VOLUME 14 • NUMBER 3 • SUMMER 2012
FOR ALUMNI, FRIENDS, FACULTY AND STUDENTS OF THE
UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

Quarterly

Microbes
FOR HEALTH AND SURVIVAL

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

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON

QUARTERLY

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

EDITORS
Dian Land
Kris Whitman

ART DIRECTOR
Christine Klann

PRINCIPAL PHOTOGRAPHER
John Maniaci

PRODUCTION
Michael Lemberger

WISCONSIN MEDICAL ALUMNI ASSOCIATION

EXECUTIVE DIRECTOR
Karen Peterson

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 med.wisc.edu/quarterly

CALENDAR

SEPTEMBER 2012

Friday, September 23	White Coat Ceremony Union South

OCTOBER 2012

Friday, October 12	Middleton Society Banquet Wisconsin Institutes for Discovery

OCTOBER 26 AND 27 • HOMECOMING WEEKEND

Friday, October 26	WMAA Board of Directors Fall Meeting
Saturday, October 27	WMAA Tailgate Party UW vs. Michigan State Football Game Reunions for classes of 1967, '77, '82, '87, '92, '97, '02 and '07

APRIL 2013

Friday, April 12	Alpha Omega Alpha Banquet Memorial Union

APRIL 25 THROUGH 27 • ALUMNI WEEKEND

Friday, April 26	WMAA Board of Directors Spring Meeting 50th Class Reunion Recognition Luncheon Medical Alumni Awards Banquet
Saturday, April 27	Reunions for classes of 1953, '58, '63, '68 and '73

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON

CONTENTS

QUARTERLY • SUMMER 2012 • VOLUME 14 • NUMBER 3

Summer on Campus (above)

Members of the UW-Madison rowing team get an early start at a summer practice session on Lake Mendota.

On the Cover

Bacteria such as this *E. coli* are usually associated with gastrointestinal infection and disease. But under normal, balanced conditions, they live harmlessly in beneficial communities of microbes in the human gut. *Photo Researchers, Inc.*

ROBERT N. GOLDEN, MD

Like the rest of our state, Madison this summer experienced one of the most severe droughts and heat waves in recent memory.

Fortunately, in a more figurative sense, there has been no drought here at our School of Medicine and Public Health in terms of exciting growth and new opportunities. We are witnessing the ripening of a crop of outstanding academic programs, as well as the flowering of stellar individuals who contribute in significant ways to our vital missions.

As featured in this issue of the *Quarterly*, our Physician Assistant Program, a true "jewel in the crown," has launched an expansion on the UW-Marathon County campus in Wausau. This is due to its successful competition for new funding from the Health Resources and Services Administration.

While our MD curriculum is clearly what most people associate with our school, our other educational programs—including the master of public health, doctorate in physical therapy, master in genetics counseling, and doctoral research programs, as well as our Physician Assistant Program—embody the school's commitment to addressing the clinical and research workforce needs of our state. All of our clinical training programs are vitally important, and each emphasizes underserved rural and urban populations across Wisconsin.

We continue to enjoy a bountiful harvest of awards and commendations for individuals and programs. These include new honors and leadership opportunities for several of our faculty, as well as heartfelt thanks and appreciation for alumni leaders and community-based teachers throughout the Badger State.

Our Institute for Clinical and Translational Research (ICTR), which was featured in the last issue of the *Quarterly*, recently "hit it out of the park" in the national competition for renewed funding. We just learned that over the next five years, $41.5 million will be allocated to support this outstanding program, which is a partnership among UW-Madison's four health sciences schools—the SMPH and the UW Schools of Pharmacy, Nursing and Veterinary Medicine—the College of Engineering and the Marshfield Clinic. We also recently learned that our major teaching hospital partner, UW Hospital and Clinics, received *U.S. News and World Report's* first-ever award as the number one hospital in the state.

In late June, we hosted a wonderful series of events honoring distinguished alumna Alice McPherson, MD '51. She graciously has allowed us to apply her name and the tradition of excellence that it embodies to the Eye Research Institute that will be located within the soon-to-be-completed Wisconsin Institutes for Medical Research, Tower II.

Dr. McPherson is a strong supporter of her alma mater in many ways, reflected most visibly in the fact that one of our five student learning communities, or houses, is named in her honor. It was especially pleasing that the naming recognition ceremony for the McPherson Eye Research Institute took place, coincidentally, just after we had completed our search for the second director of the institute, Dr. David Gamm. He received the baton from the McPherson Eye Research Institute founding director Dr. Dan Albert on July 1.

As we prepare to welcome the largest class of medical students in the history of our school, we are delighted that they will be entering an institution that continues to grow and expand, in both the quality and the quantity of its outstanding academic, service and clinical programs. We will do all that we can to provide the Class of 2016 with the best possible environment here in the school and in Madison. A little bit of rain will go a long way in that regard!

Robert N. Golden, MD
Dean, University of Wisconsin
School of Medicine and Public Health
Vice Chancellor for Medical Affairs
UW-Madison

KAREN PETERSON

Greetings medical alumni and friends! The summer is racing by much too quickly! The WMAA staff and I miss the medical students during this season, and we look forward to their return very soon.

We are busy planning for fall events that will connect our students, residents and alumni to each other. But before I comment on those activities, I'd like to reflect on the past spring.

One of our most important achievements was finalizing our new 2012-2017 Strategic Plan. I am proud of our newly defined mission and vision, as stated below.

Our Mission: The mission of the WMAA is to create lasting relationships between the University of Wisconsin School of Medicine and Public Health (SMPH) alumni and students by visibly supporting our alumni, students and residents and advancing the mission of the school.

Our Vision: The WMAA is a community that creates an exceptional environment for current students and fosters lifelong relationships connecting our alumni with each other, our students, our residents, the faculty, the school and the university.

In order to live up to this mission and achieve this vision, we have defined many important goals.

In this message, I want to highlight one of my favorite goals, which is to:

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

Impossible you say? I disagree! We have approximately 700 MD students. And we have more than 7,000 MD graduates and 4,700 resident graduates. If only 10 percent of these graduates step forward to support this goal, we will be successful! Here are a few ways in which you can help the WMAA achieve this important goal:

- Serve as a resource for students who are doing clinical rotations in your community.
- Host a social event for medical students in your community.
- Volunteer for the student/alumni partnership program (SAPP), through which alumni share their expertise about their own specialties.
- Assist the WMAA staff in hosting the orientation picnic for Med 1s.
- Volunteer for WMAA's "Young Alumni Network," a program designed to connect recent graduates with Med 4s as they explore residency sites.
- For Madison-area alumni, invite a small group of medical students into your home or take them out to dinner to share information about your specialty. There are 1,200 of you living in Dane County.

The Strategic Plan is highlighted in this issue on page 19. I hope you will take the time to review the entire plan on our Web site: med.wisc.edu/138543.

Please step up and consider helping us achieve our many important goals.

Alumni Weekend was wonderful. Former classmates in the classes of 1952, '57, '62 and '67 reunited for their reunions. They enjoyed a reception hosted by Dean Golden and the WMAA, tours of our beautiful health science campus buildings, brunch with medical students and the annual Awards Banquet.

The Class of 2012 enjoyed an absolutely gorgeous Graduation Day on May 18. Family members and friends attended the recognition ceremony in the Union Theater, and then stopped at the Union Terrace for some beautiful photo opportunities. Later in the day, our graduates participated in the evening campus commencement ceremony at the Kohl Center and the evening party, sponsored by the WMAA, at the beautiful new Union South.

Now that fall is fast approaching, we are working on Homecoming Weekend and many other events. In conjunction with Homecoming, we will host reunions for classes of 1967, '77, '82, '87, '92, '97, '02 and '07. I hope you can join these classes on October 26 and 27 for the WMAA's tailgate party and the UW versus Michigan State football game. I suggest you visit our Web site for more information.

Feel free to contact me with your ideas, questions and concerns. You can e-mail me at kspeters@wisc.edu.

I look forward to hearing from you!

Karen S. Peterson
Executive Director
Wisconsin Medical Alumni Association

Virginia Snyder and Jerry Noack, pictured here, are the current and former director of the SMPH Physician Assistant Program, respectively. They collaborated with many others to expand the program to Wausau.

BY MIKE KLAWITTER

Physician Assistant Program

EXPANSION TO WAUSAU AIMS TO EASE HEALTHCARE SHORTAGE

The year 1977 marked the beginning of the Jimmy Carter era in the White House and the emergence of "Star Wars" as one of the biggest money-making movies in cinema history.

It was also an exciting year for the University of Wisconsin-Madison as it graduated the first 16 students from the Physician Assistant (PA) Program.

Currently, 81 students participate in the program based within the Department of Family Medicine at the School of Medicine and Public Health (SMPH).

Starting in May 2014, the program will train more students through a recently announced agreement to expand the program into the UW-Marathon County (UWMC) campus in Wausau. In the area surrounding this northern Wisconsin community, the lack of healthcare professionals has forced some residents to travel many miles for physical examinations, immunizations and other medical procedures.

A pending physician shortage may be widespread. Recently, the Wisconsin Hospital Association predicted that the state will need to train as many as 100 new primary care physicians annually through 2030 to make up for a predicted shortfall in pediatricians, and internal and family medicine doctors.

"Our goal is to graduate more physician assistants who plan to work in areas where there is a shortage of primary care physicians," says Virginia Snyder, PhD, PA-C, director of the PA Program and SMPH associate professor.

Snyder explains that physician assistants receive a broad education in medicine and are educated in the medical model to complement physician training. PAs are qualified to perform physical examinations, diagnose and treat illnesses, order and interpret tests, counsel on preventive healthcare, and assist in surgery. In most states, including Wisconsin, they can prescribe medications.

"A main difference between PA and physician training is the amount of time spent in formal education, rather than the core content of the curriculum," says Snyder. "In addition to time in school, physicians must do an internship and most complete a residency in a specialty. Physician assistants do not have to undertake internships or residencies."

She adds, "In general, a physician assistant will see many of the same types of patients as the physician. The cases handled by physicians may be more complicated or require care that is not a routine part of the PA's scope of work. Physician assistants are taught to know their limits and refer to physicians appropriately; this is an important part of PA training."

To maintain national certification, PAs are required to log 100 hours of continuing education every two years and participate in recertification every six years.

–Continued on next page

The new thrust in Wausau—called the Wisconsin Physician Assistant Community-based Track (wisPACT)—was introduced during a May 31 news conference. It represents a collaboration among the UW and other medical providers in northern Wisconsin, including Aspirus, Ministry Health Care and the Marshfield Clinic, to create necessary clinical rotations for PA students.

"WisPACT demonstrates a pact between UW-Madison and UW-Marathon County to serve residents who have had to drive long distances to receive routine primary healthcare and other necessary procedures, or have had to endure long waits or gaps in healthcare visits due to limited accessibility," explains Snyder.

Four students will be admitted when wisPACT classes start in May 2014; that number is expected to increase to a total of 24 students in the program by 2016. This will increase enrollment in the PA Program nearly 30 percent, to 105 students.

"It is a bit of a hybrid of the PA Program's on-campus track at UW-Madison and distance education track," she says.

The distance education track allows students to complete their didactic training as a two-year, part-time curriculum, followed by their one-year, full-time clinical training in healthcare facilities in or near their home communities. Similar to wisPACT, its mission is to train individuals who have strong commitments in their community and wish to practice there after graduation.

The wisPACT option will be a two-year, full-time program. Students will spend their first summer at UW-Madison, then complete the balance of their training at UWMC.

"UW-Madison faculty will teach courses in technology-enhanced classrooms at UWMC, using a curriculum that combines synchronous and asynchronous learning experiences," says Snyder. "Students will participate in synchronous classroom experiences between both campuses, as well as Web-based learning in an asynchronous educational format."

Snyder says the program will focus on recruiting students from northern Wisconsin, where the need for medical professionals is the greatest.

"WisPACT candidates will be required to demonstrate a significant connection with their community and a commitment to practice in their community or northern region of the state upon completion of their PA education," Snyder says. "Educating students in rural and underserved areas has been deemed a successful strategy, as evidence suggests students recruited from and trained in underserved areas are more likely to work in those areas."

She adds, "These graduates will be familiar with local healthcare needs, challenges and potential barriers. Participants will embark on an amazing career in medicine and public health that will benefit their families, their neighbors and their communities."

Discussions about the expansion of the PA Program started during the summer of 2011 when UW-Madison representatives met with officials from UW-Marathon County and administrators from regional healthcare systems. The plan received enthusiastic approval. WisPACT will be funded through a federal grant of $610,539 over five years from the Health Resources and Services Administration.

Valerie Gilchrist, MD, Department of Family Medicine chair, applauds the new arrangement with the Wausau campus and predicts it will attract more medical professionals to work in underserved areas of Wisconsin.

"While we are successful in that two-thirds of our 1,100 residency graduates in the Department of Family Medicine program practice in the state, we clearly are not successful enough," she says. "We must continue to innovate, practice and produce more healthcare providers. What we know about providing care in rural areas is that the providers and program do much better if the students are recruited from, trained in, and return to serve in those communities."

Dennis Flood, a PA student from Medford, Wisconsin, who is scheduled to graduate in 2013, says the expanded program is very important for northern Wisconsin.

Ray Cross, PhD, chancellor, UW Colleges/ UW-Extension; Valerie Gilchrist, MD, chair, SMPH Department of Family Medicine; and Elizabeth Petty, MD, SMPH senior associate dean for academic affairs, gathered at the Wausau press conference announcing wisPACT.

"This is a great program and an excellent opportunity," he says. "There are so many professionals in the community who have waited for this. The continuity of care, the importance of knowing someone you can relate to and respect—this program will provide these benefits in the northern community."

Jerry Noack, PA-C, graduated from the first PA class of 1977. A native of Appleton, Wisconsin, he started working as a physician assistant at the Shearer-Cohen Clinic in Edgerton, Wisconsin, before moving to Group Health Cooperative in Madison. In 1980, he returned to UW as a PA instructor and later served as director of the PA Program for six years. One of his students was Snyder, who became interim program director in 2006 and director in 2008.

