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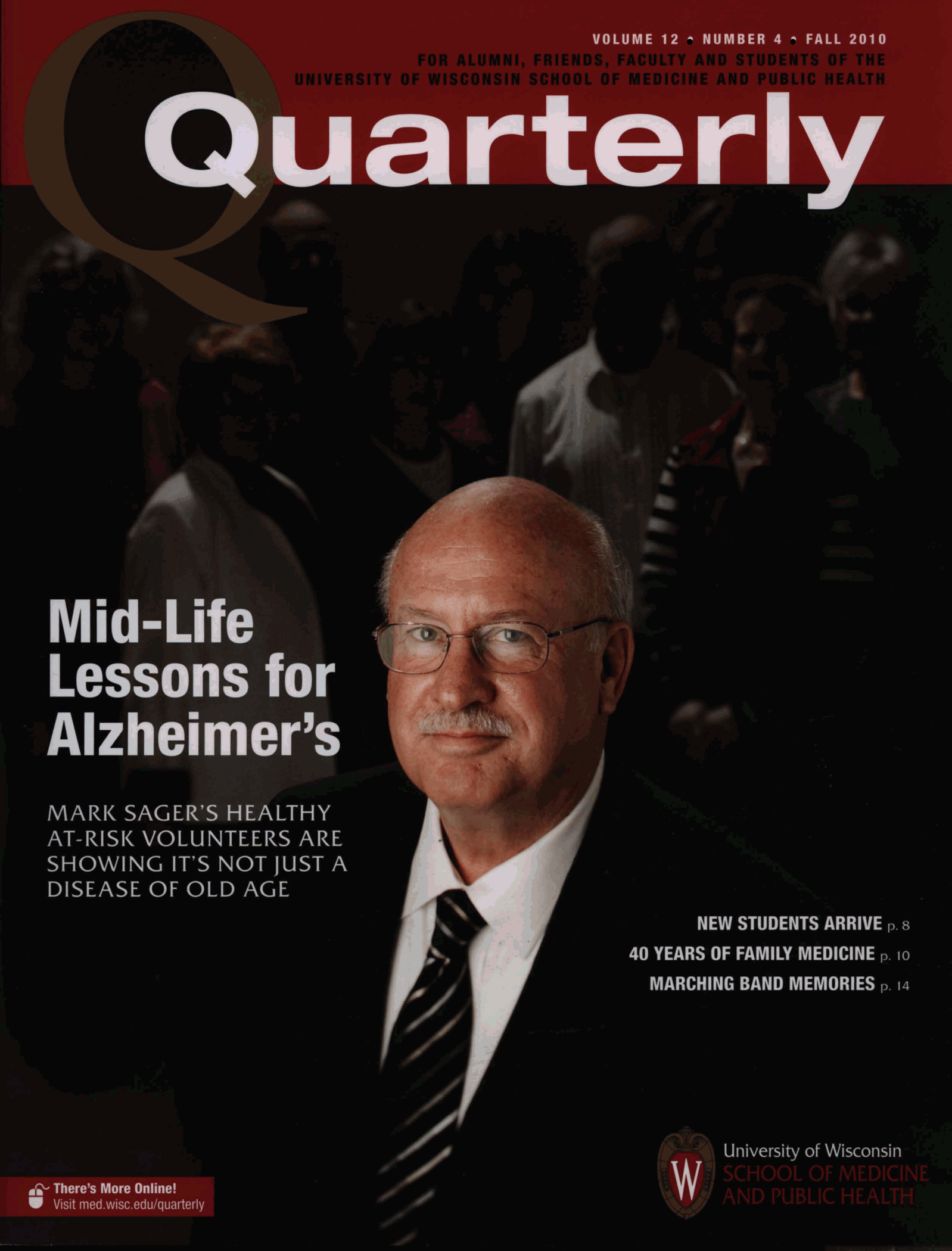
FOR ALUMNI, FRIENDS, FACULTY AND STUDENTS OF THE
UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

Quarterly



Mid-Life Lessons for Alzheimer's

MARK SAGER'S HEALTHY AT-RISK VOLUNTEERS ARE SHOWING IT'S NOT JUST A DISEASE OF OLD AGE

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University of Wisconsin
SCHOOL OF MEDICINE AND PUBLIC HEALTH

QUARTERLY

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

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CALENDAR

NOVEMBER 2010

FRIDAY, NOVEMBER 12 • ALPHA OMEGA ALPHA BANQUET

6 p.m. Health Sciences Learning Center

SATURDAY, NOVEMBER 13 • RESIDENT TAILGATE PARTY

Health Sciences Learning Center

Wisconsin vs. Indiana Football Game

FEBRUARY 2011

FRIDAY, FEBRUARY 4 • WMAA WINTER EVENT

6 p.m. Miller Park, Milwaukee

APRIL 2011

APRIL 28-30 • ALUMNI WEEKEND

Reunions for classes of '51, '56, '61, '66, '71 and '76

MAY 2011

FRIDAY, MAY 13 • CLASS OF 2011 GRADUATION

NOVEMBER 2011

NOVEMBER 27 - DECEMEBER 4 • WMAA WELLNESS CRUISE

Mexican Riviera–Ports of call include Cabo San Lucas, Mazatlán and Puerto Vallarta

University of Wisconsin
SCHOOL OF MEDICINE
AND PUBLIC HEALTH

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Fall Fun on Campus (above)

Football Saturdays often begin with high spirits before games. This year, students and other devoted Badger fans also have found reason to cheer after most games.

ROBERT N. GOLDEN, MD

Earlier this fall, we enjoyed another warm gathering of the Middleton Society. It was an opportunity to give thanks to some of the most loyal, generous supporters of our School of Medicine and Public Health (SMPH), and also to provide them with an update on some exciting new developments at the school, which you will read about in coming issues of the magazine.

The annual Middleton Society gathering is also an important celebration for the SMPH "family," in that we honor our most outstanding faculty with the Dr. Folkert Belzer Award. This award memorializes an icon who achieved both national acclaim for his innovative accomplishments in transplantation science and local appreciations as a key leader at our school.

This year, it was both a personal and professional privilege to acknowledge two of our most stellar leaders—Drs. Norman Drinkwater and John Frey—as recipients of the 2010 Belzer Award.

Dr. Drinkwater is a renowned cancer researcher who served with distinction as the director of our fabled McArdle Laboratory for Cancer Research and chair of the Department of Oncology for 16 years until 2008. He continues to serve the school in many important leadership assignments.

Dr. Frey, who grew up in Wisconsin, returned to his home state to serve as chair of the Department of Family Medicine from 1993 until 2006. Like Norm, John played a pivotal role as department chair and has continued to serve his school, university and community with distinction.

In a way, Norm and John are prototypes of the pillars upon which our school's transformation is being built. Norm represents the best traditions of basic science, while John represents the legacy of clinical medicine as well as community and population health. Most importantly, each is thoroughly committed to collaborations and interactions across the continuum from basic to clinical to population sciences, which is the ultimate goal of our school of medicine and public health.

The traditions of excellence embodied by Drs. Frey and Drinkwater are continuously renewed at the school. In this issue of *Quarterly*, you will be learning about some of the exciting developments in basic, clinical, translational and population sciences.

In Faculty Q & A, you will meet Dr. David Gamm, an outstanding retinal surgeon in the Department of Ophthalmology and Visual Sciences who also is gaining national attention for his groundbreaking stem cell research. Dave is truly the quintessential physician-scientist who, like our school, is applying a variety of approaches to important health issues.

