH Dean Robert N. Golden, MD. "Her experiences will provide an outstanding foundation for her role."

Wisconsin Registry for Alzheimer's Prevention Receives Renewal Grant

The Wisconsin Registry for Alzheimer's Prevention (WRAP) has been awarded a five-year, \$35 million renewal grant



from the National Institutes of Health (NIH), enabling continued study of biological indicators of Alzheimer's disease (AD) that may signal the disease decades before symptoms arise. The new funding also will enable expansion of the project to identify other causes of cognitive decline.

WRAP is in the Wisconsin Alzheimer's Institute at the University of Wisconsin School of Medicine and Public Health (SMPH). Founded in 2001, WRAP is the largest and among the longest-running family history studies of AD in the world. It includes more than 1,750 volunteer research participants, who return for cognitive testing and optional brain imaging scans and lumbar punctures. These assessments provide researchers with a detailed look at how brain health changes over time in people with or without a parental history of dementia.

"This funding will be critical to the future success of this rapidly progressing research," explains Sterling Johnson, PhD, principal investigator of WRAP. "Thanks to our dedicated participants, WRAP is uniquely able to track biological signs of disease in individuals, enabling a personalized medicine approach to examine why some people eventually develop dementia symptoms and others do not."

The funding will allow WRAP to offer expanded testing for AD biomarkers and other factors. Another focus will be continuing to increase inclusion of people from groups historically underrepresented in research.

Cancer Center Receives SPORE Grant for Prostate Cancer Studies

University of Wisconsin Carbone Cancer Center has been designated as a Specialized Program of Research Excellence (SPORE) by



the National Cancer Institute (NCI) to advance prostate cancer research.

This highly competitive designation comes with more than \$11 million in federal funding to support new and existing research, according to David Jarrard, MD, deputy director, UW Carbone, and professor of urology, UW School of Medicine and Public Health.

In 1992, the NCI launched the SPORE grant program to enable a rapid, efficient evolution of scientific findings from the laboratory into clinical settings and to support research to determine the causes of cancer.

This grant will focus on methods that could improve treatments for patients with more advanced-stage prostate cancer, an area of growing need. Specifically, it will focus on the tumor microenvironment; diversity of prostate cancer and how different cancer types respond to treatment within an individual; and cancer vaccines. The award also provides funding for emerging research.

"This grant offers a great opportunity to help develop a new population of researchers, including more underrepresented groups in the cancer research field," Jarrard says.

This is one of only a few active SPORE awards in the United States, and it is the second SPORE award given to a Wisconsin institution. The first was awarded to UW Carbone in 2016 and renewed in 2022 for head and neck cancer research.

Chheda is Named Among Most Influential Asian American Leaders

Shobhina G. Chheda, MD, MPH, was selected as one of Wisconsin's 40 most influential Asian American leaders for 2023 by



Madison365, a journalistic organization focused on issues of concern to communities of color and their allies.

Chheda is the associate dean for medical education at the University of Wisconsin School of Medicine and Public Health (SMPH). She is responsible for the leadership of curriculum and assessment for medical students. She continues her commitment to patient care by practicing general internal medicine at UW Health.

She completed a combined internal medicine and pediatrics residency at Cornell University Medical College/ North Shore University Hospital, New York, and she received a master of public health degree at Saint Louis University School of Public Health.

Having joined the SMPH faculty in 2001, Chheda has been a medical education leader locally and nationally. She has received a Dean's Teaching Award and the Department of Medicine Schilling-Harkness Teaching Award at the SMPH, and the Clinician Educator of the Year Award from the Midwest Society of General Internal Medicine. She was a founding member of the national Society of General Internal Medicine's TEACH Program for faculty development, and she is serving as chair of the national Alliance of Academic Internal Medicine's Board of Directors. Chheda also was selected to attend the one-year Hedwig van Amerigen Executive Leadership in Academic Medicine program for women in academic medicine.

Dempsey Receives the Dr. Thomas A. Dooley Award

Robert J. Dempsey, MD, the Manucher Javid Professor and Chair of the Department of Neurological Surgery at the University



of Wisconsin School of Medicine and Public Health (SMPH), received the Notre Dame Alumni Association's 2023 Dr. Thomas A. Dooley Award. Established in 1984, the award is conferred on an alum who has exhibited outstanding service to humankind.

Dempsey specializes in cranial neurosurgery of brain tumors, intracranial aneurysms, carotid endarterectomy, and the repair of congenital brain stem disorders; he co-directs the UW Stroke Program.

He is committed to solving health disparities by training, equipping, and mentoring generations of physicians in worldwide areas of need. Dempsey is the former president of the U.S. Society of Neurological Surgeons (SNS), and he chairs the Foundation for International Education in Neurological Surgery, helping establish and support over 20 training programs in developing countries in Africa, Asia, Central America, and South America.

Dempsey received the Humanitarian Award from the American Association of Neurological Surgeons and distinguished service awards from the SNS, Neurological Society of America, and University of Chicago Medical Alumni Association. In 2022, he received the World Federation of Neurosurgical Societies Medal of Honor, the world's highest neurosurgery award.

With over 35 years of National Institutes of Health funding, Dempsey has led multiple research projects, and he has published more than 300 scientific articles.