"The PA Program began as part of the UW School of Allied Health, which included physical therapy, occupational therapy and medical technology," Noack explains. "That was before it entered the Department of Family Medicine within the School of Medicine and Public Health."

Noack says in the 1970s, most small communities had little experience with physician assistants, but the concept caught on because many new graduates were working in the communities where they were born and raised.

Anna Deprey and Matthew Neuman, second-year students in the Physician Assistant Program, interact with a young patient.

"I think the reception was quite exceptional, given this new profession in the medical community," he says. "I think a lot of that had to do with the students who were enrolled in the program—lots of enthusiastic learners, and lots of students who were from those same home communities."

"The PA Program introduced students to different parts of the state through clinical rotations," he adds. "The majority of us ended up working in those communities where we did our clinical rotations. Positions were largely created because it was a good match. It wasn't so much you were recruited because there was an open position."

Noack retired in 2010, but—in collaboration with Snyder—has been instrumental in planning the PA expansion into Wausau.

"This is a fantastic opportunity for communities that need more medical professionals to participate in the education of people who will stay in the community to work," he says.

PA students also are excited about the program's expansion into Wausau and how it has helped in their studies thus far.

For instance, Jessica Everman, a third-year PA student, is doing her clinical rotations in Platteville through the PA Program's distance education track. She says community-based learning to be a PA was a perfect opportunity that she couldn't pass up.

"I desire to stay in my home community due to professional and personal commitments, and this program allows me to do just that," she says. "I am able to gain clinical experience while working as a medical laboratory technician and have studied the didactic curriculum through innovative video-capture technology. I think the recent expansion of the PA Program into Wausau will improve access to healthcare for people living in underserved communities, just as the distance education option has done for my community."

Anna Deprey, a second-year PA student doing a rotation in family medicine, says the PA expansion into Wausau is a great example of the program thinking "outside the box."

"The northern part of the state is in great need of medical professionals, and I believe the Wausau program will help solve that problem," she says. "Right now, all of the PA and medical programs are clustered mostly in the lower half of the state. I think this program will draw diverse and well-qualified applicants who want to stay in the northern part of the state. It is a win-win situation."

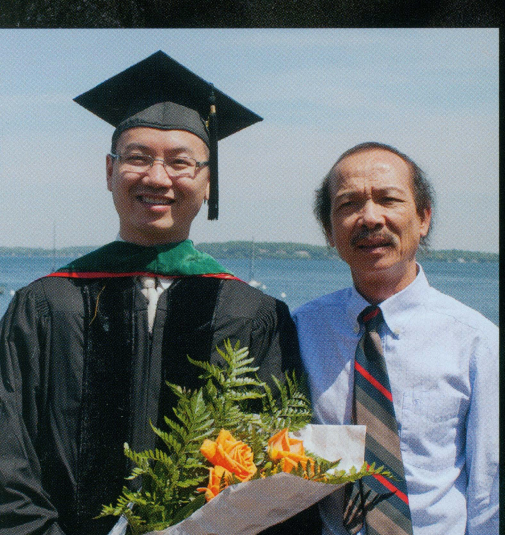
Deprey adds that participating in the PA Program is like joining a family.

"The instructors and faculty care about students and are always there to guide you," she says. "I feel very welcome and supported in the program. One of the things I really appreciate is how highly they regard students' feedback. The program continues to improve every year because of this."

There's More Online!
Visit fammed.wisc.edu/pa-program

Graduation 2012

A CELEBRATION TO LONG REMEMBER



Opposite page: Emily Abeyta happily receives her hood. Clockwise from bottom: Sarah and Bob Zemple pose with their new baby and Bucky Badger. Hau Nguyen stands proudly. Graduates celebrate in a very colorful way.

Graduates of the Class of 2012 are now deeply enmeshed in their new lives as busy resident physicians. Their time as medical students at the School of Medicine and Public Health (SMPH) may seem a blurred memory. But May 18, 2012, should be a day they will not soon forget.

The SMPH family helped the graduates celebrate the end of medical school at the annual Recognition Ceremony, held at the Wisconsin Union Theater. With Dean Robert N. Golden, MD, presiding over the ceremony, the graduates heard from guest speaker James H. Conway, MD, a pediatrician at the SMPH, and from Robert Zemple, MD, co-president of the Medical Student Association. Senior Associate Dean for Academic Affairs Elizabeth Petty, MD, administered the Declaration of Geneva, with the class reciting along.

As each student then walked across the stage, SMPH Professors Dennis Maki, MD '67, and George Mejicano, MD, symbolically invested each into the profession with the draping of a green-edged hood. Associate Dean for Students Pat McBride, MD '80, MPH, the new president of the Wisconsin Medical Alumni Association (WMAA), welcomed the graduates as alumni. The celebration ended with a WMAA-sponsored reception and brunch.

There's More Online!
To see more pictures, go to med.wisc.edu/87

PHOTOS BY CHRIS FRAZEE

Margaret McFall-Ngai has used the tiny Hawaiian bobtail squid (seen here with its reflection) and its bacterium partner to understand broad aspects of symbiosis and other beneficial relationships.

BY DIAN LAND

Microbes for Health and Survival

A SYMBIOSIS EXPERT UNDERSTANDS THE BENEFITS OF RELATIONSHIPS

Bacteria, fungi, yeasts, viruses, amoebas—trillions of them naturally take up residence in and on human beings. We usually think about them only when they make us sick, or threaten to. Now it appears that microorganisms play a much more important role than ever suspected in keeping us healthy—indeed, alive.

That may be the ultimate lesson learned from the recently completed Human Microbiome Project (HMP), a five-year, $153 million National Institutes of Health (NIH) initiative that brought together more than 200 scientists from some 80 research centers to start taking a census, of sorts—a tally to identify the microbiome, the complete collection of all the microorganisms that typically live in and on the human body.

Using samples taken from multiple spots on the skin and in the mouth, gastrointestinal tract and female reproductive tract of 242 healthy U.S. volunteers, researchers sequenced the RNA and DNA of the microorganisms they found and used super-computers to analyze the genetic data.

"The scientists were stunned by what they learned," says Margaret McFall-Ngai, PhD, professor of medical microbiology and immunology at the University of Wisconsin School of Medicine and Public Health (SMPH) and a member of the Symbiosis Cluster at UW-Madison. "The number and complexity of microorganisms was well beyond what they expected."

But McFall-Ngai has never doubted the importance of the relationships between microbes and humans.

An expert on symbiosis—the state in which two different organisms from separate species co-exist—she studies the partnership between the tiny Hawaiian bobtail squid and the luminous bacterium called *Vibrio fischeri* that lives inside it. She has found it to be an ideal system for exploring broad issues about how disparate organisms cooperate in fundamental ways to survive. A thought leader held in high esteem by the microbiome community, she was invited to attend nearly every HMP meeting convened.

The new studies revealed that more than 100 trillion microorganisms—some of them never seen before—live peacefully in or on each of us. The microorganisms are organized into thousands of different types, a much greater degree of diversity than previously imagined, and many gather at specific body sites—under the gums, in the colon, on the hand and up the nose.

The microbes connect to epithelial tissues, the cellular coverings of internal and external body surfaces; these interfaces have intrigued McFall-Ngai since the beginning of her career.

Each microorganism contains thousands of individual genes that actively contribute to many vital functions, including helping with digestion by breaking down starches, producing anti-inflammatory substances, synthesizing vitamins, promoting the storage of energy from fat, and priming the development of newborn immune systems.

–Continued on next page

From the HMP analysis, scientists conclude that each person has a distinguishing microbial signature; stool samples showed, for example, that no two people had the same combination of microorganisms living in their gut. But across the study population, many similarities were seen.

"Cities offer a good analogy," says McFall-Ngai, a comparative animal biologist by training. "San Francisco is uniquely San Francisco due to all its own characteristics. Yet there are groups of people living there—bakers, sanitation workers, police officers—that are common to almost all cities."

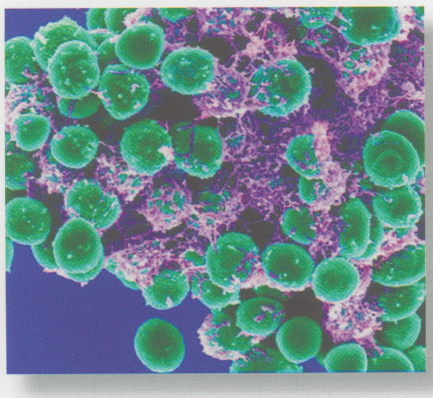
While almost everyone harbors species that have the potential to be harmful—such as *Clostridium diffiicile, Staphylococcus, Candida, E. coli and Helicobacter pylori*—these microbes live in harmony with humans most of the time. But illness, stress or the use of antibiotics can throw off the normal balance, allowing some microorganisms to overgrow and cause damage.

"If the police force in the microorganism community is greatly reduced, robbers who are usually law-abiding may now take advantage," says McFall-Ngai, extending the city analogy.

Eventually, the human microbiome returns to a state of equilibrium, although possibly not in exactly the same way as before.

McFall-Ngai was excited to learn from the HMP results that microbes appear to have been with humans since humans began evolving, a theory supporting the idea that microorganisms are essential to human existence. It's a theory she has trumpeted for a long time, often on deaf ears.

"The most dramatic HMP outcome, one that really confirms the value of microbes to my mind, is that microbial molecules found in blood, sweat and urine contribute 36 percent to the makeup of the human metabolome, the full complement of metabolites present in humans," she says. "This shows that even when microbes are not present in a particular site in the human body, the products of their activity can affect those sites."



Usually part of normal skin flora, Staphylococcus epidermis (green) *nestles in extracellular matrix.* National Institute of Allergy & Infectious Diseases.

INSIGHTS FROM SQUID-VIBRIO

As the Human Microbiome Project researchers concluded their studies this summer, McFall-Ngai completed a John Simon Guggenheim fellowship that included a sabbatical year in which she was the Gordon and Betty Moore Professor at the California Institute of Technology (Cal Tech). The fellowship allowed her to continue thinking expansively about her work and its implications. For 24 years, she has evaluated the value of persistent, mutually beneficial relationships between different species as she has studied the bobtail squid and its partner the *Vibrio*. The more she's learned from this relatively simple model system, the more she's extrapolated to the bigger picture.

The luminescent *Vibrio* helps the nocturnal squid produce light during its nighttime searches for food, allowing the squid to escape from fish predators.

"With the help of the *Vibrio*, the squid emit ventral luminescence that is often very, very close to the quality of light coming from the moon and stars at night," explains McFall-Ngai. To hungry fish peering up from below, the squid appear camouflaged against the moon or the starlight because they don't cast a shadow. The squid expel most of the *Vibrio* population each dawn, nurturing a new batch during the following day.

McFall-Ngai first became interested in squid–*Vibrio* symbiosis when she was a graduate student at University of California-Los Angeles. She convinced microbiologist Ned Ruby, PhD, then at the University of Southern California, to examine the bacterium–fish partnership with her. At the time, it was the only experimental symbiotic system in which neither partner would be harmed if the other were removed.

McFall-Ngai and Ruby, an SMPH professor of medical microbiology and immunology, have finely tuned the model over the years. The scientists have used it to understand important aspects of symbiosis: the signaling that occurs between partners as symbiosis is established and maintained, how balance is maintained between the partners, the influence bacteria have on animal development, differences and similarities that exist between good and bad animal–bacterial interactions, and how those interactions have evolved over time.

The work is covered widely in the media, and the researchers are invited often to speak about it.

One key finding, which earned a place on the cover of *Science* in 2004, involved two molecules—lipopolysaccaride, which sits on the surface of *Vibrio* and all other gram-negative bacteria, and peptidoglycan, which comprises the next layer down on the cell wall. The molecules typically work together to trigger immune responses such as inflammation. But McFall-Ngai and her team discovered that the *Vibrio* also uses them to induce development in the squid tissues with which it will associate.

"Other scientists found, to their surprise, that the same two molecules on the surface of other bacteria were required for the development of the mouse gut," says McFall-Ngai. "We pointed the community toward molecules whose action might be conserved over evolutionary history."

Another article, published two years ago in the *Proceedings of the National Academy of Sciences*, showed that the persistent maintenance of the squid–*Vibrio* symbiosis is tied to a dynamic 24-hour rhythm that involves both partners.

"The study suggests that researchers should look for evidence of circadian rhythm

in the microbiota of the mammalian gut," McFall-Ngai says. "These rhythms may play a role in normal tissue development, efficient nutrition and disease resistance."

In a "concept" article published in *Nature* in 2007, McFall-Ngai caused a stir among many scientists, particularly those who study immunology, with her long-held theory regarding what she sees as the main function of the adaptive immune system that is peculiar to vertebrates, including humans.

This memory-based immune system responds to each fresh encounter with the microbial world on the basis of past interactions. But invertebrates have functioned very successfully without this form of immunity. Why, then, do vertebrates need it, she asks?

"I think the adaptive immune system evolved in vertebrates not only to mount defenses against microorganisms but because of their need to recognize and manage the many complex communities of beneficial microbes that live with them," she says. "Invertebrates associate with far fewer microorganisms, so they don't need to worry about this."

McFall-Ngai won her Guggenheim to study the immunity issue further. But she changed her goals once it became clear that the theory was gaining traction, especially among immunologists, over the past five years or so.

She used the fellowship instead to travel to several countries in Europe, where she gave talks, met scientists and learned if they were beginning to appreciate that microbiota are important for human health.

"It turns out that European scientists are more accepting of these concepts than American scientists are," she says.

Returning from Europe, McFall-Ngai gathered a group of 25 high-powered life scientists from around the globe to draft a manifesto on how microbiota may have influenced primal issues such as the origin of animals, their ecology, genomic signatures and development. The article, called "Animals in the Bacterial World: An Imperative for the Life Sciences," should be published soon.

*Studies in the relatively simple squid–*Vibrio *system have helped McFall-Ngai and her collaborator Ned Ruby understand important issues such as how bacteria influence animal development.*

For the final part of her Guggenheim, McFall-Ngai spent time developing, with Howard Hughes Medical Investigator Diane Newman, PhD, professor in the biology division at Cal Tech, a novel introductory biology course in which microbes were used as the unifying principle.