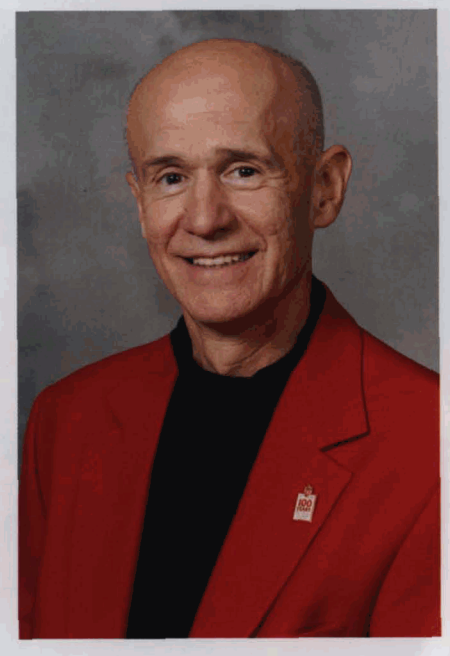
Dr. Theodore Goodfriend, a longtime SMPH researcher, educator and clinician, has received the Page-Bradley Lifetime Achievement Award from the American Heart Association's Council for High Blood Pressure Research for his work in the field of hypertension. Ted has also played a key role in student programs such as MEDiC.

We are also delighted that Dr. Jon Levine recently arrived from Northwestern University to serve as the new director of the Wisconsin National Primate Research Center and as professor of physiology in our school.

Clearly, we have an outstanding team of faculty at our SMPH. In the spirit of the recent celebration of one of my favorite holidays, Halloween, we should be grateful that despite any tricks the economy or other forces outside our control might play on us, we continue to enjoy enduring treats—the remarkable accomplishments and service of all the members of the SMPH family.

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

DONN FUHRMANN, MD '76



It is a real honor and blessing to represent the Wisconsin Medical Alumni Association (WMAA) as president for the next two years. I want to start by thanking two past presidents who have greatly influenced and encouraged me during the past few years.

John Kryger has been a terrific role model and mentor. John has worked tirelessly to promote the WMAA and its many programs. He has encouraged members to support the Middleton Society and solicited funds for student scholarships.

Bill Nietert has been a good friend and colleague in family medicine for three decades. He has been a dedicated leader of our organization for years, putting his whole heart and soul into his efforts to solicit support and funds throughout the state. Bill's encouragement and support are greatly appreciated.

Now, it's my turn to lead this wonderful organization. I'm looking forward to working with the board of directors, Dean Robert Golden, Karen Peterson and the alumni office staff, Dian Land and our many members. I will need all of your help if we are to continue to perform at such a high level.

Here are several goals I've set for myself and our board of directors:

- Review our past performance and develop a new strategic plan.
- Increase the diversity of the board of directors and strengthen the structure of our committees so they can be as efficient and effective as possible.
- Engage more members through our many programs and activities. The spring Alumni Weekend, fall Homecoming activities, class reunions and special events—all allow alumni to reconnect with classmates, establish new relationships and have fun working for a great cause. The *Quarterly* magazine also gives us an opportunity to learn more about the medical school and keep up on class and university news.
- Solicit each and every member of the WMAA to step forward and make a donation to his or her alma mater, to show appreciation for the top-notch education we received at such a great medical school.
- And lastly, I will try to call all of my classmates and encourage them to attend our next reunion in April 2011 and attend our Wellness Cruise along the Mexican Riviera in November 2011. I plan to challenge each of them to consider joining the Middleton Society.

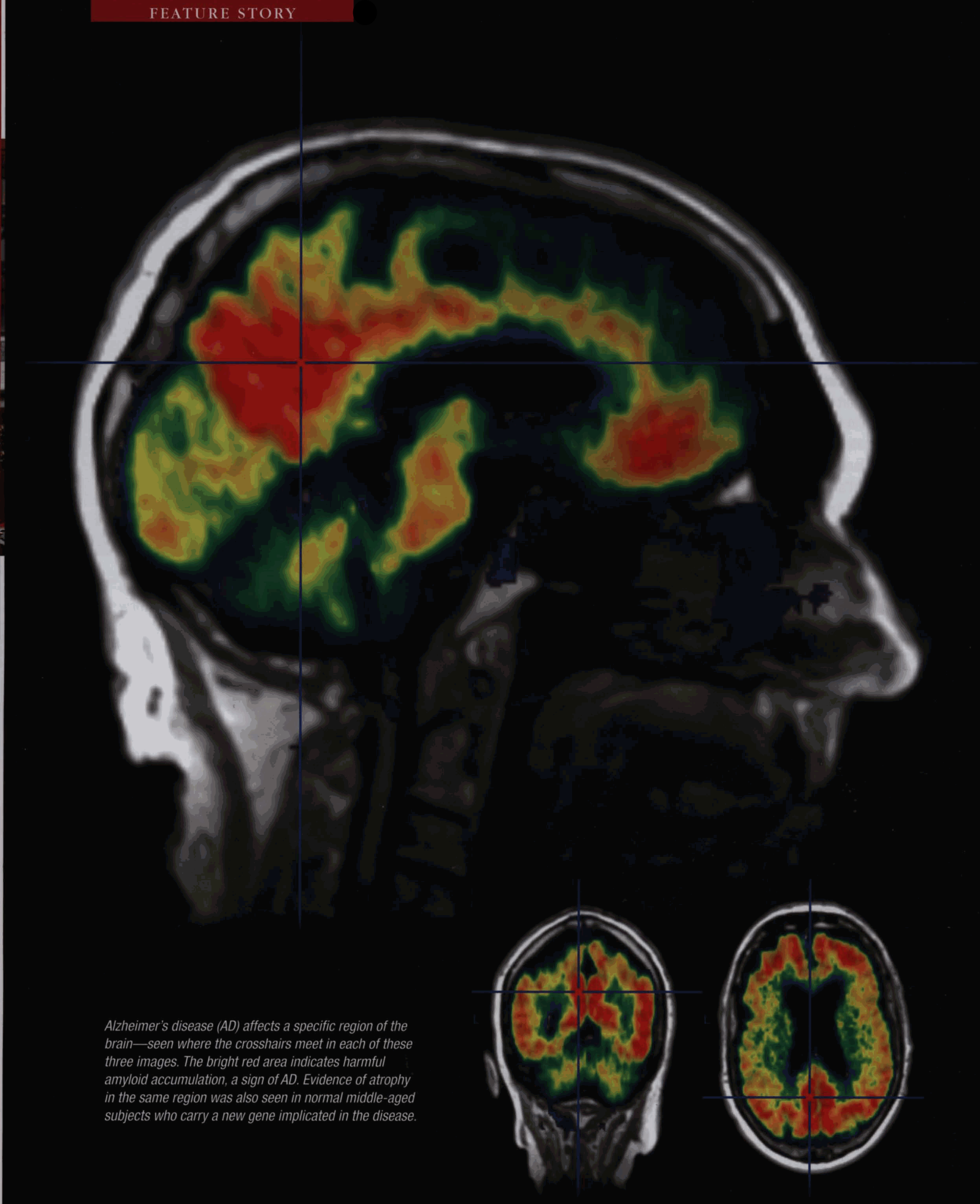
Our alumni association is extremely healthy. It's amazing how far this organization has come since many of us were in medical school. Today, medical students are involved with the programs and services provided by the WMAA. The bonds are there and grow through the years, but it's the generous funds that we alumni give that make these services and activities possible. I am going to encourage every member to give something to support the student scholarship program this year. We have a special opportunity with the Great People Scholarship Program, which you've read about several times in *Quarterly*.