Gold Humanism Honor Society

HONORING MEDICAL STUDENTS, FACULTY MEMBERS, AND A RESIDENT



Erin Bowden (left) and Charis Benjamin visit at the Gold Humanism Honor Society Induction Ceremony.

ODD BROWN/MEDIA SOLUTIONS

ach 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 sponsored by the Arnold P. Gold Foundation, an organization devoted to elevating the principles of humanism, compassion, integrity, respect, and service in medicine. The honor recognizes rising fourth-year medical students who have demonstrated exemplary attitudes and behaviors characteristic of the most humanistic physicians.

Fourth-year students are selected for induction by their classmates. These inductees then elect two faculty members and one resident to join them in the GHHS.

Senior Associate Dean Elizabeth M. Petty, MD '86 (PG '89), noted that the ceremony on August 25, 2023, was held in conjunction with the school's White Coat Ceremony to help encourage connections among the newest students in the MD program and their peers who are approaching their final year of medical school.

Petty told the GHHS inductees, "You serve as incredible role models for our new students as they begin their studies."

The SMPH inducted these people into the GHHS:

FOURTH-YEAR **STUDENT INDUCTEES**

David Alderman Ryan Anderson Charis Benjamin Erin Bowden Rachel Craven Liana Dawson James Dickman Kenneth Fiala Meredith Gallagher Jessica Gillespie Mark Hancher Eric Hess Tess Jewell Laurie Lapp Alyssa McClelland Eleanna Melcher Hailey Milakovich Maya Muldowney Rachel Munson Evan Polce Grace Seibert

Hannah Sherfinski Katharine Tippins Carlos Torres Daniel Traverzo Benjamin Weber Margaret Zwick

FACULTY MEMBERS AND RESIDENT

Brittany Allen, MD '09, associate professor, Department of Pediatrics; Allen also received the GHHS Leonard Tow Award

Aaron Wieland, MD (PG '12), associate professor, Department of Surgery

Habib Kedir, MD, third-year internal medicine resident, Department of Medicine

Max Fox Preceptorship Award

HENNINGSEN'S "SCHMUTZ" ENSURES UNIQUE LEARNING EXPERIENCES

by Kris Whitman

avid J. Henningsen, MD '91 – a family medicine physician at Lakeview Medical Center and Marshfield Clinic in Rice Lake, Wisconsin, who received the Max Fox Preceptorship Award in June 2023 – used the word "schmutz" to describe his philosophy about teaching and mentoring medical students from the University of Wisconsin School of Medicine and Public Health (SMPH).

"I learned about schmutz on a Wisconsin Public Radio segment that explained why different sourdough baked products have different flavors. The speaker attributed the unique flavors of sourdough to the 'schmutz' of all the bakers who have worked the starter over the years. I was interested because I like to make something each week with a sourdough starter, and as usual, I 'feed it' to increase the amount," said Henningsen.

"The dictionary defines schmutz as a Yiddish word meaning dirt or grime. But really, it's the uniqueness. This describes my style of mentoring medical students. While I encourage them to use guidelines and standards of care, sometimes we treat patients best by *not* following the rules, but by using the art of medicine," he shared. "By working with me, I hope students notice how I treat patients and deal with problems – my schmutz. I don't intend that they practice just like me, but maybe some of my style and that of other preceptors can be incorporated into their unique doctoring style."

Henningsen's role in teaching more than 50 SMPH medical students since 2006 caught the attention of leaders at the SMPH and Wisconsin Medical Alumni Association (WMAA). Each year, the school and association present the Max Fox Award to a Wisconsin community physician for outstanding service through the school's Ambulatory Acting Internship (AAI). The award's namesake was a preceptor for two decades.

Paul Hunter, MD '89 (PG '92), director, AAI, associate director, Wisconsin Academy for Rural Medicine (WARM), and professor, SMPH Department of Family Medicine and Community Health, noted that 50 physicians from 35 communities across the Badger State teach in the AAI, which aims to teach medical students to apply their knowledge and skills in communitybased settings.

Stephen T. Holthaus, MD – who serves as the SMPH's WARM director at Marshfield Clinic Health System and Marshfield Medical Center in Rice Lake – has worked with Henningsen for 25 years, during which they both have supported rotations for SMPH medical students and other trainees.

Holthaus said, "Throughout his career, Dr. Henningsen has been committed to medical education and is a leader at our center in supporting student learning activities. He creates a very welcoming, supportive environment for students, which allows them to grow in their clinical skills and comfort caring for patients."

WMAA Executive Director Sarah B. Rothschild said Henningsen's father, John Henningsen, MD, also practiced family medicine in Rice Lake and received the 2003 Max Fox Award. This is the first time in the award's five-decade history that it has been given to a second member of a family.

Deeply honored by his award and that of his father, Henningsen said he entered his father's field – and later, his father's practice – because he liked a wide range of experiences in medical school and wanted variety in his practice.

After earning his medical degree from the SMPH, Henningsen completed the St. Francis-Mayo Clinic Family Medicine Residency in La Crosse, Wisconsin.



Kristine (Tina) Henningsen (left) and David J. Henningsen, MD '91

"I've benefited from the schmutz of my parents in terms of my faith, hard work, and frugality, as well as the schmutz of my family, friends, medical partners, patients, students, and most significantly, my life partner, Tina, who for more than 40 years, has put up with my crazy hours ... and lovingly cared for me through the challenges of cancer," said Henningsen, who is grateful to have recovered from pancreatic cancer.