"Diane lectured 45 minutes on microbes, and then I followed by describing what happens when you become a multi-cellular organism," she explains. "It was a huge adventure, and I hope I can continue to develop that course."

NEXT STEPS

The Human Microbiome Project has thrown open the door to a barrage of scientific questions and opportunities for many scientists, says McFall-Ngai, who as chair of the annual meeting of the American Society of Microbiology organized a special late-breaking plenary session on the HMP.

"Knowing which sorts of microbes normally function in healthy people can help us study the roles they play during changes in disease," she says.

Researchers are wondering, for example, how it is that *H. pylori,* which causes ulcers and stomach cancer, can also apparently protect against asthma. Can the microbiota found predominantly in lean people be transferred to obese people to help them lose weight? What role will probiotics really play in maintaining a healthy gut microbiome? And which microbes influence brain development?

The NIH has funded many additional medical studies building on HMP findings. And McFall-Ngai expects more.

"It is finally crystal clear that micro-organisms contribute critically to human health and survival," she says.

UW HOSPITAL AND CLINICS NAMED TOP IN STATE

In its first-ever ranking of hospitals by state, *U.S. News and World Report* named UW Hospital and Clinics the top hospital in Wisconsin—and among the nation's top 50 hospitals in seven medical specialties.

UW Hospital and Clinics is nationally ranked in: nephrology (24); geriatrics (29); pulmonology (33); ear, nose and throat (38); neurology and neurosurgery (40); cancer (41) and gynecology (44). Only 150 hospitals make the *U.S. News* rankings in at least one category.

The magazine also named UW a "high-performing hospital" in cardiology and heart surgery; diabetes and endocrinology; gastroenterology; orthopedics and urology.

High-performing hospitals must be in the top 25 percent within a given specialty.

Hospitals are ranked in 16 categories, with 12 assessed on a combination of data on patient safety, survival and staffing along with survey results from physicians. In the categories of psychiatry, ophthalmology, rheumatology and rehabilitation, only a reputational score is used. Nearly 5,000 hospitals were assessed.

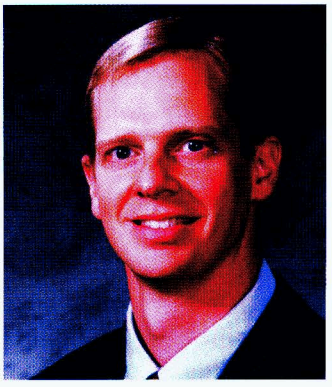
GAMM NAMED MCPHERSON EYE RESEARCH INSTITUTE DIRECTOR

Pediatric ophthalmologist David Gamm, MD, PhD, whose lab is internationally known for deriving human retina cells and tissue-like structures from human stem cells, has been named director of the McPherson Eye Research Institute (ERI). (See page 16.)

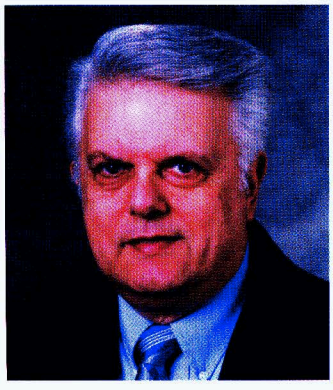
The McPherson ERI is a multidisciplinary community of more than 100 UW-Madison scholars working to gain critical knowledge about the science and art of vision and apply it to preventing blindness. Its members range from basic researchers to neuroscientists and computer engineers.

An associate professor of ophthalmology and visual sciences and an investigator in the Waisman Center Stem Cell Research Program, Gamm assumed duties from ERI founding director Daniel Albert, MD, on July 1.

"We are thrilled that Dr. Gamm agreed to take on this vitally important leadership role," says Robert N. Golden, MD, dean of the SMPH. "He has an outstanding international reputation as a physician-scientist, and has demonstrated a remarkable ability to create synergies by bringing together people from differing disciplines and perspectives."



ICTR GRANT RENEWED WITH $41.5 MILLION



Following a highly productive first five years, the UW-Madison Institute for Clinical and Translational Research (ICTR) received a coveted five-year renewal by the National Institutes of Health.

The renewal comes with a grant of $41.5 million, nearly the same amount that was given to ICTR in the initial round of funding in 2007. It is one of the largest grants ever awarded to the SMPH.

"This renewal highlights not only the work at ICTR, but the talent and research excellence at UW-Madison and Marshfield Clinic," says Marc Drezner, MD, ICTR executive director.

In addition to a key partnership with Marshfield Clinic, ICTR is a partnership among the UW health sciences schools—the SMPH and the Schools of Pharmacy, Nursing and Veterinary Medicine—and the College of Engineering.

In the next five years, ICTR will continue to cultivate the development of researchers who can conduct translational research—in which discoveries move quickly from the university to doctors' offices, clinics, hospitals and county health departments where they can be used.

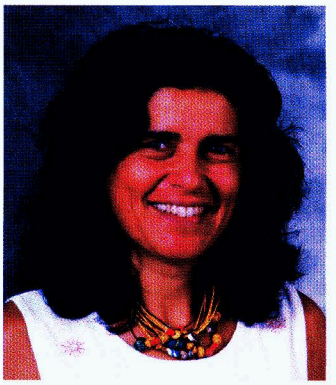
HAQ ELECTED FELLOW IN WISCONSIN ACADEMY

Cynthia Haq, MD, SMPH professor of family medicine, has been elected a fellow in the Wisconsin Academy of Sciences, Arts and Letters.

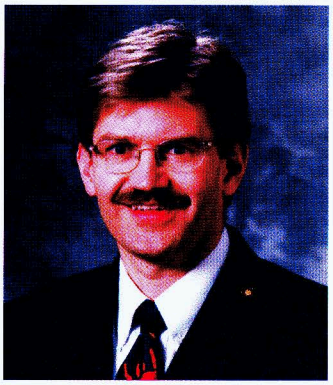
Haq has led many educational initiatives for her department and the school. Most recently, she established Training in Urban Medicine and Public Health (TRIUMPH), a program that prepares medical students for future practices in urban areas.

She also has an abiding interest in global health—she and UW colleagues established the Center for Global Health to catalyze global health education, field programs, research and partnerships in low-resource settings. She was a visiting professor in Africa, always returning home to practice in Belleville, Madison and Milwaukee.

Academy fellows are elected for their extraordinary levels of accomplishment in their fields, and a lifelong commitment to intellectual discourse and public service. The Wisconsin Academy applies the sciences, arts and letters to bring context, civilized discussion and meaningful action to the most important issues and ideas of the day.



TEMTE APPOINTED TO NATIONAL IMMUNIZATION ADVISORY COMMITTEE



Kathleen Sebelius, secretary of Health and Human Services, appointed Jonathan Temte, PhD, MD '87, SMPH professor of family medicine, chair of the U.S. Advisory Committee on Immunization Practices. He is the first family physician to serve in this role.

The committee provides advice and guidance to the secretary, the director of the Centers for Disease Control and Prevention (CDC), and others on the most appropriate selection of vaccines and related agents for effective control of vaccine-preventable diseases in the civilian population.

Temte represented the American Academy of Family Physicians (AAFP) at the CDC's 2000 Measles Elimination Meeting and its 2004 Rubella Elimination Meeting. He served as AAFP liaison to, and later a voting member on, the CDC's Advisory Committee on Immunization Practices.

He chairs the Wisconsin Council on Immunization Practices and is active on pandemic influenza and bioterrorism working groups. He conducts research on viral disease surveillance in primary care, seasonality and epidemiology of influenza, and attitudes toward immunization. He practices at Wingra Family Medical Center in Madison.

FOUR HONORED WITH DEAN'S TEACHING AWARDS

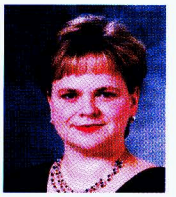
Four SMPH faculty members received Dean's Teaching Awards last spring.

Joshua E. Medow, MD, MS, developed the neurology intensive care unit (ICU) curriculum, leads neuro-ICU rounds and created other learning opportunities for students on the neurology clerkship.

Gregory Rice, MD '00, co-director of the Medical Genetics course, has a notable ability to explain complicated subject matter in a way that students can understand and apply.

Lonie R. Salkowski, MD, MS, has transformed the teaching of anatomy by merging modern imaging and cutting-edge technology, helping students make connections between clinical anatomy and imaging.

Rebecca S. Sippel, MD, is director of the surgery clerkship and has been involved in the Patient, Doctor and Society course and the Year-End Physician Skills Assessment (YEPSA).



McPherson Eye Research Institute

With a new name honoring distinguished alumna and world-renowned ophthalmologist Alice McPherson, the institute will have a home in WIMR II.

by Kris Whitman

"Vision—It reaches beyond the thing that is, into the conception of what can be," professes 20th century author Robert Collier.

Reaching beyond is something Alice McPherson, MD '51, has done all of her life.

In the 1960s and '70s, she pioneered xenon and laser therapy, cryotherapy and scleral buckling procedures in her quest to save the vision of patients with diseases of the retina. She also was among the first to document treatment of diabetic retinopathy with photocoagulation of the retina.

Now a professor of ophthalmology at Houston's Baylor College of Medicine, the Canada native's career has its roots at University of Wisconsin-Madison, where she earned her undergraduate and medical degrees. She was one of four women in her 1951 School of Medicine and Public Health (SMPH) graduating class.

After furthering her retina specialty through residencies and fellowships in Santa Barbara, California, Chicago, Madison and Boston, McPherson returned to the SMPH as an ophthalmology instructor. She credits the progressive attitude of her UW mentors—Frederick Davis, MD, and Peter Duehr, MD—with helping her forge her career.

"There were about 11 retina specialists in the U.S. In that day, one or two retina doctors were enough for a state," she says.

With retina specialist Davis in Madison, and others in Florida, New York and California, in 1960 she found her niche in Texas, among people she describes as "accustomed to women going west and proving themselves."

Prove herself she did, throughout the nation and world. Her roles in patient care, research and teaching remain active today.

Recognizing the need for basic research to eradicate blindness, she established the Retina Research Foundation (RRF) in 1969. Through donations from the private sector and investment of its endowment funds, the foundation provides research grants, fellowships and awards through many national and international vision-related organizations. The RRF also funds endowed, named professorships and chair positions at the UW and Baylor College of Medicine.

Upon learning in 1994 that her beloved Professor Duehr was dying, McPherson reconnected with the UW Department of Ophthalmology and Visual Sciences—then chaired by Daniel Albert, MD—to learn how she could honor Duehr and others who had influenced her beginnings.

"When I came to Madison that May, after nearly 30 years away, I immediately had a wonderful rush of memories," explains McPherson. "I remember the lilacs in bloom. I love lilacs, and they don't grow in Texas!"

Albert notes that McPherson has treated the department generously by establishing lectures and organizing the UW Ophthalmology Alumni Association.

"In the 1990s, Alice was my mentor and Arthur Polans was my vice chair for research," says Albert, who holds an MD from the University of Pennsylvania and a master's in health administration from UW-Madison. "We realized that a lot of researchers at the UW were working in vision-related fields, but did not know about each other's work. We were motivated to bring people together, create a scholarly environment and collaborate."

To help further these goals, McPherson established a significant endowment at the UW. In 2005, the Eye Research Institute (ERI) became a reality. Albert became its founding director and Arthur Polans, PhD, its associate director. The duo stayed in those roles until July 2012, when the institute was honorarily renamed the McPherson Eye Research Institute.

Coincidentally on July 1, David Gamm, MD, PhD, took the reigns as director of the McPherson ERI (see page 14). SMPH Professors Albert and Polans remain active at the institute—Albert in eye pathology and ocular oncology; Polans in the study of natural products such as resveratrol in the treatment of eye diseases.

Albert praises Gamm as his successor: "David Gamm is an outstanding physician scientist, mentor and teacher, and I am certain he will be an outstanding director."

Today, the McPherson ERI incorporates more than 100 UW-Madison vision scientists and scholars from more than 30 departments in eight colleges and schools who are working to gain critical knowledge aimed at understanding and preserving sight.

McPherson and 19 Retina Research Foundation board members and distinguished guests from Oklahoma and Texas visited UW in late June to celebrate the Eye Research Institute's renaming. Their visit included a tour of the WIMR II construction site, pictured here.

"Members include faculty in the visual arts, psychology, engineering, ophthalmology, zoology, biochemistry, computer science and more," says Polans, who earned his doctorate in neuroscience at UW-Madison.

The McPherson ERI will move to the under-construction second tower of the Wisconsin Institutes for Medical Research (WIMR) in 2013. WIMR's unique design includes open laboratories and limited boundaries to allow clinicians and scientists to work in a collaborative, integrated environment.

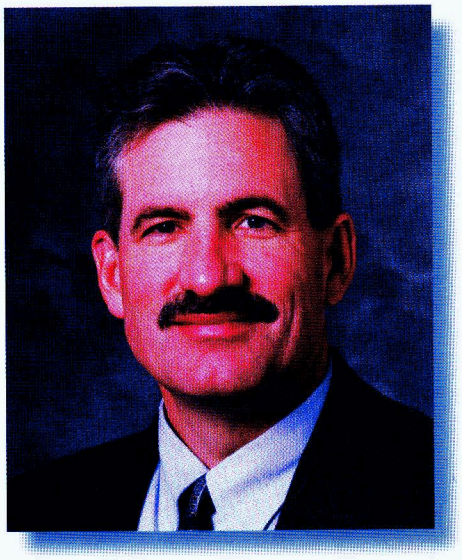
"UW-Madison's spirit of collaboration is wonderful. It fosters open communication among departments, and it's congenial and cohesive," says McPherson. "Decades ago, clinicians and scientists were not speaking the same language. Come to find out, we all share the goal of preventing blindness."

With all this research flowering in Madison, McPherson is relishing some blooms of her own: "After a year of nurturing a special species of lilac bush that Dan Albert found for me, I had my first flower this year," says McPherson. "I don't think a lilac has ever bloomed in Texas before!"