Lastly, I want to make a few comments about the WMAA Wellness Cruise scheduled for November 27 to December 4, 2011. I'm really excited about the cruise! Partly because it will be a lot of fun and also because it correlates with the main focus of my family medicine practice—wellness and prevention. I'm passionate about healthy lifestyles and you will get to hear me talk about a number of related topics. But my favorite talk is "How to Live to be a 100" and you don't want to miss it! This fun-filled alumni cruise will feature 10 CME hours of lectures on wellness and prevention topics. We'll cruise the Mexican Riviera leaving from Los Angeles. Look for a brochure soon.

Thanks for allowing me to be your president for the next two years. I want to be available to all members. I welcome and encourage your comments and suggestions. Please contact me at dfuhrmann@charter.net

GO BADGERS!

Donn Fuhrmann, MD '76
WMAA President
Middleton Society Fellow



Alzheimer's disease (AD) affects a specific region of the brain—seen where the crosshairs meet in each of these three images. The bright red area indicates harmful amyloid accumulation, a sign of AD. Evidence of atrophy in the same region was also seen in normal middle-aged subjects who carry a new gene implicated in the disease.

BY DIAN LAND

Mid-Life Lessons for Alzheimer's

THE WISCONSIN REGISTRY FOR ALZHEIMER'S PREVENTION SHINES LIGHT ON THE EARLIEST SIGNS OF THE DISEASE

Dan Otter worries that he and his three children might someday develop Alzheimer's disease (AD). Both of Otter's parents suffered from AD, as did several aunts and uncles. He knows it runs in families. He wants dearly to avoid the dementia that is the heartbreaking hallmark of the disease.

When he turned 50 last year, Otter decided to do what he could to help scientists in their quest to understand AD. With advice from friends in the medical field, he signed up to participate in the Wisconsin Registry for Alzheimer's Prevention (WRAP), by far the largest and oldest population-based study of healthy people at risk for AD. Otter is one of more than 1,400 people who have volunteered to be monitored for years as Wisconsin scientists search for the earliest, pre-clinical signs of the disease.

Recruiting for WRAP has never been a problem, says study director Mark Sager, MD, director of the Wisconsin Alzheimer's Institute and professor of medicine at the University of Wisconsin School of Medicine and Public Health (SMPH).

"Once someone in your family has this disease, you understand how devastating it is. You want to help," Sager says.

WRAP was way ahead of the curve when it was created in 2000.

"All the AD research 10 years ago focused on people who already had mild cognitive impairment or worse. But that's too late, the damage is already done," says Sager. "It's only when we look at people decades before symptoms arise that we can possibly understand the actual pathways that lead to AD."

Once it eventually appears, AD kills brain cells, though scientists aren't sure how. Approximately 5.3 million Americans have the disease today, according to the Alzheimer's Association. And as the Baby Boom generation reaches its 60s, AD researchers feel a growing sense of urgency. Progress has been slower than expected.

But the AD research community has come to agree with Sager that at-risk asymptomatic people such as those in the WRAP study may hold the answers to many questions surrounding the disease: What role do certain genes play? How important *is* family history? What are other potential risk factors? What about prevention?

The WRAP cohort consists of people ages 40 to 70 from across Wisconsin and 21 other states. Otter, who flies in from Nevada, and the others have gone through a rigorous series of cognitive tests and had magnetic resonance images (MRIs) and soon will have positron emission tomography (PET) scans of their brains. Their blood has been drawn to determine whether they carry the APOE gene, an important pre-clinical susceptibility risk factor for some but not all people who get AD, and now the newest potential indicator, a gene called TOMM40.

Over time and with many tests, the SMPH scientists have steadily monitored their WRAP volunteers, looking for subtle changes as participants age. A series of important findings has begun to emerge, helping to clarify the important role family history and

two forms of the newly implicated TOMM40 gene, which Duke University researchers discovered last year, may have on cognitive performance and brain activity.

In the newest study, the Wisconsin researchers found that 229 of 726 WRAP volunteers who were considered at neutral risk according to their APOE status, but who carried high-risk versions of TOMM40, did significantly worse on learning and memory tests than did study participants with the low-risk version of TOMM40.

"The lower performance in the high-risk group was similar to the kinds of memory and learning changes we see in very early Alzheimer's," Sager says. "We think TOMM40 may enhance or inhibit APOE, depending on its form."

Sager presented the yet-to-be-replicated findings at the International Conference on Alzheimer's Disease in Hawaii last July. His collaborator, Sterling Johnson, PhD, associate professor of medicine at the SMPH and a researcher at the Geriatric Research Education and Clinical Center at the William S. Middleton Memorial Veterans Hospital, presented other intriguing findings.

Johnson described an MRI study designed to see how the high-risk and low-risk TOMM40 might correlate with brain changes. The images showed that, compared with volunteers with the low-risk TOMM40, those with the high-risk version had significantly lower volume of gray matter in two interconnected brain regions known to be affected by AD: the posterior cingulate and the hippocampus.

"This suggests that the group with the high-risk TOMM40 may be having early signs of cognitive and brain changes related to AD," Johnson says. "This evidence in the posterior cingulate could represent a 'neural signature' for AD."

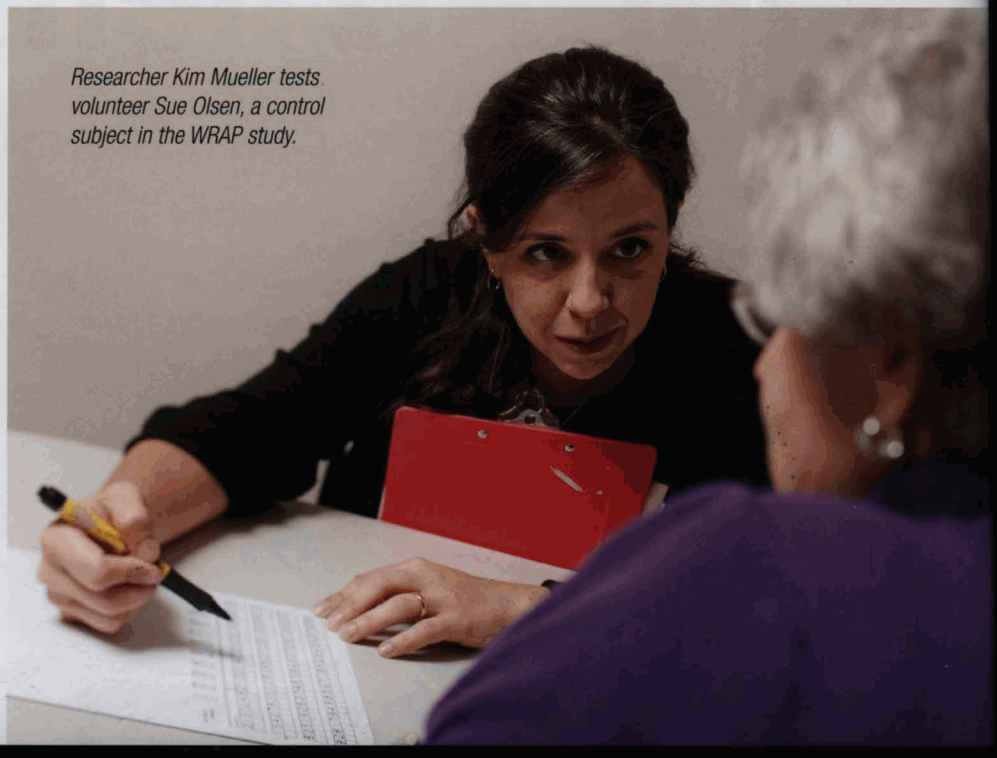
In an earlier imaging study, the investigators compared the effects of family history and APOE, the well known indicator, to see which might have a stronger influence on the brain. The MRIs showed that APOE-positive subjects with a family history of AD activated less of their hippocampus during memory formation tasks, regardless of their APOE genotype.