Henningsen and his wife are proud of their three adult children and one grandchild, with another on the way. One of their children, Lucas Henningsen, MD '20, earned his medical degree from the SMPH.

Active in his church and at the Rice Lake Area Free Clinic, Henningsen is a member of local and statewide medical societies. He also enjoys fishing, hunting, all types of skiing, and curling.

Madison Roots

and Worldwide

Observations

DURKIN'S WORK EVOLVES FROM ANTHROPOLOGY TO EPIDEMIOLOGY AND POPULATION HEALTH SCIENCES by Michael Felber

n paper, Maureen Durkin, PhD, DrPH, might appear to have the perfect credentials to be perceived as a stereotypical "ivorytower" academic. Notwithstanding her two doctorates – one in anthropology from University of Wisconsin–Madison and the other in epidemiology from Columbia University – her life's work has proved to be anything but esoteric.

Over the past four decades, she has demonstrated an unrelenting passion for readily applying her vast knowledge about different cultures and the varying preponderance of health maladies among children. Her efforts have played a significant role in reducing the number of young children around the world who die from largely preventable diseases or causes.

A 20-year faculty member of the UW School of Medicine and Public Health's (SMPH) Department of Population Health Sciences, for which she has served as chair since 2017, Durkin fell in love with anthropology as an undergraduate at UW–Madison during the 1970s. Working on her dissertation while living in Nepal in the early 1980s, Durkin's academic passion began gravitating toward epidemiology. Learning about the incidence of disease among certain populations evolved as a natural sequel to her anthropology work that focused on cultural differences.

"Once I learned what epidemiology was and saw for myself so many children needlessly dying or getting sick in Nepal and, later, in other countries, I decided to dedicate myself to putting what I learned into action so lives can be saved and improved," Durkin recalls. "It is not enough to collect the data and leave. I felt I had to immerse myself and do something to prevent unnecessary infant and child mortality. For me, that is the most satisfying outcome."

A Journey of International Study

Before long, Durkin found herself working in a number of low- and middle-income countries – including Bangladesh, India, Pakistan, Ethiopia, Jamaica, and the Philippines – to analyze disparities in developmental disabilities among young children. Very little medical information about these children was available, and prevention and treatment options for their conditions were largely nonexistent.

When she returned to the United States, Durkin applied that same passion toward the prevention of childhood injuries. While pursuing her epidemiological studies at Columbia University, Durkin worked with officials from the New York City Health Department to develop an injurysurveillance program to monitor the epidemiology of fatal and non-fatal injuries to children. In New York, she worked closely with clinicians and leaders, including the late Charlotte Spiegel, a civic leader who played an instrumental role in requiring window guards in apartments that were homes for children ages 10 and under. Before the requirement was enacted, more than 200 children per year had fallen out of windows. Fortunately, such tragedies are now a rare occurrence.

Another of Durkin's projects, which began with a study of Harlem playground injuries – many resulting from neglected broken glass and equipment – resulted in substantial safety improvements and improved playground maintenance.

After two decades in New York, Durkin and her husband, B. Jack J. Longley, MD '79, returned to their



Maureen Durkin, PhD, DrPH, and her husband, B. Jack J. Longley, MD '79

hometown of Madison in 2003, when they both accepted faculty positions at the SMPH – she in the Department of Population Health Sciences and he in the Department of Dermatology.

Over the past 20 years, Durkin has focused on the prevalence of autism and other intellectual and developmental disabilities.

"The more we study autism, the more it seems to be increasing," Durkin notes. "For years, we have seen a much higher prevalence among children from affluent white families. Lately, we have witnessed similar upticks in autism among children who are lower income and from minoritized groups."

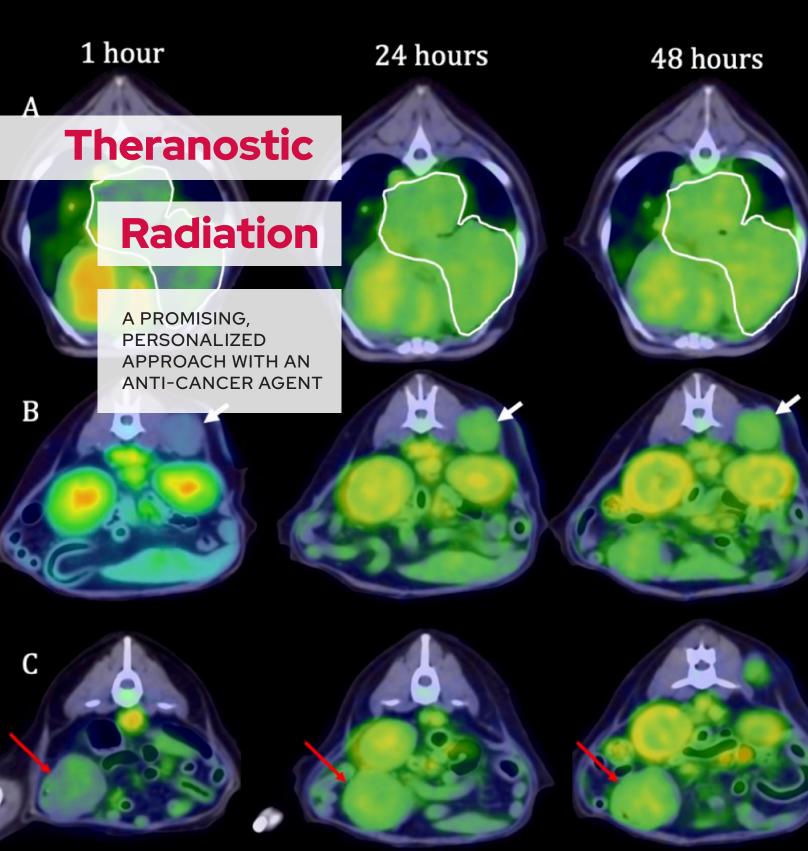
The Impact of Population Health Sciences