There's More Online!
Visit vision.wisc.edu

Pat McBride Becomes President

OF WISCONSIN MEDICAL ALUMNI ASSOCIATION



by Kris Whitman

As a lifetime Wisconsin Medical Alumni Association (WMAA) member and champion of the Wisconsin Idea, the new role as 48th WMAA president seems a natural fit for Pat McBride, MD '80, MPH, associate dean for students at the School of Medicine and Public Health (SMPH).

"Stemming from my UW-Milwaukee undergraduate years, and my SMPH medical training and faculty roles, the Wisconsin Idea is ingrained in me," says McBride, an SMPH professor of medicine and family medicine.

All six of his siblings attended UW System schools, and his mother and others taught in the UW System. His siblings include a public school teacher, two university professors, a film historian, and two attorneys, including his twin brother, who is president of the Wauwatosa common council.

McBride's parents—reporters for rival Milwaukee newspapers—instilled a strong work ethic, dedication to education and financial responsibility in the clan.

"Starting at age 12, we had to pay for our education and all of our expenses," he explains.

To that end, he delivered newspapers, scooped ice cream at Baskin-Robbins, and worked odd jobs.

"When I was 15, I won an essay contest called 'Why I Want to be a Bat Boy' for the Milwaukee Brewers, and I got the job," he reminisces. "That allowed me to work in that role for the Brewers, as well as Milwaukee-based games for the Green Bay Packers. At age 16, I was hired as a ball boy for the Milwaukee Bucks, and at age 18, I was promoted to equipment manager.

"I'm sure I'm the only kid to simultaneously work for three professional teams, and I became the youngest equipment manager in the history of professional sports," says McBride, recalling opportunities to work with Kareem Abdul Jabbar, Oscar Robertson, Robin Yount and Bart Starr.

McBride is writing this history in a book called "The Luckiest Boy in the World."

This Milwaukee native left Wisconsin only to complete his family practice residency and master of public health degree at the University of South Carolina. Upon joining the SMPH faculty in 1984, he was first charged with helping start the DeForest Family Medicine Clinic and the UW Hospital and Clinics inpatient family medicine service.

Early in his career, McBride developed a comprehensive curriculum for preventive cardiology, primary care residencies and a cardiology fellowship with a National Institutes of Health award. He obtained a grant to start a preventive cardiology program aimed at primary and secondary prevention of heart disease. Through these projects, McBride has collaborated with most SMPH departments and more than 300 practices in Wisconsin.

"Consistent with the Wisconsin Idea," says McBride, "our team realized we could best reach our goal of reducing premature death and disability from cardiovascular disease by educating generations of medical students, residents, physicians, nurses and other healthcare providers."

Today, McBride's activities encompass medical student and resident education, patient care and cardiovascular disease prevention research. He serves on several national advisory boards and has served on many national guideline expert panels. He received the 2012 SMPH Dean's Teaching Award and 2009 Department of Medicine Grossman Award for displaying the highest standards of professionalism, teaching and compassionate care.

"I consider myself very blessed and want to return those blessings to my

family, community and future generations of physicians," says McBride, whose family includes wife Kim and children, Sean and Gabrielle.

McBride's greatest pride is to share his Badger spirit through interactions with SMPH students and alumni. This inspiration led him to chair the committee that crafted the WMAA's new strategic plan.

"We want to enhance communication and connections among alumni and students," he explains. "A big goal is to help reduce medical student indebtedness through scholarships and awards."

McBride's Class of 1980 started a scholarship fund the year after graduation, and he encourages other classes to consider doing this.

"Students and alumni are surprised to learn that tuition and state funding cover only a modest percentage of medical education. Together, approximately 15 percent of the school's expenditures come from state and tuition dollars," McBride explains. "The school is grateful for its state support, but the amount keeps decreasing while costs keep increasing. This means the WMAA must ask alumni for help."

As an example, the WMAA will be asking alumni to contribute toward purchasing a stethoscope for each first-year medical student, who will own the tool for life. The WMAA also donates money and time to student organizations, such as the MEDiC student-run free clinics that provide healthcare to homeless and low-income patients.

"This is a profession where people must work hard to get where they are, but the returns are great," McBride says. "I am proud to be part of this world-class university."

New WMAA Strategic Plan Approved

by Dian Land

The board of directors of the Wisconsin Medical Alumni Association (WMAA) recently approved a new strategic plan that will guide the association for the next five years. A 12-member committee consisting of alumni, school leaders, staff, a student and a resident met eight times in the past year to hammer out the details, seeking formal input from the board twice in the process.

"The strategic plan was a great example of a team effort involving the wonderful leadership of Karen Peterson, our consultants, the WMAA board, the UW Foundation and many others," says Pat McBride, MD '80, MPH, who chaired the committee. "We are excited to have specific goals to help the WMAA improve connections with our alumni and students, and support our world-class School of Medicine and Public Health."

The plan aims specifically to intensify activities in the areas of engaging constituents, strengthening communications, enhancing student and resident career development, and increasing endowments and scholarships.

"These are things we have always cared about, but now we are setting the bar higher than ever, in terms of clarifying and achieving our priorities," says Peterson, WMAA executive director.

For example, in the area of career development, the WMAA will strive to ensure that every medical student will make a meaningful alumni connection.

"A good number of our alums live in areas of the state such as La Crosse, Eau Claire, Milwaukee, Marshfield and the Fox Valley. Students also do rotations in several of these areas," says Peterson. "We hope to bring people together. We plan to help alumni in these areas create regional chapters that can sponsor social events for students living in those areas."

Peterson hopes this goal will provide alumni with new opportunities to be involved in students' lives in any way they choose, from providing career advice to suggesting the best local bike trail.

In terms of increasing endowments and scholarships, the new strategic plan calls for eliminating WMAA annual dues so that alumni can focus instead on more effective ways to invest in the association and the school.

The plan also calls for fostering a culture of philanthropy and giving back among students and young alumni, increasing the active engagement of all board members, developing a strategy for using social media to strengthen communications, and establishing a "Buy a Stethoscope" program to support students throughout their four years in medical school.

"As our vision statement says, it's all about building a community that creates an exceptional environment for current students," Peterson says. "Fostering lifelong relationships that connect alumni with each other, with students, residents, faculty, the school and the university is at the heart of our efforts."

WMAA Strategic Priorities

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

Communications: Strengthen the effectiveness of all communications with WMAA constituents.

Career Development: Enhance career development opportunities for medical students and residents.

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

There's More Online!
To see the complete strategic plan, go to med.wisc.edu/138543

Alumni Weekend

RECONNECTING AND REMEMBERING

From left: Donald Kinkel, Richard Barrick and Glen Holt of the Class of '57 share a laugh after many years.

by Dian Land

Twenty-one members of the Class of 1962 celebrated their 50th class reunion during Alumni Weekend 2012. But one classmate was conspicuously absent: longtime class representative Charlie Miller, who died suddenly the previous May in a racquetball accident.

"Charlie had been our class president in medical school, and he continued to lead us and keep us connected after we graduated, putting together a newsletter every year and organizing class reunions every five years," says classmate Kathryn Nichol. "He was like a big brother to many of us. He was older than most of us, had graduated from the Naval Academy, and was responsible and serious, although he also had a great sense of humor. He was my best friend in medical school."

Nichol rallied her classmates by creating a Great People's Scholarship fund in Miller's name. Over the months, the class gave $27,300 to the fund, with the WMAA and the UW Foundation matching that amount between them.

"We thought it was a special way to honor Charlie while also supporting medical students, who are so burdened with debt these days," says Nichol, who practiced pediatrics in Madison.

On Friday evening, Nichol hosted an intimate cocktail party in her downtown condo for the particularly close classmates, who were medical students during a tumultuous time at the school. Toasts were also made to classmates John Konnak and Mort Futterman, who also died.

The Classes of 1952, '57 and '72 also held reunions during Alumni Weekend. Although 20 members of the Class of '57 were on hand, classmate Leon Rosenberg was unable to make it. But he arranged a conference call that produced a few laughs, and read a poem he had written for the occasion.

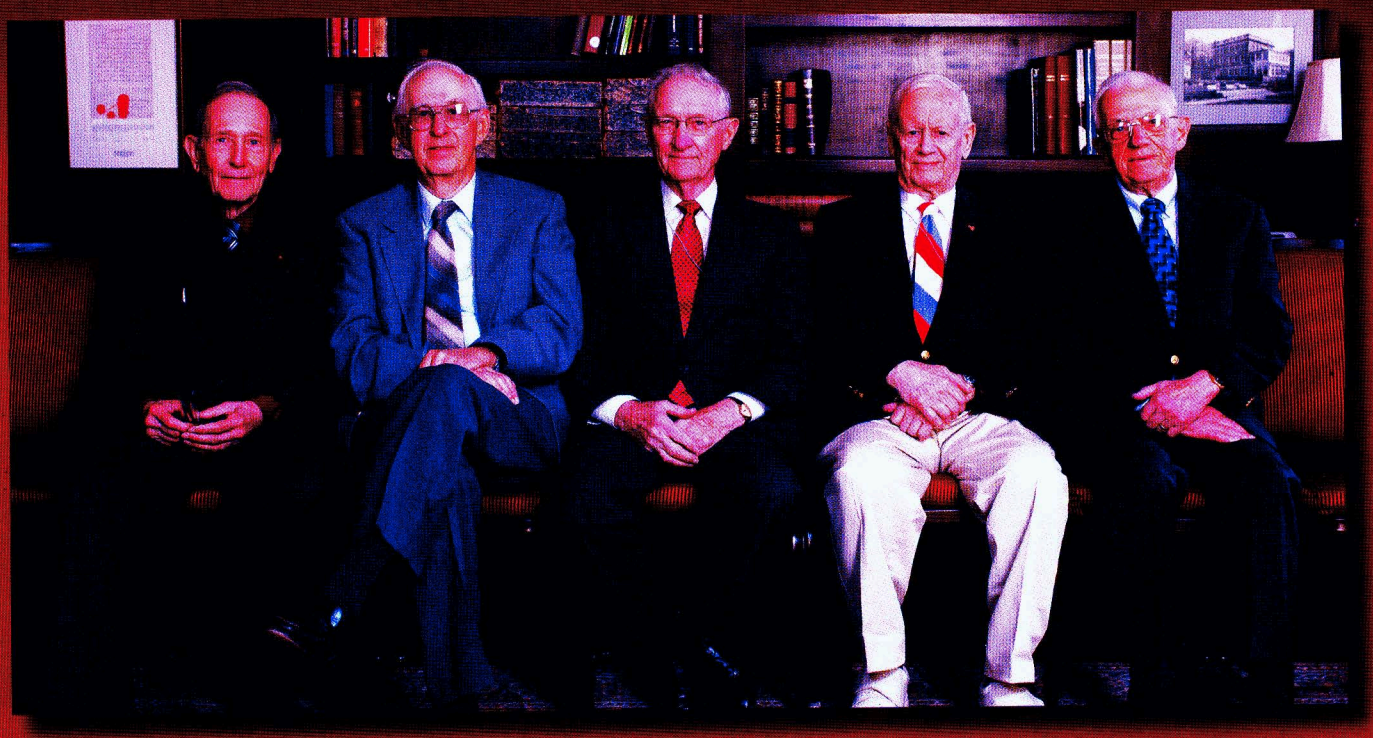
As always, the reunions were the highlight of the weekend. In addition to reconnecting with friends and classmates at their reunions, alumni attended the Dean's Reception, had brunch with a group of medical students, and took tours of the Health Sciences Learning Center, American Family Children's Hospital and Wisconsin Institutes for Medical Research.

Before all of the fun started, the WMAA board of directors had a productive meeting on Friday, signing off on the strategic plan that has been in the works for nearly a year.

Above: Raymond Schofield and Gregory Gallo check out their class picture. Left: Kathryn Nichol (left) presents a check to Susan Miller, widow of Charlie Miller, whose memory will be honored with a scholarship fund.

REUNIONS

1952



Left to right: Erby Satter, C. Emil Mueller, Robert Kebbekus, Weir Horswill and Ray Hansen.

1957

Front row (left to right): John McKenna, Gregory Gallo, John Ellis, Jr., Ted Fox, Anne Schierl, Henry Aufderhaar, Raymond Schofield, Harold Oxman and Richard Stiehm. Back row: Freeman Born, Jr., Donald Kinkel, Ethan Pfefferkorn, Sandy Mallin, Jim Ferwerda, Bruce Stehr, Richard Barrick, Robert Pointer, Glen Holt, Edward Miner and Ronald Olson.

1962

Front row (left to right): Paul Frechette, Bernard Huizenga, Lowell Peterson, Charlotte Burns, Kathryn Nichol, Neil Sagle, Robert Barnes, Philip Marden, James Basiliere and Richard Van Dreel. Back row: Charles Vavrin, Larry Schmitt, Michael Hughes, Jerome Gundersen, Richard Geline, Marcus Cohen, Roger Plotkin, Alan Bensman, David Hill, John Sarbacker and William Martens.

1972

Front row (left to right): John Pederson, Charles Garvey III, Robert Justl, George Gay, Richard Steliga and Jim Pettersen. Back row: Lawrence Frazin, William Borer, Michael Dictor, Howard Thalacker, Edward Ehlinger, Henry Anderson III and Theodore Goodfriend.

AWARDS BANQUET 2012

YOUNT AND SLACK WIN TOP HONORS

The Wisconsin Medical Alumni Association (WMAA) presented its top two awards—the Alumni Citation Award and the Medical Resident Citation Award—to William J. Yount, MD '60, and Warner V. Slack, MD, respectively.

Yount is a nationally acclaimed immunologist and rheumatologist. He graduated first in his class from the SMPH in 1960 and completed his internship, residency and fellowship at the Massachusetts General Hospital. He then served in the U.S. Public Health Service clinical oncology unit in Boston and collaborated in the initial trials of vincristine, vinblastine and mitomycin C in a variety of refractory malignancies. Clinical trials of melphalan as the first successful treatment for multiple myeloma led him to a more basic interest in immunoglobulins and basic immunology.

In 1965, Yount moved to Rockefeller University and the laboratory of Henry Kunkel, MD. He used purified myeloma proteins to discover the IgG and IgA subclasses, IgG subclass deficiencies, and some of the Gm genetic markers. He found the IgG heavy chain genes to be closely linked.