"This told us that family history accounts for a unique influence not seen with APOE," Johnson says. "Studies around the world are confirming this evidence, strengthening the possibility that additional factors—probably other genes and lifestyle factors—may also be involved."

With the help of Bradley Christian, PhD, an SMPH associate professor of medical physics based at the Waisman Center, the SMPH researchers are now conducting an imaging study using PET scans to "view" any amyloid plaque deposits in the brains of WRAP participants.

Amyloid has been seen as a key factor in the development of AD. Some scientists think the sticky plaques it produces, and the tangles of a protein called tau inside neurons, contribute to the destruction of brain cells. Others believe that the plaques and tangles are markers left by nerve cells killed by some other unknown cause.

"Some PET studies have shown that people with AD have a very high burden of



Researcher Kim Mueller tests volunteer Sue Olsen, a control subject in the WRAP study.

Alzheimer's Critical Mass

The Wisconsin Registry for Alzheimer's Prevention (WRAP) began as a research component of the Wisconsin Alzheimer's Institute, which Mark Sager, MD, created in 2000 with the help of organizations such as the Helen Bader, Northwestern Mutual and Extendicare foundations in Milwaukee. The goal of the institute was, and is, to ensure that Alzheimer's disease (AD) patients and their caregivers have the services they need.

Now the institute and WRAP partner with the SMPH's new Alzheimer's Disease Research Center (ADRC), part of a national network funded by the National Institutes of Health.

Based in the Geriatric Research Education and Clinical Center at the William S. Middleton Memorial Veterans Hospital, the ADRC represents a solid infrastructure and critical mass of population, imaging and basic science researchers working to understand AD.

amyloid plaque," says PET expert Christian. "But other findings show that 20 percent to 30 percent of people who don't have AD, normal controls, had a high incidence too."

Christian hopes the new National Institutes of Health-funded study will dispel some of the confusion. He'll direct the PET imaging aspects of the UW part of the multi-site clinical trial involving only centers capable of producing the special imaging compound that binds to amyloid. Christian also partnered with Sager and Johnson in earlier amyloid studies in which Otter and other WRAP volunteers participated.

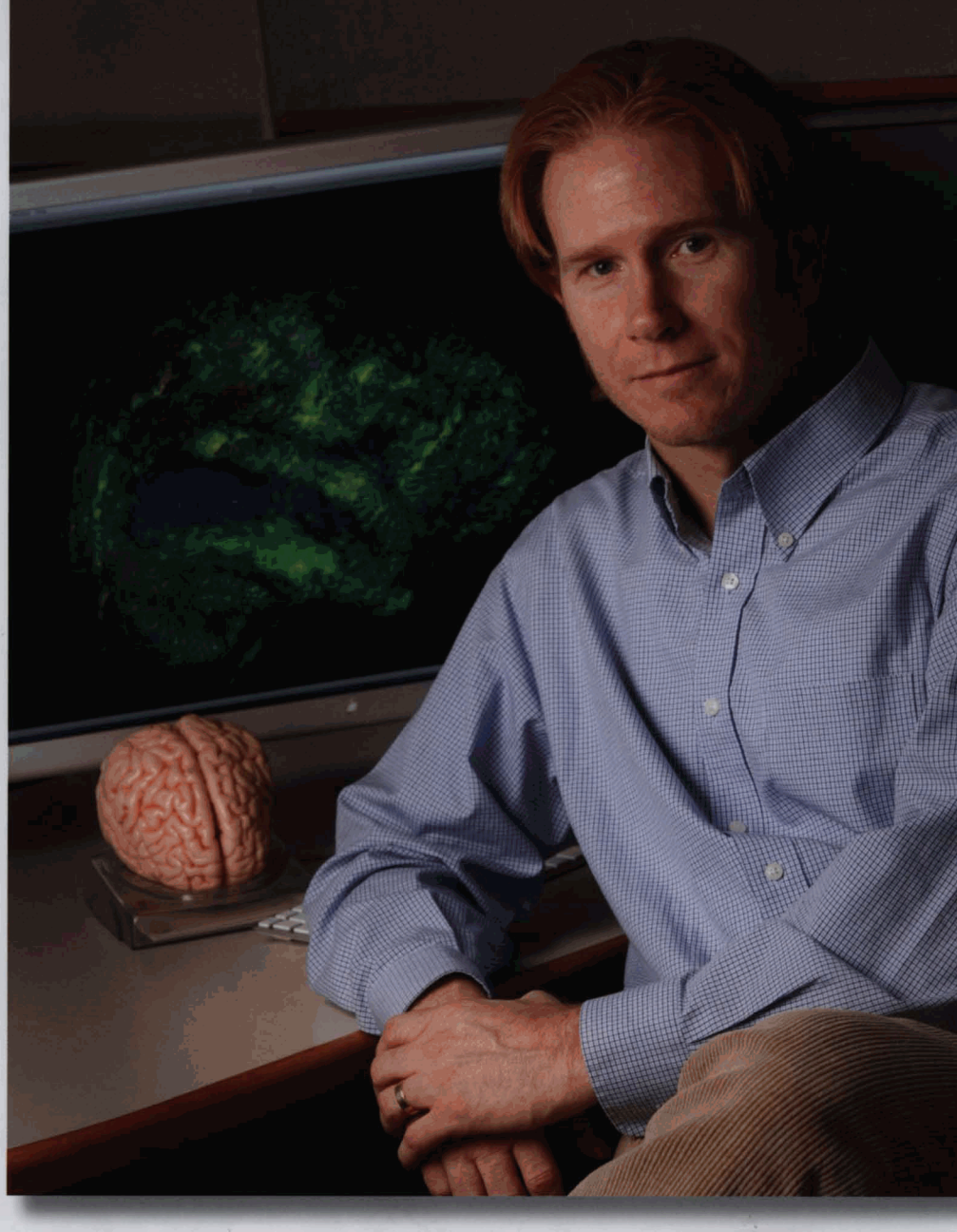
THE SMPH RESEARCH FINDINGS added to the overall excitement the AD research community felt during the past summer. WRAP was even featured on network television. Cumulatively, the advances represent a major step forward in potential ways to detect AD long before symptoms appear. But the buzz stops abruptly and becomes disappointment when attention turns to treatment. The most visible indicator of this occurred in August when Ely Lilly shut down a major clinical trial on a drug that targets amyloid.

"We know existing medications don't really work for people who have progressed to AD, and we won't know for a long time if they work on at-risk people who haven't yet gotten the disease," says Sager.

But even without the prospect of effective drugs for treatment, Sager still urges WRAP participants—indeed, all his patients at risk for AD—that they should not sit by and do nothing.

"The entire field is beginning to understand that mid-life risk factors, such as untreated hypertension or hypercholesteremia, are also risk factors for Alzheimer's," he says. "People who are really concerned should make sure their cholesterol is in the normal range, that they aren't overweight, that they exercise. All the lifestyle and health factors that are preventive for heart disease also work to prevent Alzheimer's disease."