Population Health Sciences at UW-Madison traces its roots back to 1903, when the State Legislature established what is now known as the Wisconsin State Laboratory of Hygiene (WSLH). Its purpose is "to provide benefits from the university's scientific capabilities and promote public health." In 1959, the WSLH became part of the newly constituted SMPH Department of Preventive Medicine; in 2001, that department changed its name to the Department of Population Health Sciences. Given the field's inherent multidisciplinary makeup, several of its 30 faculty members have joint appointments in other UW-Madison departments and schools, such as the SMPH Department of Biostatistics and Medical Informatics and Department of Medicine, and the Nelson Institute for Environmental Studies.

"We were the first university in the United States to establish a Department of Population Health Sciences," Durkin says. "Now, many if not most academic medical centers have such a department. Many of our faculty members have national reputations and are called upon by state and federal policymakers."

For example, Emeritus Professor David Kindig, MD, PhD, served as a high-level government advisor during the Clinton administration's effort to enact national health care legislation. Many of

-Continued on page 37



Tumor selective uptake of a targeted radioisotope therapy agent as demonstrated by serial PET scans in a companion canine with metastatic melanoma

by Michael Felber

eginning in 2024, a large team of cancer researchers at University of Wisconsin-Madison, including the UW School of Medicine and Public Health (SMPH), hopes to begin learning whether a potentially game-changing form of treatment has the capacity to deal a devastating blow to cancer in human patients.

Fueled by three decades of pre-clinical laboratory and animal research, more than \$20 million in National Cancer Institute funding, and a world-class team of about 75 UW–Madison experts representing every facet of cancer research, the novel approach is known as targeted radionuclide therapy (TRT). Rather than attacking cancer from the outside in, as is the case with conventional externalbeam radiotherapy, TRT delivers a more precise, systemic "inside-out" form of radiation.

A clinical trial is expected to begin in 2024, proverbially placing TRT on the witness stand before a "jury" of qualifying UW Health | Carbone Cancer Center patients who will render a verdict on its efficacy.

Jamey Weichert, PhD – a professor in the SMPH Department of Radiology who has conducted TRT research throughout his career – believes his approach is on the cusp of

revolutionizing the



Jamey Weichert, PhD

way patients, especially those with advanced disease, are treated. His premise: TRT boosts the body's natural defenses, enhancing their ability to overcome the capacity of cancer cells that can be sneaky enough to evade the immune system.

His secret sauce combines a low-dose radioactive element with a molecule, called NM600, that mimics a type of lipid found in rapidly dividing cancer cells. Patients will receive an injection to "scuff up the tumor" with a low amount of radiation to make it easier for the immune system to recognize it, he explains.

Once treated with low-dose TRT, the cancer cells become recognizable to the immune system, and immunotherapy is introduced. This combination treatment simultaneously destroys cancer cells while eliciting a positive, long-term, "vaccine-like" immune response. Best of all, says Weichert, pre-clinical tests show TRT to be effective against virtually any type of cancer.

Zachary Morris, MD, PhD (PG '16), an associate professor and vice chair in the SMPH Department of Human Oncology, notes that one of the great features of agents like NM600 is that they can be given both



PhD (PG '16)

diagnostically and therapeutically. "We call it a 'theranostic agent,'"

Morris says. "With the help of PET scans, we first determine whether the patient's tumor will absorb the agent before we give a therapeutic dose of the agent. This approach lets us customize a personalized prescription to deliver the desired amount of radiation for each patient."

"Our goal is not just to give these patients a few more months or a couple of years, but to actually cure their cancer."

-Zachary Morris, MD, PhD (PG '16)

Other advantages, Morris notes, are that – compared to a typical course of external-beam radiation therapy – the approach using low-dose TRT gives about one-tenth the amount of radiation, and it is potentially safer because it does not target healthy cells.

UW–Madison cancer researchers are eager to gauge whether NM600 triggers the same anti-cancer effect in humans that has already been seen in tests with mice and dogs. Candidates for the first phase of clinical trials include those who received other treatments but showed no response or experienced a recurrence of their cancer.

"Our goal is not just to give these patients a few more months or a couple of years, but to actually cure their cancer," Morris says. "Much needs to be seen with the upcoming trials, but just the possibility of achieving this outcome would be a dream come true for patients and for everyone who has worked on this monumental project."

Weichert and Morris serve as advisors to a recently formed, Madison-based biotech startup, Archeus Technologies. If clinical trials prove successful, Archeus plans to bring the new agent

to market. Its CEO, Evan Sengbusch, PhD '12, MBA, completed his doctoral degree in the SMPH Department of Medical Physics. Seeing promise in TRT, Isthmus Project – the



Evan Sengbusch, PhD '12, MBA

innovation hub for UW Health and SMPH that focuses on commercialization of health care solutions developed within the health system – has invested in Archeus.