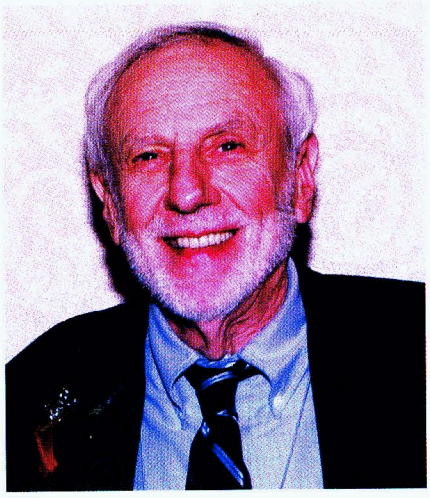
In 1970, Yount was recruited to the University of North Carolina (UNC) School of Medicine to develop the Division of Rheumatology, Allergy and Immunology. He established the Clinical Immunology and Immunopathology Laboratories, and the Rheumatology and Allergy Fellowship Programs. He continued his research on the IgG subclasses and studied the role of complement receptors in the pathogenesis of systemic lupus.

He continues to consult and teach in rheumatology and allergy and immunology at UNC and, in 2006, was awarded the Reeves Distinguished Professorship.

For the past 45 years, Slack has focused his research on the use of computers to improve communication in medicine and to empower doctors and patients for better healthcare. His early work on computer-based medical interviewing, when he was a resident at UW-Madison, led to the first studies of patient–computer dialogue and formed the basis of a new field in the use of the computer as an assistant to the patient.

Over the years, Slack established new computer-based approaches to medical interviews, and developed and studied programs that provide direct assistance to patients in managing medical and psychological problems. He was an early advocate of "patient power," arguing for a shared medical record and the patient's right to participate as a peer with the doctor in decisions about diagnosis and treatment.

William J. Yount



Warner V. Slack

With colleagues at the Center for Clinical Computing at Harvard, Slack developed and implemented an integrated, hospital-wide clinical computing system for use at Boston's Beth Israel Hospital and Brigham and Women's Hospital.

On the faculty in Harvard Medical School's Department of Medicine for more than four decades, he earned his MD at Columbia University College of Physicians and Surgeons.

There's More Online!
To read more about the winners, go to med.wisc.edu/96

More Awards

A dozen other people were honored this year with special awards, including:

Distinguished Clinical Science Teaching Awards
Kyla Lee, MD '98; Gregory Kennedy, MD, PhD; Lori Remeika, MD; and Carla Kelly, DO

Outstanding Resident Teaching Award
Sarah Yanke, MD '10

Distinguished Basic Science Teaching Award
Paul Bertics, PhD (posthumously)

Sigurd Sivertson Medical Education Award
Jeffrey Polzin, MD

Basic Science Emeritus Faculty Award
Daniel Geisler, ScD

Clinical Science Emeritus Faculty Award
Lincoln Ramirez, MD, PhD

Ralph Hawley Distinguished Service Award
William Klish, MD '67

WMAA Service Award
Louis Bernhardt, MD '63

WMAA Honorary Membership
Gloria Hawkins, PhD

Meyer Given Max Fox Preceptor Award

Timothy Meyer, DO, of Memorial Medical Center in Neillsville, Wisconsin, was honored recently when SMPH officials presented him the Max Fox Preceptor Award. The school and the Wisconsin Medical Alumni Association co-sponsored the event.

The award is given annually to an outstanding preceptor whose effective service as a mentor and teacher has guided UW medical students. Some 50 physicians across the Badger State volunteer in the program.

Meyer has been a preceptor to SMPH medical students and a supervisor to physician assistant and nurse practitioner students at Memorial for many years. He has served as the chief medical officer and director of medical education at the hospital for the past four years.

In July 2010, he was appointed to the state's Rural Health Development Council, a 15-member group that advises the Wisconsin Department of Commerce on issues such as the Wisconsin Loan Assistance Program, ways to improve health indicators in rural communities, and other healthcare matters.

"Dr. Meyer is an outstanding role model to our students, providing each of them individualized learning experiences in a rural setting," says Robert N. Golden, MD, dean of the SMPH.

A primary goal of the SMPH is to increase the number of physicians who practice medicine in Wisconsin, especially in rural Wisconsin, adds Golden.

Meyer joined Memorial in 1999 as an emergency/urgent care physician, and continues to serve in that capacity and as a primary care physician. He also founded the hospital's Cardiovascular Prevention Clinic and continues to be involved in cardiac rehabilitation and cardio testing.

In addition to his many medical responsibilities, he serves on the city's Economic Development Committee, Chamber of Commerce board of directors and winter carnival committee, among many others. He is a founder of, and actor in, the local theater group.

Meyer earned his doctor of osteopathy degree from Michigan State University College of Osteopathic Medicine and did his internal medicine residency at Gundersen Medical Foundation/Lutheran Hospital in La Crosse. He was a fellow in the Health Care Administration and Leadership Course in Washington, D.C.

The Max Fox Preceptor Award was created by Herman Shapiro, MD, in 1969, to honor his preceptor, Max Fox, MD. During his 46 years of practicing medicine, Fox greatly influenced the careers of some 4,000 physicians.

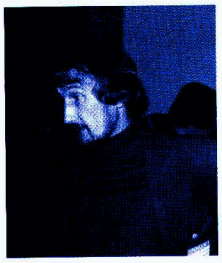
Max Fox Preceptor Award Recipients

1970 Merritt Jones, MD
1971 Peter Midelfort, MD
1972 Leslie Kindschi, MD
1973 Paul Mason, MD
Einar Daniels, MD '34
Warner Bump, MD
1974 Maurice Whalen, MD
Bruce Prentice, MD
1975 George Magnin, MD '46
Robert Senty, MD '47
1977 Mischa Lustok, MD
Phillips Bland, MD '47
Herbert Snodgrass, MD
1978 Henry Ashe, MD
Roy Larsen, MD '39
1979 Robert Gilbert, MD
Thomas Rice, MD '45
1981 Donald Griffith, MD
Ben Lawton, MD '46
1982 Thomas M. Haug, MD '47
William Russell, MD '46
1984 William Deardorff, MD
1985 Eugene Eckstam, MD '43
Herbert Sandmire, MD '53
Roger Bender, MD '43
1987 Donald Jeffries, MD '47
James Merritt, MD
1988 James Michael, MD
1989 Sigurd Sivertson, MD '47
1990 Robert Obma, MD '65
Richard Hartzell, MD
1991 Thomas Nikolai, MD
Bernard J. Haza, MD '50
1992 Eugene Krohn, MD '59
1994 Thomas Jackson, MD '67
1996 D.J. Freeman, MD '52
1997 Donald Burandt, MD '59
1998 Lynn Eggman, MD '62
2000 A. A. Koeller, MD '61
2002 Phillips Bland, MD '47
John Henningsen, MD
2003 Sharon Haase, MD '85
2004 John DeGiovanni, MD
2005 Robert Mortimore, MD
2006 John Frost, MD '71
2007 Jeffrey Polzin, MD
2008 Kenneth Gold, MD
2009 William Nietert, MD '78
2010 Jeffrey Menn, MD '74
2011 Timothy Meyer, MD

CLASS NOTES

Compiled by Joyce Jeardeau

CLASS OF 1952



William Richards is proud to have mentored and influenced young people to choose medicine as a career. Sharon Haase '85, an internist in Beaver Dam, Wisconsin, and former Max Fox Preceptor award recipient, is among those who were influenced by William. He also mentored high school students at the Wayland Academy by providing an in-hospital study program. His favorite publication to read is *Scientific American*, and the highlight of his retirement has been bicycling throughout Europe and the United States.

Working at Fairbault State Hospital in Minnesota was a true learning experience for **Gwendolyn Smythe**. When she first joined this mental health facility, which treats many patients with seizure disorders and behavior problems, she thought such behavior could not be treated. She learned that with a teamwork approach, great things were possible, and notes "the residents were wonderful." Years later, the facility closed, and the residents were placed in their own home areas; many of them were able to hold paying jobs.

CLASS OF 1957

Theodore (Ted) Fox is well known by students for his 25-year role as a summer preceptor for first-year medical students. Ted has hunted in 15 states and providences, and in South Africa. He has traveled to Peru, Spain, Italy and France. Some are surprised to learn that he was the fourth person to be Bucky Badger. Because he was incognito, only his fellow band members and a few close friends knew of his alter ego. His reign as Bucky was the 1952 and 1953 football seasons. The latter season resulted in the Badgers' first trip to the Rose Bowl. Ted didn't get to go, however, because the fundraising total allowed the band to attend, but not Bucky. Today, it is hard to imagine a Rose Bowl without Bucky.

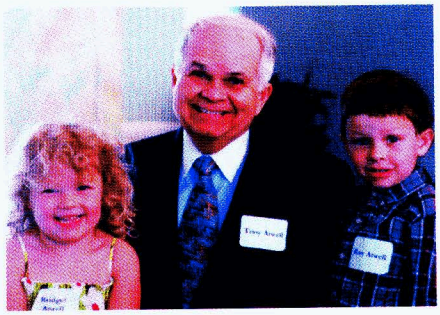
John Haswell advises young physicians to "get a hobby, because it's important to have a life outside of medicine." John plays the tuba with the Sarasota Pops Orchestra. His brass quintet plays at a day-care facility for Alzheimer's patients. He also states that he considers being a physician a "privilege."

CLASS OF 1962

Prior to retirement, **Bernard Huizenga** and his wife, Judy, built a home in the country near Palmyra, Wisconsin. They considered it a "magical place" due to its woods, pond, stream, springs and peat marsh. They carved out one-and-a-half miles of trails that revealed the beauty and variety of the land and its offerings. They constructed six bridges that crossed the stream along the path to further enjoy this "magical place." Though they have moved closer to town in the past year and miss the country, they plan to bring some of those magical touches to their home in Elm Grove.

Kathryn Nichol has woven Navajo rugs that grace the floors of the Nichols' homes in Madison and Sarasota, Florida. During the past decade, she also has woven many Nantucket baskets and this year will be completing her third queen-size Amish quilt. She enjoys reading, gardening and many Madison-area arts, such as opera, theatre and the symphony.

CLASS OF 1968



Anthony (Tony) Atwell has been recognized as the 2012 Distinguished Clinical Professor by the Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine. In its history, the award has been presented to only four other child psychiatrists. Tony has been a clinical faculty member in the department since 1975, supervising child psychiatry fellows, serving on department committees and teaching. He is the director of the Child Forensic Psychiatry Seminar, which he co-founded and has taught annually since 1989. He also maintains a private practice of child, adolescent and family psychiatry in Campbell, California. He lives in Saratoga, California, with his wife of 43 years, Sue (Schiller) Atwell. Son Andrew and daughter-in-law Alix, with their children (shown above) Rory, 6, and Bridget, almost 4, live nearby. Daughter Amy, a graduate student at the University of California-Irvine, lives in the Los Angeles area.

CLASS OF 1974

Timothy Peterson has been appointed secretary of the Accreditation Association for Ambulatory Health Care (AAAHC) board of trustees. A national organization that accredits a variety of healthcare organizations, AAAHC signifies dedication to quality patient care. Timothy became an

AAAHC surveyor in 1995 and served on the AAAHC Surveyor Training and Education Committee. The type of organizations that the association accredits include ambulatory surgery centers, office-based surgery centers, college student health centers, managed care organizations, military health care clinics, medical homes, and large medical and dental practices.

CLASS OF 1976

In 1976, about 15 percent of **Liz Gabay's** fellow medical school graduates were women. Recently, she attended the medical school graduation of her daughter, Katherine, and about 50 percent of her class members are women. Great strides have been made in medical education for women in the past 30 years.

CLASS OF 1986

According to **Louis Ptacek**, a neurologist, "the more we understand how specific genes and proteins function in normal biology and what role they may play in neurological diseases, the better we can find new and better treatments and diagnostics." For his research on the biology and genetics of several human diseases and disorders, Louis has been elected a member of the National Academy of Sciences (NAS), one of the highest honors awarded to scientists and engineers in the United States. At the academy's 150th annual meeting in Washington, D.C., next April, Louis will be formally inducted into the NAS, which has 2,152 active members, among them 200 Nobel Prize winners. His research has involved everything from epilepsy and migraines to sleep disorders and jet lag. He has been working with families throughout the world regarding disease-related genetic traits.

CLASS OF 2006

Daniel Sklansky will be joining the University of Wisconsin hospitalist team in September. He recalls a lecture by Philip Farrell, MD, PhD, about nutrition in cystic fibrosis patients and a photo of a patient who grew up to be a competitive rower.

POST GRADUATE

Jonathan Haug, '05, chair of the Department of Anesthesiology at Altru Hospital in Grand Forks, North Dakota, has been appointed to the North Dakota State Board of Medical Examiners. He is eligible to serve two four-year terms on the board. The medical examiners board consists of 13 members: nine MDs, one DO, one PA and two public members. The Board of Medical Examiners is responsible for regulating the practice of medicine to assure safe standards of the practice of medicine for the people of North Dakota. They review each applicant for a qualified license to practice in the state and enforce the state's Medical Practice Act.