It's something positive people can do as the science gradually catches up.



Sterling Johnson has led brain imaging studies of WRAP volunteers showing that subjects with high-risk versions of TOMM40 had lower gray matter volume in brain regions known to be associated with AD.

"We've learned over the past 10 years that this is not just a disease of old people," says Sager. "It's a disease of a lifetime. A person can have AD for decades before the brain, probably the most resistant of all organs to disease, begins to malfunction."

And it will take time before the benefits of WRAP are clear.

"We can begin to make some inferences from what we are learning from our volunteers," says Johnson, "but we will need to follow them for many years to see if the changes actually correlate with future symptoms of AD."

It's a process that requires patience, but the researchers are hopeful.

"I've never been involved in research that has the potential to make the kind of breakthroughs I think we can make with the WRAP study," says Sager.

Otter, like the other WRAP participants, is committed to the project. He plans to come back for as many years as he's asked to.

"My desire is that my children never experience Alzheimer's disease like my generation never experienced polio," Otter says. "I hope we can see those diseases as tragedies of a past generation."

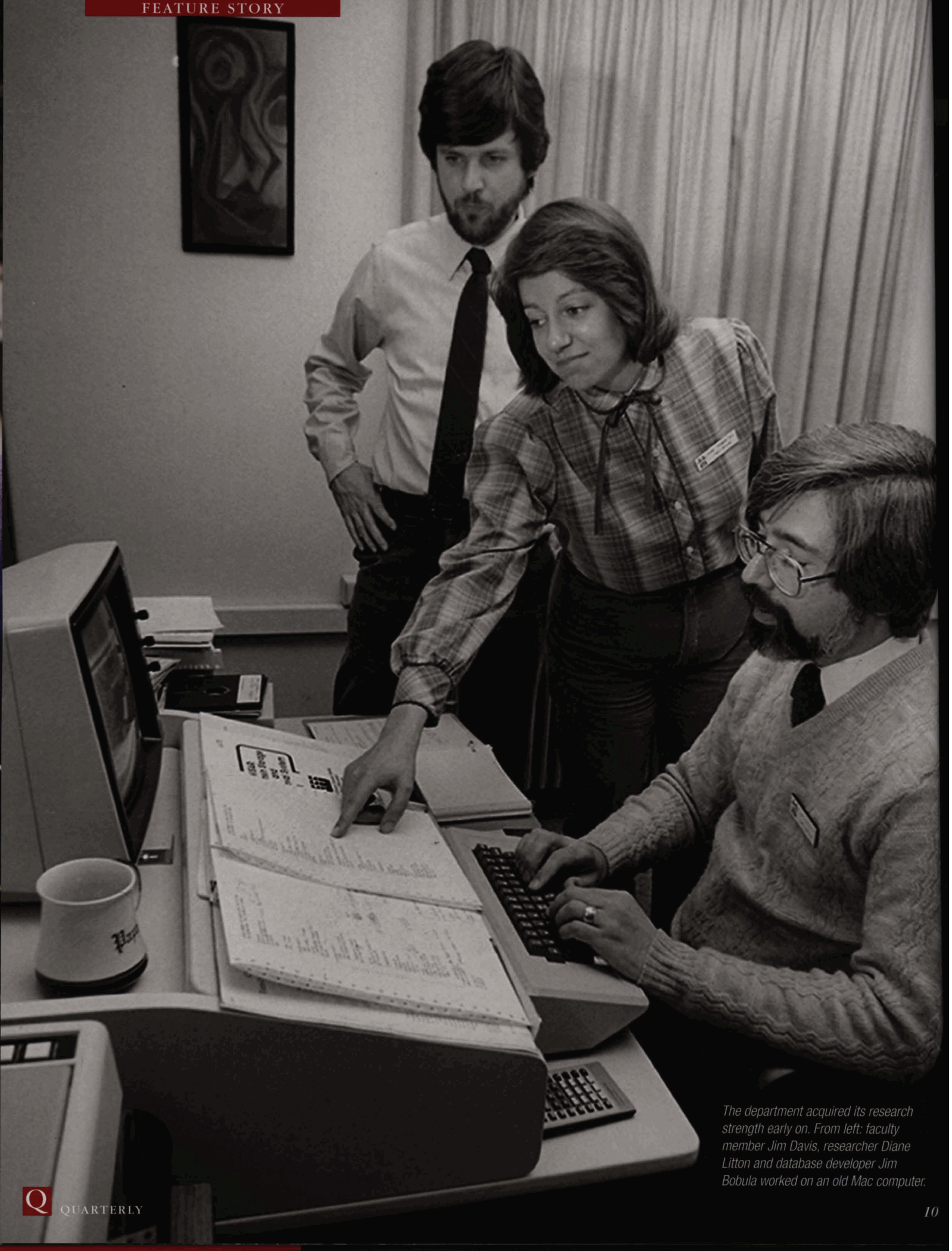
New Stu

In their first week at medical school, members of the Class of 2014 get a taste of their rich new lives as physicians-in-training.

PHOTOS BY TODD BROWN, CHRIS FRAZEE & JOHN WINGREN

dents Arrive

The third week of August saw the annual arrival of new medical students at the School of Medicine and Public Health, when members of the Class of 2014 got an introduction to many aspects of their rich new lives as physicians-in-training. The students performed community service activities in various Madison neighborhoods, got to know each other and leaders of the Wisconsin Medical Alumni Association during a "Badger Cook-Out" and tried on their white coats in anticipation of the investiture ceremony later in the month and the interactions they would soon have with patients. Students also listened to the "Voices of Patients," which gave them an opportunity to meet the real people behind common diseases, and they browsed dozens of displays at the Organizations Fair. It's all probably a distant memory by now, as the students are deep into their first fall semester.



The department acquired its research strength early on. From left: faculty member Jim Davis, researcher Diane Litton and database developer Jim Bobula worked on an old Mac computer.

BY MIKE KLAWITTER

40 YEARS OF Family Medicine

In 1970, medicine was going through a major transition. General practitioners were retiring and fewer medical school graduates were taking their places. New doctors were attracted more and more to careers in specialties.

Within this context of shrinking numbers of primary care physicians, the American Medical Association (AMA) decided to recognize a new specialty of family medicine and promote residency teaching programs based in medical schools that would train medical students to become family physicians. The AMA identified the University of Wisconsin School of Medicine and Public Health (SMPH) as a possible site.

"What we were doing at the time was very compatible with what the AMA wanted for training family doctors," says Marc Hansen, MD, a pediatrician and faculty member at the medical school. "We sent in an application and were chosen as one of the first 15 medical schools in the U.S. to offer training for family medicine physicians."

Hansen was a visionary who already had developed the University Family Health Service, a multi-disciplinary team of physicians, nurses and therapists focused on primary care at UW Hospital and Clinics.

The idea of a full-fledged family medicine training program received further support from the Wisconsin Legislature, which was particularly interested in planning for future programs in rural and underserved communities of the state. Lawmakers provided the medical school $50,000 to proceed with its plan, and have supported it ever since.

"At the start, the Wisconsin program was a joint project between the medical school and St. Mary's Hospital," says Hansen.

He recruited Washington, D.C. area physician John Renner, MD, to be the program's first director.

"John was very energetic and very good at setting up residencies across the state," recalls Hansen.

Within eight years, Renner had created three family practice clinics in the Madison area, each graduating an increasing number of physicians every year. UW family medicine residency programs were gradually created in Eau Claire, Wausau, Fox Valley, Waukesha and Milwaukee.