"We're excited to work with so many outstanding researchers at UW–Madison, and we cannot wait to see if TRT works in human patients the way we hope it does," Sengbusch shares. "We're also delighted that Dr. Morris will be leading the first clinical trial with selected patients from UW Health | Carbone Cancer Center in Madison."

While acknowledging that ultimate proof hinges on the clinical trial outcomes, Weichert cites the multimillion-dollar level of federal support as a big vote of confidence.

"I've never been as optimistic as I am today about what this can do," Weichert says. "Clearly, the National Cancer Institute thought this was a good investment."

Faculty Investiture Celebration

HONORING FACULTY MEMBERS AND DONORS

n June 29, 2023, University of Wisconsin School of Medicine and Public Health (SMPH) faculty honorees, donors, and leaders gathered at the Memorial Union for the school's second-annual Faculty Investiture Celebration.

The event honored generous donors who have established endowed professorships, chairs, or fellowships, and the faculty members who are benefitting from that generosity. The highest honor the school can bestow on faculty members, endowed positions enable the SMPH to recognize and advance recipients' passionate pursuit to understand, treat, and eventually cure devastating diseases.

At the event, a chair or other representative talked about each faculty member's accomplishments and briefly described the donor behind the endowed position, including how these gifts help push forward the school's mission of advancing health and health equity through remarkable service to patients and communities, outstanding education, and innovative research.

"The endowed positions we honor this evening provide precious flexible funding that allows each recipient to take risks and pursue new areas of interest, supporting the time and resources required for new 'outside the box' pilot projects," said Nancy Raymond, MD, associate dean for faculty affairs and development. "This is what helps these leaders, and our institution, create avenues for progress in advancing the health and well-being of all. And this critical support would not be possible without the generosity of our donors. It takes a special kind of altruism and commitment to create an endowed faculty position. These are gifts that go on giving, in perpetuity."



Faculty member honorees (listed below) posed with school leaders.

2023 Honorees

Cripps/Ratcliff Professorship for Skin and Cancer Research Hao Chang, PhD, associate professor, Department of Dermatology

Retina Research Foundation Edwin and Dorothy Gamewell Professorship

Shaoqin "Sarah" Gong, PhD, professor, Department of Ophthalmology and Visual Sciences

Wisconsin Endowed Chair of Leadership in Emergency Medicine*

Azita G. Hamedani, MD, MPH, MBA, professor, BerbeeWalsh Department of Emergency Medicine

Ben Miller Peckham, MD, PhD, Chair in Obstetrics and Gynecology

Ellen Hartenbach, MD, chair, Department of Obstetrics and Gynecology

Robert Turell UWMF Professorship in Biomolecular Chemistry Leadership

Patricia Kiley, PhD, chair, Department of Biomolecular Chemistry

Mark A. Fischer Chair In Transplantation

Joshua Mezrich, MD (PG '07), professor, Department of Surgery

Flesch Family Faculty Fellowship in Kidney Transplant Research Suzanne Norby, MD '95, professor, Department of Medicine

Azita G. Hamedani Distinguished Chair of Emergency Medicine* Manish N. Shah, MD, MPH, chair,

BerbeeWalsh Department of Emergency Medicine

Robert Turell Professorship in Infectious Diseases

Vanessa Sperandio, PhD, chair, Department of Medical Microbiology and Immunology

^{*} Matching gift support was provided through the generosity of John and Tashia Morgridge.

Doctor of Physical Therapy Degree Continued from page 7

programs could work together. Since 2019, three students have enrolled in the combined degree, which expands the profession's vision to incorporate non-medical factors that powerfully shape health and wellness. It builds new skills, including systems thinking; greater understanding of biostatistics and epidemiological data; and analysis of social determinants of health. And it offers invaluable background for those whose career aspirations include global health, particularly in countries with scarce health care resources.

Graduate Accomplishments

When Hartman received his MPH degree, he immediately went to work for Hillside Health Care International, which supports a clinic in Belize where UW–Madison students can participate in an internship. He says his MPH degree has been a tremendous advantage in his many global-health efforts.

"A public-health degree is almost required if you want to invest significant time in underserved areas, domestically and abroad, because the skills and perspective are incredibly valuable. These include community assessment, program planning, grant writing, and advocacy skills," he points out. "We need to have professionals with both clinical expertise and a public-health perspective who can intervene and make changes in all aspects along 'the river' of health."

The success of alumni with dual DPT/MPH degrees speaks for itself. For instance, the first graduate to earn the dual degree, Daniel Deuel, PT, DPT, MPH '22, MEd, spent the summer after his graduation working for the Ujima Center, a community organization in Monroe, Louisiana. The center's stated commitment to health care justice and its motto – "It takes a village; we are that village" – aptly illustrate the vision of the evolving DPT Program and the SMPH within which it is housed.

These examples highlight what makes the DPT Program successful in providing high-quality education to help students become excellent clinicians, as well as leaders, instructors, administrators, and researchers. The program excels beyond national benchmarks related to student success passing PT certification exams and securing jobs after graduation.

"Our alumni have become worldrenowned scholars and educators; leaders in political-action areas; and



In the Dewane Neurorehabilitation Clinic, a patient receives guidance from Jess Rosenau, a student in the Doctor of Physical Therapy Program.

successful business owners who serve their communities in many ways," reflects Wenker. "The high value of the program is hard to define, but a peek into what our alumni accomplish shares that story."