IN MEMORIAM

George Lerner '51
May 14, 2012
Chicago, Illinois

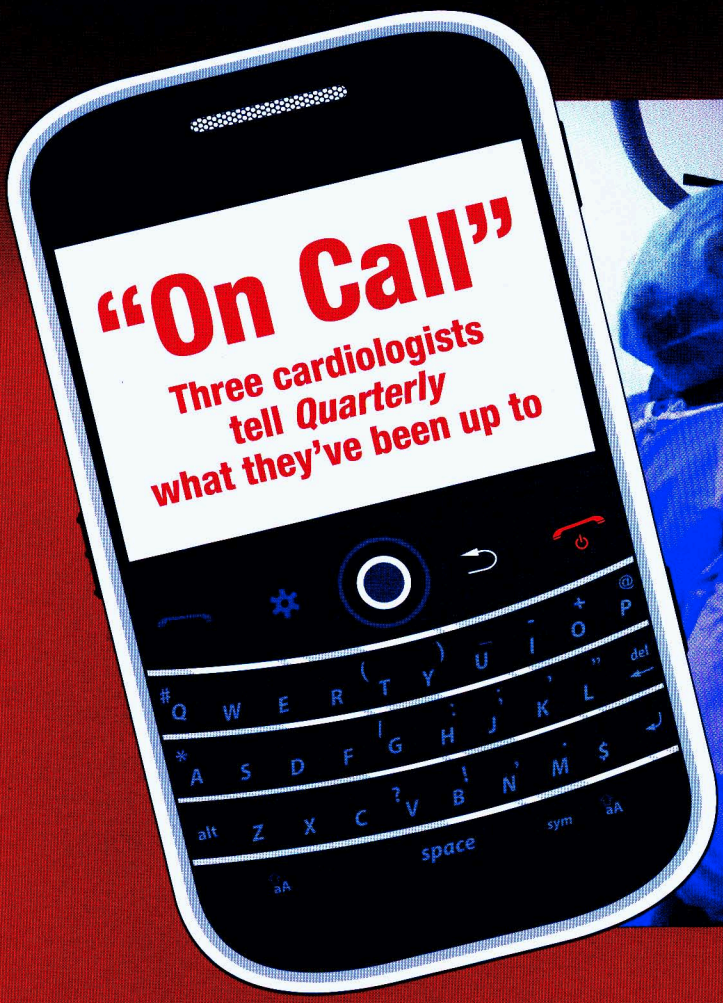
John Mitchell (resident) '48
September 13, 2011
Omaha, Nebraska

Charles (Chuck) Schoenwetter '57
May 1, 2012
Madison, Wisconsin

TO THE EDITOR:

I was saddened to read the article by Doctors Rieselbach and Bernhardt: "Goodbye, Dear Colleague—William A. Kisken, MD" in the Spring 2012 issue of the *Quarterly*. Dr. Kisken was a prince as a teacher, a mentor and a surgeon. When I first arrived as a surgical intern in 1965 on the old 6 East, I not only had Lou Bernhardt as a junior resident, but Bill Kisken as our attending. For that year and the following year as a general surgery resident covering also his private surgical service, I always looked forward to working with Bill and enjoying his witty humor and friendship. He was a gem. He even allowed me to be on his kidney transplant team doing cadaver procurement no less, even after I began my otolaryngology residency. How fortunate I was.

Francis Parnell, MD
Intern, 1965-1966
Resident, 1966-1970
Ross, California



"On Call"

Three cardiologists tell *Quarterly* what they've been up to

CRAIG STEVENS, MD '77

I am a cardiologist at Iowa Health Cardiology at Iowa Health Des Moines, a large healthcare system in the Des Moines metro area. I also do outreach clinics in rural Iowa.

I have been in Des Moines for 24 years and have been in cardiovascular practice for 30 years. I do non-invasive work and direct a vascular laboratory at Iowa Lutheran Hospital. I also practice at Iowa Methodist West Medical Center.

I previously did invasive catheterizations and interventions, but left the catheterization laboratory 15 years ago, as I needed hip replacement due to an old football injury. If my health continues to be good, I will practice another 10 years.

I am a fellow in the American College of Cardiology. I have passed American board certification in cardiovascular disease, echocardiography and vascular duplex imaging. I also am board eligible in coronary computed tomography angiography (CTA).

This is an amazing time in cardiology, as we have seen an enormous impact on improved healthcare. Age-adjusted death rates continue to drop for cardiovascular patients. Acute myocardial infarction-related mortality rates and preventive cardiology continue to improve. Early detection and heart disease treatments also continue to improve. Nationwide, numbers for coronary interventions and surgery continue to drop due to better detection, prevention and treatments.

The biggest challenge for cardiology relates to the increasing rates of congestive heart failure that accompany the aging population. Another challenge relates to cardiovascular risks and diabetes associated with obesity among youth.

I feel very fortunate to have grown up in Wisconsin and to have received a high-quality education that helped me succeed throughout my career.

My excellent undergraduate and medical education at UW-Milwaukee and UW School of Medicine and Public Health, respectively, prepared me well for my career.

My wife, Stacy, is a Drake second-year law student who grew up in nearby Grinnell, Iowa.

MELISSA KLEIN, MD, PG

I've been working at the Presbyterian Heart Group in Albuquerque, New Mexico, since I finished my residency at Dartmouth-Hitchcock Medical Center in New Hampshire and my cardiology fellowship at UW.

I chose cardiology because I wanted to practice both inpatient and outpatient medicine. This exciting subspecialty offers the opportunity to perform invasive and non-invasive procedures, and interpret nuclear medicine and cardiac ultrasound studies. Some days, I see critically ill patients in the throes of a myocardial infarction, and other days I offer a lot of reassurance.

As a general cardiologist, I see a wide variety of patients with chest pain, coronary disease, congestive heart failure, electrical heart disease and valvular disease, as well as those aiming to prevent a first vascular event. I am a member of the American Society of Echocardiography and a fellow of the American College of Cardiology.

A challenge is that this field requires a significant commitment to hard work, including weekends and holidays. Although it's possible to work part time or job-share, it's harder to do that in practices where hospital coverage and night call are expected. As a mother of three young children, I find balancing work and family challenging because my patient care takes place in both inpatient and outpatient settings. Patients expect to see me when they are ill and for outpatient follow-up.

Several years ago, I saw a particularly memorable patient: an older man who was a ski and bicycle racer. He had been very competitive through his 60s, but shortly after his 70th birthday, he stopped winning races. His primary doctor reassured him that slowing down was part of aging, but the patient became a bit depressed about his decline in exercise tolerance. At the urging of his daughter, a high school friend of mine, he came to see me. We discovered that he had heart block. With a new pacemaker, he is back to skiing competitively. Even though I'm a pretty good skier, I had trouble keeping up with him.

KAREN MONCHER, MD '98

I am an assistant professor of cardiovascular medicine at the UW School of Medicine and Public Health and practice at the William S. Middleton Memorial Veteran's Hospital, UW Hospital and Clinics and Meriter Hospital in Madison, and Divine Savior Hospital in Portage, Wisconsin, via the UW outreach program.

My outpatient work includes general, preventive and nuclear cardiology and vascular medicine.

On the inpatient team, I admit patients with myocardial infarctions, congestive heart failure and arrhythmias. I am a non-invasive cardiologist, so I collaborate with colleagues in the cardiac catheterization laboratory regarding care such as angiography, stenting, electrophysiology, and placement of pacemakers and defibrillators.

I have many long-term patients whom I just love—including a 92-year-old aortic stenosis patient who looks 70 and acts like she's 50, and others who have remarkable composure in the midst of terrible illness.

I chose cardiovascular medicine for its multi-dimensional nature: prevention, acute treatment, chronic therapy—there is never a dull moment. Progress in this field is astounding.

I did my residency at Gundersen Lutheran in La Crosse, Wisconsin, which included opportunities at Mayo Clinic and in rural medicine, adolescent medicine, palliative care and drug overdose, which has grown so much.

I returned to UW for my cardiovascular fellowship, and spent time in my fourth year of fellowship at Abbott Northwesten in Minneapolis and at Mount Sinai in New York for vascular medicine training.

I am a fellow of the American College of Cardiology, and have participated in groups such as societies in vascular medicine and biology, nuclear cardiology, hypertension, and music and medicine.

I have the pleasure of working with medical students, and encourage them to choose a field about which they are most passionate. Although lifestyle is important to consider, most fields are becoming more flexible in how one can work.

Sleep Apnea Associated with Cancer Risk

Sleep-disordered breathing (SDB), commonly known as sleep apnea, is associated with an increased risk of cancer mortality, SMPH researchers have found.

While previous studies have associated SDB with increased risks of hypertension, cardiovascular disease, depression and early death, this is the first human study to link apnea with a higher rate of cancer mortality.

Lead author F. Javier Nieto, MD, chair of the SMPH Department of Population Health Sciences, says the study showed a nearly five times higher incidence of cancer deaths in patients with severe SDB compared with those without the disorder, a result that echoes previous findings in animal studies.

"Animal studies have shown that the intermittent hypoxia (an inadequate supply of oxygen) that characterizes sleep apnea promotes angiogenesis—increased vascular growth—and tumor growth," says Nieto, an expert in sleep epidemiology.

Nieto presented the study May 20 at the American Thoracic Society 2012 International Conference in San Francisco.

The Wisconsin researchers examined 22-year mortality data on 1,522 subjects from the Wisconsin Sleep Cohort, a longitudinal, community-based epidemiology study of sleep apnea and other sleep problems that began in 1989.

After adjustment for age, sex, body mass index and smoking, the study found that all-cause and cancer mortality were associated with the presence and severity of SDB in a dose-response fashion.

These associations were similar after excluding the 126 subjects who had used continuous positive airway pressure (C-PAP) and were stronger among non-obese subjects than obese subjects.

Exercise and Yoga Can Cut Cold Symptoms

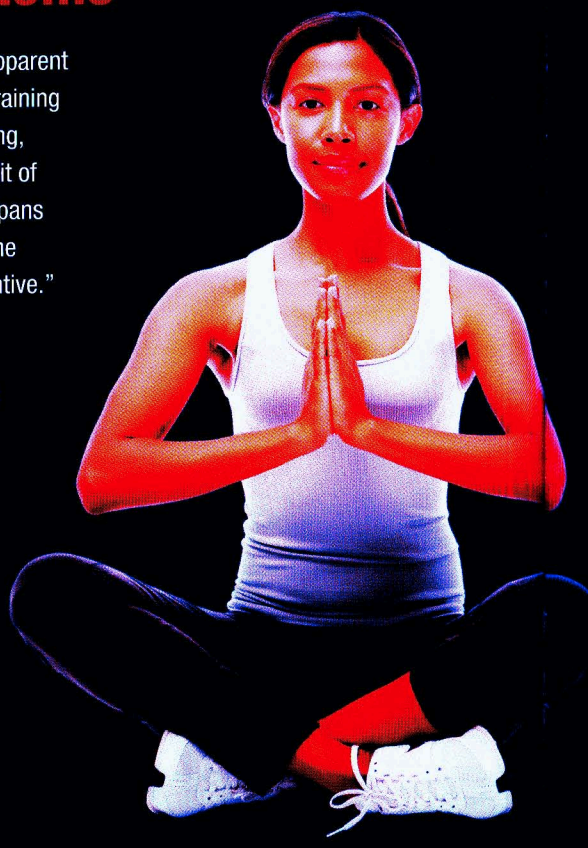
A study published recently in the *Annals of Family Medicine* shows that people older than 50 involved in mindfulness training can reduce the incidence, duration or severity of acute respiratory infections (ARI) by 40 to 50 percent and the use of exercise can reduce symptoms by 30 to 40 percent. Both groups were compared with a control group that did not meditate or exercise.

Fifty older adults were in the mediation group, 47 in the exercise group and 51 in the control group. After eight weeks of training in mindfulness meditation, exercise or neither, subjects were followed throughout the cold and flu season,

The results showed the meditation group had 27 ARI episodes totaling 257 days of illness, and the exercise group had 26 ARI episodes with 241 total days of illness. The control group reported 40 ARI episodes and 453 illness days.

"Flu shots are partially effective, but only work for three strains of flu each year," says lead author Bruce Barrett, MD, associate professor of family medicine. "The apparent benefit of mindfulness training is a very important finding, as is the apparent benefit of exercise training. If this pans out in future research, the impact could be substantive."

Barrett has just received funding for a similar study with 400 people.



Wisconsin Residents Living Longer but not Better

The good news? We're living longer. The bad news? Wisconsinites are reaching old age more overweight, less wealthy and still drinking too much alcohol.

Those are some conclusions of the *Wisconsin Health Trends: Progress Report*, the first comprehensive look at trends in the state's health indicators over the past decade.

Among the findings: all age groups showed a reduction in death rates; rates of obesity are increasing rapidly; rates of smoking and births to teenage mothers are declining; more babies are being born at low birth weights; economic indicators of health are declining, as more people drop out of high school, have no jobs, have no insurance, live in poverty and are exposed to violent crime and air pollution; and self-reports of good health have declined.

"This report shows that while we're living longer, we're not necessarily living better," says the report's lead author, Patrick Remington, MD '81, MPH. "It seems that the quality of life in Wisconsin is declining."

Remington, the associate dean for public health at the SMPH, says that trends such as increasing obesity rates, high rates of alcohol abuse and increasing poverty mean that old age will be less healthy for more of the population. The trends will increase health disparities among some groups in the state who will age very differently.

The report, which assessed 20 health factors, was produced by the University of Wisconsin Population Health Institute, with funding from the Wisconsin Partnership Program.

Early Brain Deterioration Found in Unexpected Place

SMPH researchers believe that Alzheimer's disease may develop first in the brain's "white matter," which coordinates various functions in the central nervous system, rather than the gray matter as previously thought.