In 1973, the medical school approved the creation of the Department of Family Medicine (DFM), and Renner was appointed professor and chair.

Fast-forward four decades to 2010, and not only has the DFM created a network of clinics across the state—the number today

The Northeast Family Practice Clinic was one of the first DFM clinics created in Madison in the early 1970s. Rudy Hecht, Nancy Radl, David Kuter and Diane Iverson were among the providers.

Mindy Gensler, a resident who graduated recently from the DFM training program, visits with a young patient and her father.

is 19—but it also is viewed nationally as a leader in family medicine teaching, research and clinical care.

"This is a unique department that not only has a very visible presence in Madison but a strong presence across the state, with a total of almost a half million patient visits occurring at our clinics each year," says Valerie Gilchrist, MD, who became chair of the department in 2008.

Each year, between 30 and 35 family physicians graduate from DFM programs. Many are SMPH graduates and two-thirds of the family physicians in Wisconsin now have connections to the department.

In the intervening years between Renner and Gilchrist, three family physicians served as department chair: William Scheckler, MD, Eugene Farley, MD, and John Frey, MD. Richard Roberts, MD, JD, and James Davis, MD, served as interim chairs. All of the leaders steadily brought added depth and breadth to the department.

Research was one area in which the department expanded early on, with Farley creating a research division that later included the community-practice-based Wisconsin Research Network (WReN).

DFM investigators won substantial research grants and ultimately gained national and international attention for their work in alcohol addiction, native community

Providing Care to Generations of Families

Sandra Kamnetz, MD '81, the DFM vice chair of clinical care, was one of the first to do a primary care clerkship while she was a medical student.

"I spent two months living in Waupaca and working at the hospital there," she says. "I learned what family medicine was all about, and found it very rewarding to be part of that community, providing care to generations of families."

Kamnetz says the same fundamental concepts she learned then—particularly building relationships with patients—remain true today in her own medical practice at the UW Health Monona clinic, and in family medicine in general.

"We know things about patients from four or five generations that we can connect back to their health today," she says.

Like many others, Kamnetz agrees that teamwork will be the key toward making primary care a more attractive option for future doctors.

"It's not always about me and my relationship with the patient," she says. "It also concerns the patient's relationship with the nurses, medical assistants, lab staff and receptionists. It becomes the medical home everyone is talking about."

health and childhood obesity and nutrition. Research fellowships in academic medicine, integrative medicine, primary care research, sports medicine and faculty development also were eventually established.

Recognizing the state's ongoing need for more physicians in rural and urban areas, DFM leaders developed a rural training track in several sites across Wisconsin, and later established an urban track. Both of these DFM training tracks laid the foundation for two of the school's newest and highly successful physician training programs—the Wisconsin Academy for Rural Medicine (WARM) and the Training in Urban Medicine and Public Health (TRIUMPH).

Expanding its focus in other ways, the department sought and received accreditation for teaching doctors of osteopathy and it welcomed the UW Physician Assistant Program.

As the department matured, DFM faculty members were appointed to national leadership positions, including membership in the Institute of Medicine, the National Library of Medicine and the AMA. And a number of the school's current leaders—Associate Dean of Students Patrick McBride, MD '80, MPH, Associate Dean for Rural and Community Health Byron Crouse, MD, and Director of the Center for Global Health Cynthia Haq, MD—either received their family medicine training through, or are faculty members in, the department.

The DFM is widely recognized for its achievements in the interwoven missions of patient care, education and research. *U.S. News and World Report* consistently ranks it in the top five among the nation's family medicine departments.

In her two-plus years as chair of the DFM, Gilchrist has been impressed with her colleagues and their talents. She understands why the department receives national recognition.

"We have colleagues with strong clinical backgrounds as well as colleagues who are nationally known researchers and educators," she says. "It's a marvelous and very unusual blend."

Looking forward, Gilchrist believes family medicine doctors will continue to make great contributions to Wisconsin and the nation, especially as Baby Boomers approach their Golden Years.

"As our population ages, we want healthy elders," she says.

Her view is that chronic health problems, such as high cholesterol, will be managed more effectively and in a less costly way by combining exercise and diet rather than using medicines.

"That makes it more imperative than ever that we get more primary care doctors involved," she says. "The future must include teams of medical professionals who collaborate with doctors to come up with the best solutions for patients' health problems."

To meet the ongoing shortage of family physicians, the DFM will continue to supply as many primary care physicians as possible, Gilchrist says.

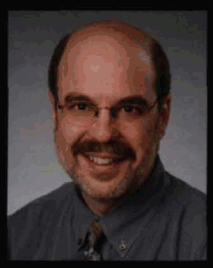
Valerie Gilchrist, current chair, says the department's blend of strong clinicians, educators and researchers is unusual.

"Having a vibrant, innovative, efficient and high-quality primary care team providing care for our population is our best means of recruiting family medicine students and residents to the state," she says.

As the department moves into its fifth decade, Gilchrist is sure that UW-Madison's DFM will remain an innovative leader.

"We will demonstrate the powerful impact that academic family medicine can have on the health of Badger State communities and beyond," she says.

Integrating, Rather than Compartmentalizing, Care



William Schwab, MD, the DFM vice chair of education, first heard about family medicine in the early 1970s while working as a nursing assistant at UW Hospital and Clinics. He found he had the right mindset to become a primary care physician.

"I liked the idea of being able to integrate the aspects of someone's care, as opposed to compartmentalizing it," he says.

Schwab says he has seen the concepts behind family medicine benefit many patients and lead to more positive outcomes.

"Studies have shown that if people have common ground with their physician at that clinical visit, over the subsequent months, their health status improves and their utilization of health resources actually decreases," he says.

Schwab believes that the rise of technology, such as electronic medical records, has greatly assisted family medicine doctors.

"It used to be part of the doctor's job to be a walking textbook," he says. "Now, we have information technology available at the point of care. That's a very powerful tool for any clinician, but particularly in generalist practice."


Dynasty
Dynasty
Dynasty
Dynasty

Marching Band Memories and More

Dozens of medical alumni have played in the UW Marching Band. Now the school is involved in another way.

by Susan Lampert Smith

Walk out the doors of the Health Sciences Learning Center (HSLC) on a sunny autumn afternoon, and you'll hear the bright brass and crisp beat of "On Wisconsin" from the nearby band practice field along Lake Mendota.

Leave the HSLC a little later on a Tuesday as the sun sets and you'll pass the band members themselves, flooding into the HSLC atrium as medical students are leaving, heading to one of the lecture halls for a performance critique by Band Director Mike Leckrone.

The Badger Marching Band and the SMPH have had a surprising amount of overlap over the years. Several current medical students and about 120 medical alumni also were members of one of the UW bands during their undergraduate years, including Richard Edwards, MD '60, and Quinton Callies, MD '60, whose class held its 50th reunion last spring.

Some have "rock star" memories, while others can tell their kids about leading an impromptu pep rally on State Street when the Badger Basketball team made the National Collegiate Athletic Association Final Four.

Recently, the ties between the band and the medical school have grown closer. Since the fall of 2008, the band has used an auditorium in the HSLC to watch film of its pre-game and halftime performance at the previous Saturday's football game.

Band Director Leckrone reviews film of the band's pre-game and halftime performance at the previous Saturday's game in a lecture hall in the medical school's Health Sciences Learning Center.

By day, the HSLC classroom screens are filled with images of excitable membranes, proteolytic enzymes and messenger RNA translations. But one fall evening a week, Professor Leckrone holds sway, running the video backward and forward, making the band flood the field at Camp Randall and then reverse back into the tunnel—over and over, aiming for perfection on the field.