Faculty Profile: Maureen Durkin, PhD, DrPH Continued from page 33

the population health principles for which Kindig advocated became law when the Affordable Care Act (Obamacare) took effect in 2014.

New Chair Role in 2017

Durkin's departmental leadership role commenced in 2017, following the departure of the former chair, F. Javier Nieto, MD, PhD, MPH, MHS, who became dean of the College of Public Health and Human Sciences at Oregon State University.

"Maureen never sought the job of chair, but when Dean Robert Golden asked her to step up at a time of need, she accepted out of a sense of service to the department and the school," says Professor Emeritus Patrick Remington, MD '81, MPH, who was the SMPH's inaugural associate dean for public health, as well as a former colleague and lifelong friend of Durkin's. "She has been an extremely collegial leader whose unwritten mantra is, 'What can I do to help you succeed?'"

After a distinguished career of pursuing her own work, Durkin felt the time seemed right to start focusing more of her efforts on supporting the academic pursuits of others.

"It's very gratifying to work with such wonderful faculty members in this department and help them achieve their goals," Durkin says.

Deep Roots in Madison

Avid bicyclists, parents of four, and grandparents of three (soon to be four), Durkin and Longley live in the same home where Durkin grew up in Madison's University Heights neighborhood.

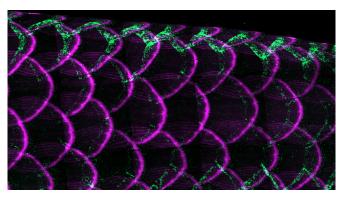
"Jack and I have a lot of roots here," Durkin says. "He is a fifth-generation Madisonian, and his great-grandfather was the first professor of animal husbandry on campus in the 1800s. Notwithstanding all of the places we have been fortunate to see around the world, we love Madison and being so closely tied to the community."

Study Illustrates Adaptive Immune System in Zebrafish

study at the University of Wisconsin School of Medicine and Public Health offers a first-of-its-kind visual of a non-mammal species' adaptive immune system in action. This holds several implications, from better understanding fundamental disease processes to adaptive immunity.

Published in the Proceedings of the National Academy of Sciences, the study tracks immune cells through zebrafish, revealing systemic circulation, which had never been documented.

Nearly all vertebrates have adaptive immune systems, but the structure of these systems and how they



work in non-mammals has remained obscure.

Tanner Robertson, PhD, postdoctoral researcher, Department of Medical Microbiology and Immunology, who led the work, had studied human diseases using mouse models, which have lymph nodes. He wondered how zebrafish's adaptive immune systems work since they do not have lymph nodes.

He and colleagues imaged immune cells expressing fluorescent proteins as they traveled through transparent zebrafish. The researchers found an organized network of immune cells, and they documented T cells traveling in a diamond pattern.

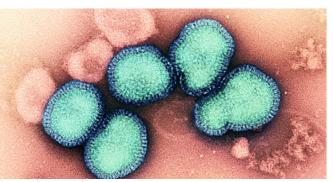
"We discovered that these cells can quickly and efficiently move in 'collective migration,'" says Anna Huttenlocher, MD, professor of medical microbiology and immunology and pediatrics. "To our knowledge, a network that organizes T cells into a repeating pattern has never been observed in any organism."

The researchers found that this orderly system functions similarly to mammalian lymph nodes. The study presents exciting questions to pursue about these and other animals.

Key Protein May Help Influenza A Infect its Hosts

nfluenza A is one of two influenza viruses that fuel costly flu seasons and is a near constant threat to humans and other animals. It also causes occasional pandemics that, like the one in 1918, leave millions dead. The virus was identified as a threat nearly a century ago, but only in the last decade have scientists identified one of its key proteins, PA-X, which infiltrates host cells and short-circuits their defenses.

Researchers at University of Wisconsin School of Medicine and Public Health (SMPH) have taken a major step toward understanding how that protein works, with a new finding that runs counter to previous wisdom:



NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

They've found that viruses like influenza A take over host cells in a "tactical" way. PA-X disrupts host cells by making thousands of cuts in their RNA, disrupting defenses against invading viruses. But viruses need to deploy PA-X while ensuring their own RNA remains functional. Scientists have been trying to understand how this can happen.

Marta Gaglia, PhD, associate professor, Department of Medical Microbiology and Immunology, and her colleagues have used high-throughput sequencing and advanced statistical modeling to crack at least part of the secret that allows PA-X to degrade host cells' RNA without doing too much collateral damage. They have learned that PA-X has a strong preference for a specific sequence of RNA.

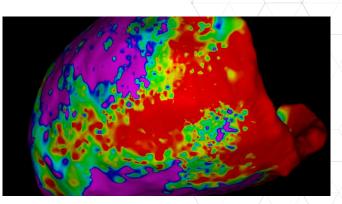
As Gaglia explains, the team found that the RNA sequence that PA-X tends to target is common in the genetic material of humans and other animals infected by influenza A, but it rarely occurs in the virus' own RNA. This characteristic gives the protein a good enough aim to do its job of disrupting host cells but not the virus.

The study has been published in *Nature Microbiology*, and the team continues to investigate new angles of this research.