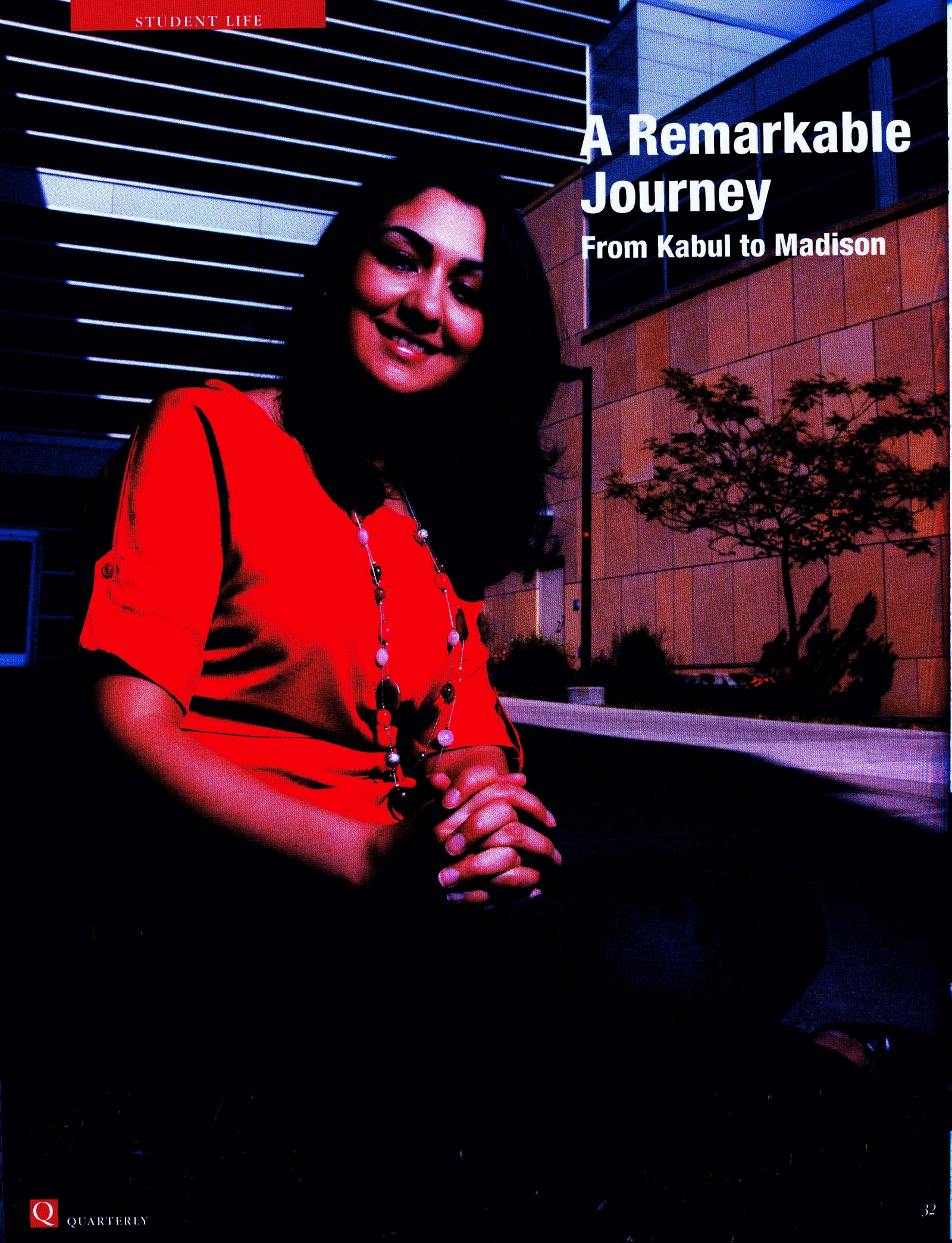
The study, published in *PLoS ONE*, involved 43 healthy middle-aged participants who had at least one parent with Alzheimer's disease. Samples of their cerebrospinal fluid (CSF) were acquired through lumbar puncture. The fluid can be tested for presence of proteins related to Alzheimer's—specifically total tau protein, and the 42-residue form of beta-amyloid protein.

According to Barbara Bendlin, PhD, the lead researcher and assistant professor of medicine (geriatrics) at the SMPH, brain scans given to the participants years later showed that proteins measured in their CSF predicted degeneration in the white matter. This was a surprise because the studied proteins are usually related to degeneration in the brain's gray matter.

"Brain white matter is made up of myelinated axons, and they form connections in the brain—the telephone wires that let different parts of the brain speak to each other," she says. "This study suggests that at the earliest stages of Alzheimer's, these connections are breaking down."

Bendlin says the findings are significant because they could lead to earlier diagnosis of Alzheimer's.

"This study underscores the finding that brain changes in Alzheimer's probably begin decades before diagnosis, and we expect that we can detect the disease earlier and intervene before memory problems occur."



A Remarkable Journey

From Kabul to Madison

by Renie Schapiro

On a hot morning in 1994, 8-year-old Mehria raced through the streets of Kabul, Afghanistan. "Run!" her parents shouted at the confused girl and her two siblings as rockets flew overhead.

Overnight, her parents had decided to flee their war-torn country, leaving behind most of their possessions and a large extended family.

They sought safety from the death and injury that shadowed them every day and had claimed friends and family. Mehria's little sister had died when they could not get her medical care amid the violence. And they wanted an education for their children. With the rise of the Taliban in the 1990s, girls could not go to school. At age 8, Mehria had yet to attend school.

Mehria's desperate run that day began a remarkable journey that has taken her, along a circuitous route, to Madison. Today, Mehria Sayad-Shah is a second-year medical student at the University of Wisconsin School of Medicine and Public Health (SMPH).

Wearing blue jeans and a summer top, she exudes calm and poise as she talks about her tumultuous past. In fluent English, with barely an accent, she also stresses fond memories, like time with her grandparents and getting soft ice cream with her uncle, cousins and siblings.

"It is my favorite ice cream to this day, and I found the exact one here at McDonald's," she says with the broad smile and warm laugh that punctuates so much of her conversation.

The family first reached Pakistan but lasted only a few months there. They didn't know the language and her father, a college-educated civil engineer, couldn't find a job. Mehria turns solemn as she explains that he suffered torture as a prisoner of the Soviets during their war in Afghanistan in the 1980s.

During that war, her uncle emigrated to Germany—one of many family members who scattered to countries all over the world during the last three decades of violence. He encouraged them to join him in Germany. Access to medical care, safety and an education for the children lured them to yet another country with its new language and culture.

Nine-year-old Mehria, who had never been to school and spoke no German, joined a third-grade class mid-semester.

"I remember the first day of class because it was so embarrassing," she says.

The teacher asked her name but didn't understand it, even when the girl repeated it three times, so she asked her to write it on the board.

"I went to the board but I couldn't even write my own name in German," she says, sounding more bemused than embarrassed.

Mehria knew only how to read and write a little Dari that her mother had taught her.

School was "tough and terrifying," she says.

But Mehria became more resolute.

After fourth grade, German students are divided into three tracks based on their performance, with only the highest group moving to 13th grade and university. Mehria was in the lowest group.

"I wasn't OK with that," she says.

As her German improved, her confidence grew. She chose to repeat fifth grade, worked very hard, and by seventh grade she made the unusual leap to the university-bound track.

"It was a good time. I felt very happy," she recalls.

Meanwhile, she and her brother translated German into Dari for their parents.

"For some reason, it just happened, or maybe it was my own interest. I was always translating for healthcare appointments," she recalls. "Often, because I felt a responsibility, because this was serious, I would read the entire medication package and all the side effects and translate it to Dari."

That experience, together with her little sister's death, probably planted an early interest in medicine, she says. But she never dreamed of becoming a doctor.

"Being a doctor was probably not for people like me," she thought then.

Mehria's odyssey continued in 2004, at age 18, when as part of her school's exchange program, she ventured to Oceanside, California, where her aunt lived.

"Going to Germany was about survival," says Mehria. "Coming to the U.S. was more about adventure."

She enrolled in high school and soon took a sales job at Macy's "to learn the culture and language more rapidly." She laughs as she recalls when the Macy's manager told her she would be working in "fragrances." She had no idea what that meant and was too embarrassed to ask.

After she earned her high school diploma in just three months, she took a calculus class at the local community college.

Following college, Mehria was a member of a UCSD research team that earned a trip to NASA to evaluate whether a non-invasive model that they developed for simulating intracranial pressure, known to affect astronauts at times, worked in weightless conditions.

–Continued on next page

Then came a big decision: return to Germany, where her parents and siblings remained, to complete three years of high school—her American diploma would not get her into university there—or remain in the U.S.

She decided to stay in the U.S., got married to Edris Shah, a first-generation Afghan-American, and earned a community college degree. Then she transferred to University of California-San Diego (UCSD), where she earned a bachelor's degree in biomedical engineering.

With each accomplishment, her sense of possibility grew. As she watched classmates who were in a combined biomedical engineering/pre-med track, she began to think maybe she could be a doctor after all.

Following graduation, she worked for a year as a research associate in the UCSD Clinical Physiology Laboratory. Her projects included work on a non-invasive method for simulating intracranial pressure to evaluate severe head injuries.

The research also had applications in space medicine, where it might be used to identify causes of the increased intracranial pressure that astronauts can experience. She was part of a team that earned a trip to NASA to test its model in weightlessness.

With encouragement from her family and husband, and the support of her mentors, Dr. Alan Hargens and Dr. Genevieve Bloom, she started applying to medical school. She first heard of the SMPH through collaborators in the laboratory and then a UW professor who spoke at UCSD.

"It was meant to be," she says with a big smile. "I absolutely love it," she adds, praising the dedicated faculty and her classmates.

It was another difficult transition, though, and she says her first semester was challenging. Her husband, a certified public accountant, relocated to his firm's Wisconsin office well after first semester had started.

But her classmates were quick to recognize her strengths, electing her their representative to the school's Education Policy Council. Josh Tarpley, president of the Medical Student Association, says he thinks students see her as very approachable, responsible and hardworking.

"She is friends with everyone," he says.

Looking back, Mehria sees her life in nine-year segments—the Mideast, Europe and now America. No place has been 100 percent home, she says. And she doesn't know where the next leg of the journey will take her.

She says Afghanistan is more dangerous now than when her family left. She has not returned, though she often thinks of her cousins who lack the educational opportunities she has had. When her mother went there during spring semester to visit Mehria's ailing grandmother, Mehria was so worried she didn't sleep well for a week.

What she knows is that she is passionate about helping people in disadvantaged communities get care. In college, she was co-founder and vice president of the UCSD chapter of Engineers without Borders, and she volunteered in a clinic for the underserved.

At SMPH, she volunteers with MEDiC and went to Guatemala this summer with the Global Health Institute.

With all the cultures and languages she has navigated, and all she has accomplished, Mehria says one of her goals has so far eluded her: She hopes one day to acquire a Wisconsin accent.

4,600 Thanks to Assistant Dean DeMarse!

The School of Medicine and Public Health (SMPH) community extends its thanks to Patricia DeMarse, assistant dean of students, upon her spring retirement, following 36 years of service to the school.

"Pat touched the lives of approximately 4,600 SMPH graduates, or about 65 percent of our alumni," says Karen Peterson, executive director, Wisconsin Medical Alumni Association (WMAA).

After an initial career in social work, DeMarse joined SMPH in 1976 as director of admissions, and moved a few years later into Student Affairs. During DeMarse's first year at the SMPH, Donn Fuhrmann, MD, graduated from the school, and Pat McBride, MD '80, MPH, started his journey as a medical student. Fuhrmann was president of the WMAA for the past two years; McBride began that role in July.

McBride quips about being a student during DeMarse's tenure, and later becoming her boss and teammate, as the associate dean for students.

"Pat's dedication was second to none. She usually arrived at work by 7 a.m., and seldom left before 7 p.m. She made sure everything students needed to progress got done perfectly—including every grade, degree, letter, recommendation, scholarship or residency form, and more," says McBride.

"She always had an open-door policy, and she knew the answer to any question a student or I tossed at her," he says, adding that DeMarse wrote the 100-page student handbook.

McBride adds that DeMarse went out of her way to help students in any way they needed her.

"She has helped students who had an apartment fire, who got cancer, or had to contend with the challenges of a relative's illness," he notes. "With gratitude for all she has done, we now wish her some much-deserved relaxation in her retirement."

....OR DO I?

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

HINT: In his spare time, this man (who is not an alumnus but should be familiar to many alums) loves singing. He sang in two third-year skits at the medical school during the 1980s and still sings bass in his church choir and the Edvard Grieg Chorus in Madison. He was an avid tennis player for years and, back in the day, he organized relay races at the school's annual Field Day.

Our last mystery alums? From left, Sigurd Sivertson '47, Paul Apyan '80, Dave Hansmann '79 and William Russell '46. They are standing on the porch of MASH House on West Johnson Street. MASH House, or Medical Alumni Student House, provided low-cost housing for medical students from about 1977 to 1987.

"MASH House had been the old Phi Chi med fraternity house," recalls Apyan, who was the student manager during his four years of medical school. "It was pretty run down at first, but the WMAA put in $30,000 or so and made it livable. We usually had 15 to 20 people living there. People I remember include George Davis, Kim Merriman, Sam Poser, Ann Olson and Kristi Knight."

Apyan lived on the second floor in an old room with a fireplace. He's now an associate professor in the Department of Orthopedic Surgery at the University of Tennessee in Chattanooga.

James Stouffer, MD '46, was drawn as the contest winner. He quickly recognized his "good friend and classmate," Bill Russell.

GRATEFUL DUO ESTABLISHES THREE AWARDS FROM MAYO CLINIC

Two Alumni Give Back to Their School

by Ann Grauvogl

An essential something clicked when Mark Morrey met fellow student Matt Abdel at the University of Wisconsin School of Medicine and Public Health (SMPH). Both were headed toward orthopedic surgery, both were steeped in faith and both believed in giving back.

"The first time I met him, I knew he was the real deal," Abdel says of his friend. They shared ethics, morals and beliefs, but what stands out for Abdel is that he and Morrey collaborated instead of competed.

Nine years later, after finishing their orthopedic surgery residencies at the Mayo Clinic in June 2012, both have begun stints as Mayo Scholars, which will take them around the world to learn specialized techniques. They also have established three endowed scholarship funds to benefit UW medical students, especially those pursuing careers in orthopedic surgery.

"It really stems from a willingness, need or feeling to give back," Morrey says.

Ten percent of their class chose orthopedics, but there were no student awards in the specialty, Abdel adds. He and Morrey established their first two awards in thanks for their education, training and the opportunity to meet each other and become good friends. With the Class of 2007 award, they hoped to bring their classmates together. They also wanted to promote orthopedic surgery.

"We can fix people," Abdel says, explaining his interest in the specialty. "We can change people's lives in one or two hours."

For Morrey, whose dad was an orthopedic surgeon, medicine was as much a part of his growing up as farming would be to a farmer's child. He also learned woodworking and how to put cars together from his dad. When it came to a career, though, he chose teaching and coaching

and also worked with an adapted floor hockey program for youth with disabilities. While the players had all forms of physical disabilities, most were orthopedic, Morrey says. His mechanical skills came in handy as he modified wheelchairs and built custom hockey sticks.

"That really rekindled an interest in medicine for me," he says. So on to medical school he went.