Nervous laughter fills the auditorium as the band members spot an unfortunate trombone player who has left too big a gap in the marching formation, something the eagle-eyed Leckrone is sure to highlight with his laser pointer and his "dummy list."

But band and medical alumni will tell you that there is a connection here.

John Vasudevan, MD '07, and a drummer in the band from 1999 to 2002, says the intensity of band practice and Leckrone himself, helped prepare him for the rigors of medical school.

"His enthusiasm is infectious, and he truly loves his job, but you DO NOT want to see him angry," Vasudevan says. "Professor Leckrone taught me that success requires self-discipline. Even though my biochemistry major gave me the knowledge to get into medical school, my experiences in the Marching Band gave me more skills to succeed in medical school than any other college course."

The person who brought the band to the HSLC is Christopher Stillwell, MS, director of academic and career advising at the SMPH, and equally importantly, a Badger Band alum. Stillwell heard that the

Perched atop a tower made of scaffolding, UW Marching Band Director Mike Leckrone oversees a band practice at the west campus band practice field.

band was looking for a new film room, and decided that the HSLC might be perfect.

"We love it," Leckrone says. "It's a very comfortable room, and much closer to our practice field, so the kids can get over here and then get home much more quickly."

In exchange for the room, the band sends performers to SMPH events, including alumni gatherings at homecoming and graduation.

Stillwell's years playing trumpet in the band, from 1996 to 2001, overlapped with those of Heisman Trophy running back Ron Dayne, which meant he got to go to two Rose Bowls. He also played at a hockey championship and a Final Four appearance by the basketball Badgers.

"These experiences and my time in the band really cemented my connection to UW," says Stillwell, who still gets the chills when he hears the strains of the "On Wisconsin" finale.

There are plenty of SMPH alumni who would agree that the years they played in the band were the among the best ever.

Greg Horwitz, MD '03, played snare drum from 1995 to 1999, as well as the drum set for band concerts in the Field House and Kohl Center. The drum set was set up by professionals so that the sound went through huge speakers.

"Every time I hit the bass drum, the whole auditorium shook," says Horowitz, now a urologist in Kansas City. "Playing in front of thousands of people with lights, fireworks and a massive-sounding drum set is as close to being a rock star as I'll get . . . now back to kidney stones!"

Stephanie Place, MD '10, recalls the rigors of registration week tryouts.

"We would begin the first practice with the freshmen on one side of the 50-yard-line and the returning band facing them on the opposite side of the field," says Place, who played trombone from 2003 to 2007. "Mike would shout 'Atten-hut!' and we would snap to attention, trying to look as fierce as possible."

While the upperclassman spent the week working the hapless freshmen half to death, the week ended with the "dreaded perimeters," a continuous drill around the outside of the playing field that happens at the end of an exhausting week and seems never to stop.

"Each upperclassman would pick a freshman to march behind," Place recalls, "shouting encouragement and getting them through that one last work-out and officially into the band."

Jared Olsen, MD '07, probably wins the award for the most medical-oriented band memory. In January 2003, the band followed the Badger football team to the Alamo Bowl in sunny San Antonio, Texas.

"Spirits were high, and all was good, except for one or two members who arrived with the 'flu,'" recalls Olsen, who played trumpet. "Day by day, the ranks of the band thinned for our daily marching rehearsals. The 'flu' was instead an extremely contagious Norwalk-like virus that spread through the band like wildfire."

Olsen recalls a member of the spirit squad fainting just a few feet from him, dehydrated from the virus.

"Despite how sick the band was, every member marched into the stadium and performed a great show," he says. "The football team then came back with an amazing come-from-behind victory."

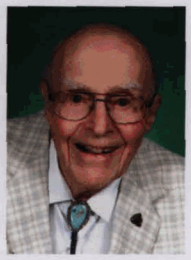
The plane ride home was memorable, says Olsen, adding, "Let's just say that the chartered plane home ran out of biohazardous trash bags."

Olsen himself stayed healthy through strict hand and mouth hygiene, a lesson he can share with his patients at the Mayo Clinic, where he is a resident.

CLASS NOTES

Compiled by Joyce Jeardeau

CLASS OF 1935



Kenneth A. Seifert will celebrate his 100th birthday on January 19, 2011. Now living in Hot Springs Village, Arkansas, he is happy to report that he is able to get around without some of the disabilities other elderly people acquire. "God has been good to me," he says.

CLASS OF 1948

Roland Liebenow has recently had his second book, a compilation of articles he has written, published. The articles are about historical subjects of Lake Mills, Wisconsin. Both printings of *People, Their Places & Things* have sold out. In 2009, his article, "Round Barns of Wisconsin," was also published in the *Wisconsin Farmer* newspaper. Roland serves on the board of trustees of the L.D. Fargo Public Library in Lake Mills, and is active with the American Legion, Lake Mills Rotary and the local historical society. This year he was recognized by the Boy Scouts National Office for 60 years of service.

CLASS OF 1958

John Weiss recently completed a term as president of the Pacific Dermatologic Association, an 800-member group that serves the Western states and the Pacific Rim. John culminated his service at a week-long meeting in Pasadena, California, in August. He also held the office of president of the Chicago Dermatological Society and the San Francisco Dermatologic Society. He and his wife, Suzanne, live in Oakland, California, and he is in private practice in nearby Castro Valley.

CLASS OF 1965

Gerald Barnes has some very special memories of medical school, including watching the TV coverage following the assassination of John F. Kennedy. He's semi-retired now and enjoying his many hobbies.

In June 2011, **Norman Jensen** will close his internal medicine practice. He's interested in developing a non-profit to help community physicians provide leadership for community health. He is president of the American Academy on Communication in Healthcare, is on the board of directors, secretary and acting CEO of Citizen Congress Wisconsin, Inc., and is a past board member of the Wisconsin Medical Society. His hobbies are gardening, forestry and his five grandchildren.

Allen Plotkin has been married to his high school sweetheart, Diane, for 48 years. They have travelled a lot, covering all of Europe, South America, the entire Amazon, Arctic and Antarctica. They just returned from India and Nepal. Allen works part-time and runs an erectile dysfunction clinic three days a week.

Harvey Wichman has discovered golf is less frustrating than he thought—"it's all about attitude." His fondest memory of medical school days occurred during his preceptorship in Janesville, when he fell in love with orthopedics. His worst memory is that he hasn't been able to enjoy sausage since his visit to the Oscar Meyer plant.

CLASS OF 1970

James Bruckman has authored a genealogy book of his mother's ancestors, *A Dresser Collection to Early New England Settlers.* The Wisconsin Historical Society library holds a copy. Some of his special memories of medical school include living in the Phi Chi house, fellowship with classmates, rotations with Dr. William Middleton, summer research with Dr. John Mangos and an externship in Janesville.

Gene Enders retired from the Family Care Department of Midelfort Clinic in 2008 and will work part-time in urgent care at the clinic until the end of 2010. He will then be retiring to Northfield, Minnesota, to be near family and grandchildren (currently just one). Gene serves on the Eau Claire Bicycle/Pedestrian Advisory Commission and enjoys tandem bicycling, Guthrie plays, cross-country skiing, orchestra concerts and bicycle tours. He met his wife, Peg, in medical school and they have been "happily married" for 42 years.

Marcia Stahmann Richards received a National Gold Medal in her figure skating freestyle event. She skates with the oldest guys at the lowest level that allows her to go to the nationals. They call their group "61 'til Death." She is a specialist in radiation oncology.