Study Finds Disparities in Cardiac Arrhythmia Treatment

large, populationbased study at the University of Wisconsin School of Medicine and Public Health found that cardiac ablation for ventricular tachycardia (VT) is more likely to be performed on patients who are white males from wealthier neighborhoods. Conversely, Black women and patients from disadvantaged areas are least likely to undergo the procedure used to control this life-threatening heart rhythm, according to the study, which was published in the Journal of the American Heart Association.

An ablation procedure can be a safe, reliable way to improve control of VT and prevent recurrence.



Ryan Kipp, MD '07 (PG '10, '13, '14), associate professor, Department of Medicine, led the team that analyzed data from 131,645 Medicare patients who were admitted with VT.

The team determined that among patients admitted for VT during 11 months of 2014, women were 25 percent less likely to receive VT compared to men, and Black patients were 25 percent less likely to receive VT compared to white patients. Black women had a 50 percent lower rate of receiving ablations compared to white men. Researchers also found that patients from the most socioeconomically disadvantaged neighborhoods were 19 percent less likely to receive an ablation.

Researchers parsed the data to determine whether comorbid conditions or previous medical concerns could be driving decisions.

"Results show that under-resourced groups are least likely to receive advanced care. One plausible explanation is implicit bias," says Kipp, adding that more research is needed to understand causes for this disparity and how to deliver more equitable care.

Deep Proteome Sequencing Project Provides Atlas for Human Complexity

hile the human genome contains roughly 20,000 genes, many primitive organisms have almost the same number of genes. What accounts for the leap in complexity between species?

An answer may lie in proteomics, which focuses on identifying building blocks of individual cells, and identifying how protein dysfunction can contribute to disease. Rather than one gene coding for one protein with one purpose, most human genes act like compressed files, where a gene can code for hundreds of proteins that each perform precise functions.

A study – led by Joshua Coon, PhD, professor, Department of Biomolecular



Chemistry, University of Wisconsin School of Medicine and Public Health, and investigator, Morgridge Institute for Research – outlines an approach to quantifying the human proteome and the massive number of protein variants produced by the human body. The study was published in *Nature Biotechnology.* The team developed a method called "deep proteome sequencing" that offers unprecedented characterization of proteins. They used six human cell types and six enzymes that break down proteins into peptides. Using mass spectrometry, researchers identified more than 1 million peptides from 17,717 different protein groups and were able to detect approximately 80 percent of the sequences of individual proteins – a vast increase over previous approaches.

"There has always been a goal of detecting all proteins that are present in a sample, then fully sequencing the individual proteins. Data from this study represent the deepest proteomics map collected to date. This study is expected to catalyze future efforts," says Coon, who adds that the project, primarily sponsored by the National Institutes of Health, received major input from international research groups.

The team created a publicly available resource (deep-sequencing.app) for other scientists to use.

Easing Rural Health Disparities

bout 25 percent of Wisconsinites live in rural areas, yet only 11 percent of physicians practice in rural Wisconsin. Rural communities comprise an important part of the state's culture, history, and economy. However, due to social inequities and decreased access to health care, rural Wisconsin residents disproportionately experience higher morbidity and mortality. According to the Wisconsin Office of Rural Health and Wisconsin Department of Health Services (DHS), rural populations have higher rates of chronic diseases and shorter life expectancies. Access to primary care physicians, dentists, and mental health providers is significantly lower, and more rural people are uninsured. Limited access to affordable housing, transportation, employment, telehealth, and broadband internet in rural Wisconsin disproportionately contributes to negative health outcomes.

The rural physician shortage is projected to grow as the population ages and rural physicians retire. A recent study found that 16 percent of Wisconsin's rural hospitals are vulnerable to closure. Additionally, onethird of rural Wisconsin counties do not provide birthing services. Maintaining a sustainable physician workforce is critical in addressing these disparities.

WISCONSIN'S APPROACH

The University of Wisconsin School of Medicine and Public Health (SMPH) is recognized as a national leader for its long tradition of supporting residency programs that train outstanding physicians for rural Wisconsin. Founded in 1996, the UW Baraboo Family Medicine Rural Training Track (RTT) supports two residents per year. Its curriculum offers unique opportunities, including electives in addiction medicine and tribal health. The program has a strong record of placing family medicine physicians in rural practice.

In 2017, the Department of Family Medicine and Community Health (DFMCH) created the Family Medicine Rural Health Equity Track, which adds two residency slots per year and includes six months of rural rotations, along with experiences in leadership, community health, and advocacy for residents who intend to enter rural practice. A rural pathway option was added to its Family Medicine Residency in 2019. In 2023, the DHS granted support to develop a Rural Family Medicine Obstetrics Fellowship to train family medicine physicians in surgical obstetrics. The DFMCH also supports statewide academic partners in Eau Claire, La Crosse, Wausau, and Monroe, and in Barron County.

In 2016, the Department of Surgery launched its rural residency track, which places one general surgery resident each year in rural Wisconsin. In 2017, the Department of Obstetrics and Gynecology began the nation's first rural track in this field. Trainees gain six months of rural experience in Wisconsin. Funding through the Wisconsin Rural Physician Residency Assistance Program and Wisconsin DHS has helped create and support these tracks.

Data indicate that rural exposure during medical school and residency is a strong predictor for entering rural practice. An estimated 50 percent of family medicine residency graduates may enter rural practice if they receive 12 to 24 weeks of training in rural settings.