Morrey and Abdel established the third award in honor of Matt's father, who immigrated to the United States from Egypt in 1979, earned a master's degree and went to work for General Dynamics in Minnesota. He was a man of strong faith who cared deeply about family, and would be up at 3 a.m. to spend long days at work, Abdel says. He also was a mentor to his son, Morrey and other classmates, and would bring feasts of Mediterranean food to share with all of them when he visited Madison.

"The Wisconsin Medical Alumni Association has made raising scholarships for medical students a top priority, so it warms my heart to see such young alumni giving back and wanting to help our current medical students," WMAA Executive Director Karen Peterson says. "Matt and Mark were great leaders as students. ... Obviously they will continue to lead their class in the future."

Jason Jagodzinski, MD '09, the first recipient of the Abdel-Morrey Orthopedic Surgery Award, says it was an honor. As a first-year medical student, he worked with fourth-year students Abdel and Morrey to start an Orthopedic Interest Group.

The award solidifies his appreciation for the community of orthopedics, Jagodzinski says. He had a personal appreciation for the specialty after playing football, baseball and "being a kid," which gave him two broken

collar bones, injured knee ligaments, a dislocated patella and a broken wrist. He also remembers being fascinated as a 10-year-old by the video of his dad's anterior cruciate ligament reconstruction. Jagodzinski is finishing his third year of residency at Loyola University's Stritch School of Medicine.

Jill Martin, MD '11, is in her second year of residency at the Medical College of Wisconsin.

"It's good," she says. "I'm on orthopedic trauma right now. It's fun to be doing what I really want to do."

And what she's really wanted to do since she was a middle-school gymnast is be an orthopedic surgeon. She was fascinated even then by the musculoskeletal system and how to treat injuries. She also helped her dad build furniture, another reason she chose the field that allows her to think on her feet and put the puzzles of broken bones back together.

While the monetary award was welcome when she received the Abdel-Morrey award, Martin says she was especially excited to be chosen.

"I'm so happy and thankful that I matched into ortho," she wrote when she received the award in 2009. "This award was icing on the cake!"

There's more online! To make a gift to the SMPH, visit med.wisc.edu/ and click Make a Gift

Opposite page: From their base at the Mayo Clinic, Mark Morrey (far left) and Matt Abdel (far right)—bookends to a statue of the Mayo brothers—have established three awards to support medical student education at the SMPH.

Awards established by Matt Abdel, MD '07 and Mark Morrey, MD '07

ABDEL-MORREY ORTHOPEDIC SURGERY AWARD: Created to recognize a fourth-year student pursuing a career in orthopedic surgery. Students who have participated in basic science and/or clinical research in orthopedic surgery and who demonstrate financial need will be given preference. Recipients also will have volunteer experience in humanitarian efforts and earn at least a 3.3 grade-point average.

CLASS OF 2007 EXCELLENCE IN ORTHOPEDIC SURGERY AWARD: Created to recognize fourth-year students with a documented ongoing and consistent interest in orthopedic surgery and an intention to complete an orthopedic surgery residency. Preference is given to those who have participated in basic science and/or clinical research in the field and should have extensively volunteered for humanitarian efforts, and demonstrate a strong work ethic and leadership qualities.

PHILIP M. ABDEL MEMORIAL SCHOLARSHIP: Created in honor of Matt Abdel's father, who died unexpectedly from an acute ascending aortic dissection, the award acknowledges Philip Abdel's moral character, work ethic, support for his sons and unwavering advocacy of higher education. The award will be given to fourth-year medical students who have demonstrated one or more of the following attributes: dedication to a surgical specialty or subspecialty, superb academic competence, a resolute work ethic, notable leadership qualities and active research participation.

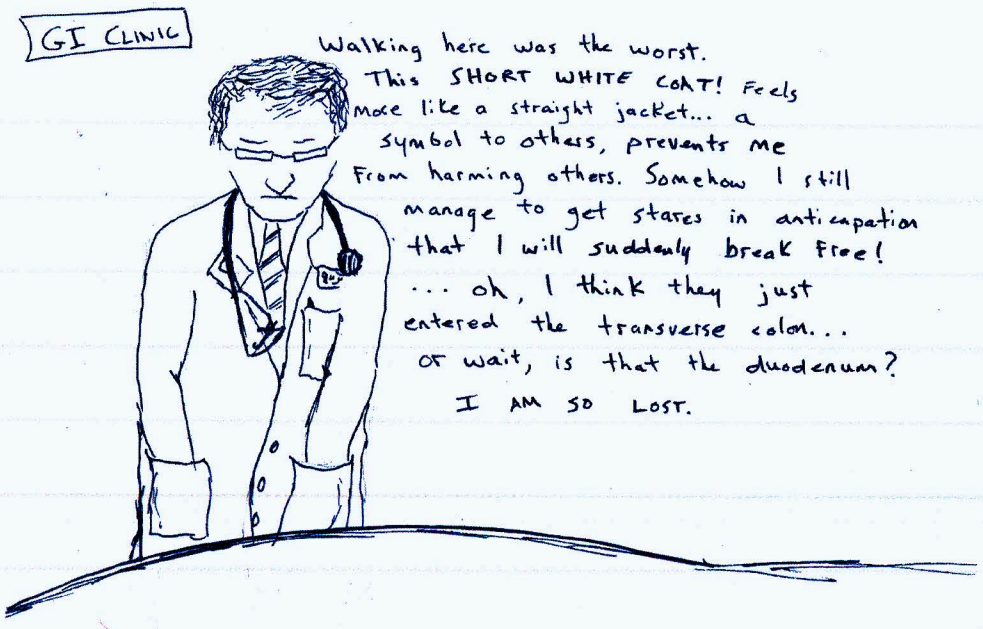
Graphic Novels in Medicine

Drawing Helps Sort Out "What Just Happened"

by Peter Polewski

Studying for an exam late one evening at a friend's apartment while in grad school, I found myself lying on the floor trying to stay awake. Finally rolling myself to a sit, I was face-to-face with a green crate filled with comic books. I supplied plenty of comments on how a 30-year-old reads comic books. "No, Graphic Novels, Peter!" Apparently graphic novels are more of a single book that deals with scientific, political or social issues whereas comic books tend to come in a series, such as Batman or Superman. The education continued that evening as I was handed my first graphic novel. It eventually turned into a green crate of my own.

Drawing had long been a hobby of mine. At some point, I received my own "how to draw" book, pencils and a sketchbook. Although not having much confidence, I was struck by someone saying that if you were able to write in cursive, you had the ability to make any line in a drawing you wanted. Empowered I was. Last summer, attending a "Comics & Medicine: The Sequential Art of Illness" conference at Northwestern University Feinberg School of Medicine, I explored the potential connections that medicine and graphic novels possess. A small subset of people thought the same way, and that was comforting.



Comic books (excuse me, graphic novels) are nowhere to be found in a medical student's world. Rightly so, this is serious stuff! But during a lecture or later at night when taking a break, I learned that finding a moment to draw something from the day was a refreshing change. It was also rewarding to create from my memory how a certain encounter had occurred. But then I began to discover moments within the scene I had missed previously—and to explore why. This opportunity to look back and further evaluate "what just happened" as a medical student who tends to only look ahead became addicting.

Peter Polewski

Drawing scenes has provided immense benefit. Graphic novelist Chris Ware says cartooning "has something fundamental to do with a constant sort of revision of ourselves and our lives, the same sort of resorting and refiling that goes on when we're dreaming." It is the same when reading graphic novels. Descriptions do not always accompany every detail, forcing the reader to infer what is often unsaid. Here lies the potential of stating more with less, while making a greater impact. As many of our interactions are kept confidential within a hospital, the need for universalizing connections with patients, colleagues and life in general is all the greater. Images provide a unique medium of connecting emotions and lessening feelings of isolation.

Seeking Submissions

Healer's Journey showcases creativity originating from members of the SMPH family reflecting personal experiences in our world of healing. We seek pieces that are moving, humorous or unusual.

Our guidelines are as follows:

Manuscripts, subject to editing, can be no longer than 1,200 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
Health Sciences Learning Center
Room 4293
School of Medicine and Public Health
750 Highland Ave.
Madison, WI 53705

Or e-mail quarterly@med.wisc.edu

DOES KNOWING HELP?

We often wonder how things would be different should we have the benefit of deeper knowledge. Would we think differently about someone or something? Or would we simply chalk things up to experience? Would we make different decisions? Or would we carry on as planned?

I'm learning that there is an age when children become comfortable sharing details of their past. The wait for them to impart this knowledge can be short, such as one semester, or longer, after many years. But it appears this waiting serves a purpose to protect listeners from the shock of hearing a contemporaneous rendering of something apparently unthinkable. Time heals or palliates, until our reaction is almost as painless as never knowing in the first place. For me, it was hearing of my children's first college experience with alcohol, staying out late, or something that happened at a high school sleep over.

A friend's daughter, like many motivated college students, wanted to spend her second semester of junior year abroad in language immersion. Her chosen field was Arabic, and it was arranged that she and her fellow students would travel to Egypt. Circumstances changed, however, and the students were relocated at the last minute to Amman, Jordan.

Housing was quickly secured for the students. To housing officials, it would be a dorm within the city, perfect for their Arabic language-immersion experience. They were all college girls in their 20s, and fluent in classroom Arabic. No harm, no foul. But, for the students, the culture of Amman was new, and distinguishing overtures from men—targeting versus flirting—was at first confusing. The girls eventually realized college housing had put them up in a brothel!

Had their parents known of the situation, would they have changed the girls' experience for the better?

To give a medical example, microbial resistance is on the rise. Resistant *Staphylococcus aureus* and *S. epidermidis* pose an especially onerous threat to the cataract surgeon. Exogenous microbial endophthalmitis from methicillin-resistant *Staphylococcus aureus* (MRSA) can devastate a post-operative cataract surgery eye. MRSA has become the endemic marker in our communities for emerging microbial resistance.

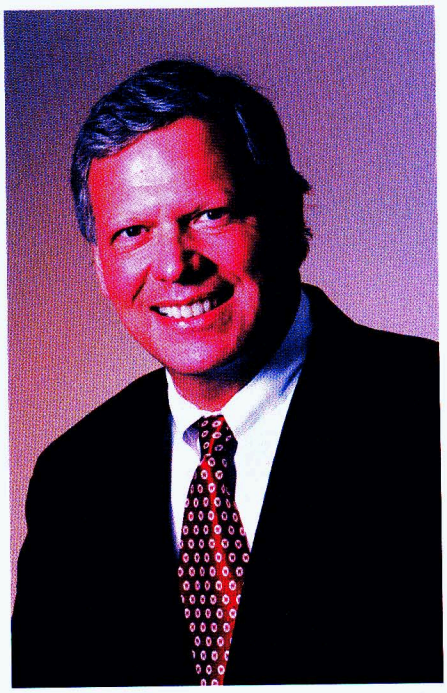
However, much like a leper cured of infection but forever disfigured by the disease, MRSA patients, in the medical setting, are forever labeled and treated as dangerous.

But time gives us a different perspective on leprosy and on MRSA patients.

In a study reported in the *British Journal of Ophthalmology* 81:953–955, 16 percent of aqueous taps performed in subjects at the time of cataract surgery were found to be MRSA positive.

In a 2010 study reported in *Clinical Ophthalmology* 4:1505–1514, looking at MRSA in healthcare and non-healthcare workers undergoing cataract surgery, lids and conjunctivae were cultured in patients scheduled for surgery. Most cultures were positive for *Staphylococcus epidermidis* and *S. aureus* as the most common isolates. A third of patients age 80 or more had a 50-percent chance of having resistant *Staphylococcus*! So, looking at this differently, in 12 patients with cataracts, odds are that two of them will have *staphylococcal* organisms in their eye at the end of the procedure, with at least a one-in-three chance of these being methicillin resistant.

The reported incidence of post-operative endophthalmitis varies depending on the study, but falls somewhere between 0.05 and 0.01 percent, much lower than the 16 percent these cultures suggest.



An associate with a remote history of a positive MRSA culture asked my thoughts about going ahead with cataract surgery. It made me reflect on how ubiquitous these organisms really are.

Would not knowing have meant he felt more secure about the surgery? Regardless, I assured him that antibiotics are used to prevent post-operative infections; drugs address all pathogens including lid contaminants, as well as emerging resistant organisms.

We've gone beyond labeling these pathogens as something to be addressed differently. The treatment is the same—even without knowing.

Christopher Larson, MD '75
Quarterly Editorial Board Chair

Inbox

SUBJECT: WIMR CONSTRUCTION

The second tower of the Wisconsin Institutes for Medical Research (WIMR) continues to take shape. As the exterior nears completion, you can watch the progress by tuning into a live construction camera at: med.wisc.edu/wimr

SUBJECT: ARE YOU READY?

The UW Hospital and Clinics emergency medicine program recently hosted a READY camp (Responding to Emergencies and Disasters with Youth), which teaches young men and women how to respond to emergencies in their communities and schools. The camp also seeks to create resilient and positive solutions to local and potential emergency needs through volunteer activities and community service learning projects. Watch a video at: med.wisc.edu/simulation

SUBJECT: PACKER POWER

Green Bay Packers coach Mike McCarthy and his wife, Jessica, raised $270,000 for American Family Children's Hospital as part of the third annual McCarthy Golf Tournament earlier this summer. Along with supermodel Cindy Crawford, the McCarthys serve as honorary co-chairs of the hospital's "Sick Kids Can't Wait" campaign. Watch a video of the McCarthys' visit at: uwhealthkids.org/37973

SUBJECT: HISTORY LESSON

Take a quick trip through the SMPH's history by viewing a photo gallery that celebrates the people and places that have shaped the school, from its humble beginnings in Science Hall to the construction of the Health Sciences Learning Center and Wisconsin Institutes for Medical Research. View the gallery at: med.wisc.edu/historical-photos

We Want to **Hear From You**

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

Have you moved? Please send us your new address.

CONTACT INFORMATION:
Wisconsin Medical Alumni Association
Health Sciences Learning Center
750 Highland Ave.
Madison, WI 53705

OR online at med.wisc.edu/alumni/share-your-news/874
OR e-mail quarterly@med.wisc.edu

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

Nonprofit Org.
U.S. Postage
PAID
Madison, WI
Permit No. 2117

MS-32311-12