Among many factors that impact rural placement and retention, a rural background is a strong predictor. It is critical to create and sustain effective pathways that expose rural students to medical career opportunities as early as middle school. Wisconsin's strong network of regional Area Health Education Centers exposes more than 5,000 high school and undergraduate learners annually to health care careermentoring opportunities. The SMPH's Wisconsin Academy for Rural Medicine (WARM) recruits medical students who intend to practice in rural Wisconsin. Seventy-three percent of WARM graduates practice in Wisconsin, and 47 percent in rural Wisconsin.

KEY PARTNERSHIPS

The SMPH's rural programs benefit from and contribute to many important statewide and national partnerships. The school's crucial relationships with the Wisconsin Hospital Association, Wisconsin Collaborative for Rural Graduate Medical Education, Wisconsin Office of Rural Health, and Wisconsin DHS provide a rich environment for professional development, funding, and curriculum development, with the goal of enhancing health care in Wisconsin's rural areas. Leaders of our rural programs also have key relationships with national organizations such as the Health Resources and Services Administration's programs. Aiming to promote rural residencies in all specialties, SMPH leaders are widely disseminating lessons learned through decades of developing rural programs.

PROMISING FUTURE

The health care provider shortage will continue to impact rural areas. We must keep using our time, resources, and knowledge to expand rural physician recruitment and development. The SMPH is committed to working with our partners to advance this vision and serve as a national model. Together, we will move FORWARD in advancing the health of rural communities.



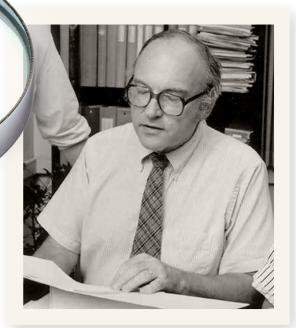
Left: Jillian Landeck, MD '14, assistant professor (CHS), director, Rural Health Equity Track, Department of Family Medicine and Community Health, SMPH

Right: Ryan J. Spencer, MD, MS '18, FACOG (PG '15), associate professor (CHS), director, Rural Track in Obstetrics and Gynecology and Gynecologic Oncology Fellowship, Department of Obstetrics and Gynecology, SMPH

I Know YOU

... Or do l?

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*.



HINT ABOUT PHOTO ABOVE: He is known for his leadership and teaching.

ABOUT LAST ISSUE'S PHOTO:

Mark Huftel, MD '86 (PG '91), won the prize drawing and will receive a gift from the Wisconsin Medical Alumni Association!



In the last issue of *Quarterly*, eight people correctly identified Elizabeth M. Petty, MD '86 (PG '89). Multiple people said Petty's smile gave away her identity in the mystery photo, and several responders were her classmates in medical school.

Petty is the senior associate dean for academic affairs at the University of Wisconsin School of Medicine and Public Health (SMPH). She received her bachelor's degree in biology and art history from Clarke College in Dubuque, Iowa, and earned her medical degree from the SMPH.

After she completed a pediatrics residency at UW Health, she completed postdoctoral fellowships in medical genetics and clinical molecular genetics at Yale School of Medicine, followed by postdoctoral research training in genetics.

Petty joined the faculty of the University of Michigan, where she was a professor of internal medicine and human genetics. She joined the SMPH faculty in summer 2011.

Recognized for her achievements as a clinician, educator, and physicianscientist, Petty has research interests in genetic mapping and syndrome identification and the development of research skills, as well as professionalism among medical students.

Petty has received numerous local and national awards and recognitions, including membership in Alpha Omega Alpha, receipt of the Gender Equity Award in Medical Student Teaching from the American Medical Women's Association, and selection as one of "America's Top Pediatricians" by the Consumers' Research Council of America.

SMPH classmate Jill Mocarski, MD '86, wrote, "I remember Liz as always being 'calm and present,' a demeanor I have aspired to but have yet to achieve. A more recent memory was that Liz took time out of her very busy schedule to talk to my daughter about a career in academic medicine and pediatrics. I was so grateful that she made time to nurture the next generation of physicians."

PLEASE SHARE YOUR NEWS!

Please send information about your honors, appointments, career advancements, publications, volunteer work, and other activities. We'll include your news in *Quarterly* as space allows. Please include names, dates, and locations. Photos are encouraged.

Please send the above updates: online at wmaa.med.wisc.edu/share OR email quarterly@med.wisc.edu

Have you moved?

Please send us your new address: online at wmaa.med.wisc.edu/update OR email wmaa@med.wisc.edu OR via phone at (608) 263-4915

University of Wisconsin Medical Alumni Association Health Sciences Learning Center 750 Highland Ave. Madison, WI 53705

Nonprofit Org. U.S. Postage PAID Madison, WI Permit No. 1121

MS-1571815-23

Giving Back the WMAA Way!

Your gift to the Wisconsin Medical Alumni Association (WMAA) Fund allows us to provide a helping hand that makes our school special, whether through supporting student wellness initiatives, providing emergency relief for students in crises, or building bridges among Badgers.

The WMAA Fund is the lifeblood of the organization, helping to provide our medical students with a supportive and enriching educational experience.

The WMAA is here for all of this and more – including alumni engagement – only because of you. Thank you for being here for the students who follow in your footsteps.

Make a gift today using the enclosed envelope or online at **give.wiscmedicine.org/wmaa**