Paul Wertsch was elected to the Council on Medical Services at the June AMA meeting and remains in full-time family practice. His wife and classmate **Kay Heggestad** was elected to the National Board of Parents, Families and Friends of Lesbians and Gays last fall. Instead of practicing medicine, Kay now practices volleyball. Paul and Kay fell in love during a class trip to Lilly County, Indiana, in their second year of medical

school. Kay can still sing "Tip Toe Thru the Path Lab" and "Somewhere, a Place for Us (at the VA)" from their Junior Skit. My, how things have changed! She remembers learning the dermatome chart via a slide of *Playboy* bunnies and hearing one pathologist say women shouldn't go to medical school unless they've had a hysterectomy. Paul remembers watching the birth of family medicine and starting the Blue Bus Clinic.

CLASS OF 1975

Bruce Hanson is still doing full scope family practice, including delivering babies and working in the emergency room. Once or twice a year he hosts a medical student from UW-Madison or Germany. He recalls the medical school day when half his nephrology class was given Lasix and the other half was given a placebo at the beginning of a lecture. "You don't have to have been there to be able to imagine the outcome," he says.

Terrance Scheid's wife, Mary Kay King, wanted to let us know that Terry had a stroke in April 2009. He is occupied with working on his recovery, which is going very slow.

The first day of gross anatomy when his cadaver-mates shied away, leaving him with the scalpel—that was a life-changing moment in medical school for **Errol Segall**. His specialty is psychiatry and over the years he has been involved in various academic and patient care activities. He is devoting himself to outpatient care and at this stage of his career he says there's no end in sight.

CLASS OF 1980

Whenever anyone complains about the electronic medical record at the William S. Middleton Memorial Veterans Hospital in Madison, **Dean Krahn** tells them about one day when he was in medical school and a student on the next unit got a patient admission with "a wagon full of charts about three-feet wide by four-feet long and two-feet deep." Dean is really showing his age now!

Alan Strobusch grows his own hops for brewing beer and hopes to have a special brew done for his class reunion. He also enjoys making maple syrup, cooking, snowshoeing (he made his own pair), hunting, gardening and numerous other outdoor recreations and activities. Other interests include fund raising for Children's Cancer Research and the Make-A-Wish Foundation. Some of his favorite medical school memories are eating birthday cake over the cadaver tanks in anatomy and hearing Dr. Helen Dickey call medical students "cabbage heads" in grand rounds.

CLASS OF 1985

John Gosbee is involved in "changing curricula of medical school and residency to include patient safety." He is working on altering the product development process in device companies to include human factors in engineering to improve safety. He enjoys kayaking, camping (where no bugs live) and biking with the kids.

Tree farming, distance running, backpacking and grape growing (maybe wine production soon) are a few of the hobbies and interests of **Tom Novacheck**. His specialty is pediatric orthopedics. He mainly treats children with cerebral palsy who have spine deformities and gait problems. He does research on gait analysis and teaches orthopedic residents and fellows.

Lon Peterson's memories of medical school include his first Badger football game when the Badgers beat number-one ranked Michigan. He also recalls listening to Neil Young music and smoking a pipe while talking philosophically.

CLASS OF 1986

David Cassidy was awarded the Bronze Star Medal for exceptional meritorious service as the brigade surgeon for Task Force Cyclone. Last spring, he produced a medical operations system capable of responding to the needs of personnel at military bases in Kabul, Afghanistan.

CLASS OF 1990

Primary care provider for the Department of Veterans Affairs in Wasilla, Alaska, **Lynn Budzak** is learning to fly fish. She also is able to enjoy her other interests, such as training sled dogs and hiking in the beautiful state of Alaska.

During first semester gross anatomy in medical school, **John Daley** and three of his classmates found a different way to celebrate Halloween. They took their significant others to the anatomy lab to look at the tank that contained various heads in different stages of dissection. For John and the other medical students, it was "like a day at the office," but their lady friends were quite shocked.

IN MEMORIAM

Thomas Bloss '68
July 14, 2010
Brooklyn Park, Minnesota

Margaret (Hoekstra) Davidson '57
July 22, 2010
Rancho Palos Verdes, California

Gilbert Stannard, Jr. '46
June 19, 2010
Sister Bay, Wisconsin

James Warrick '51
March 30, 2010
Las Vegas, Nevada

Milton Zemlyn '38
October 31, 2009
Chester, Illinois

GOODBYE, DEAR COLLEAGUE: TODD VARNESS, MD, MPH

by Renie Schapiro

Dozens upon dozens in the SMPH community wore the turquoise wristbands throughout those difficult spring and early summer days. Doctors, administrative staff, nurses, residents, fellows, students and patients and their families in Madison and across Wisconsin.

"Todd Squad," the bracelets read in large white uppercase letters. They affirmed our support for Todd Varness as he battled a malignant tumor suddenly and rapidly invading his chest.

After a valiant fight, Todd died on August 2, 2010, at age 36.

Todd came to Wisconsin in 2002 as a pediatric intern, became chief resident and was a research fellow before completing a pediatric endocrine fellowship in 2009. He joined the faculty shortly after.

From the start, his star shone brightly. He was intellectually rigorous and curious, always prepared, eager to tackle the most difficult challenges and cases. His good cheer, warmth and generosity made him a cherished colleague and beloved doctor and friend.

He was an exemplary teacher, winning the WMAA's Clinical Sciences Teaching Award and several others.

His young patients and their families, together with colleagues, family and friends, stood in line for four hours on a hot summer day to pay their respects. Throughout his illness and after his death, tributes like these poured in:

"You have helped our son and family more than we could ever tell you."

"Dr. Todd was the first doctor who really listened to what I had to say."

"I was supposed to be a teacher for him during residency, but found myself his student most of the time."

"His chief resident year was such a memorable year, when all ships rose with Todd's ever-rising tide."

Todd made the SMPH so much better in his too-short time. Now those wristbands represent a commitment to continuing support for his wife Dierdre Varness, MD '07, a UW anesthesiology resident, their son to be born in December, and to carrying on the ideals Todd embodied.

CLASS OF 1995

After eight years at the University of Chicago and Mt. Sinai Hospital as an assistant professor of emergency medicine, **Anthony Macasaet** has returned to his rural hometown of Viroqua, Wisconsin. He feels it is an honor to care for the people he grew up with, and it is a rewarding environment in which to practice emergency medicine. Anthony has launched a local "farm-to-fork" eatery in Viroqua, called Optimo, and, as a passionate photographer, is working on an independent film.

Julie Mitchell has been appointed interim chief of general internal medicine at the Medical College of Wisconsin.

Since quitting practice in 2006 to become a full-time parent, **Thomas Meyer** is now working in restoration ecology. He says his favorite memory from medical school has to be Dr. Courtney Hogendorn's ('95) impression of Dr. Dennis Maki ('67) on skit night.

CLASS OF 2005

In thinking back to memorable (embarassing) moments in medical school, **Dan Schumacher** recalls the time during his second year when he repeatedly bumped the chair that held the "lecture capture camera." This made for a "sea-sick experience" for all who watched the film later. Dan says, "Sorry."

Currently in an abdominal imaging fellowship at UW-Madison, **Paul Stanton** has accepted a position at Gundersen Lutheran in La Crosse, which will begin in July 2011.

CORRECTION

In our last issue's In Memoriam, we misspelled Sylvia Griem's name. We sincerely regret the error.

Bill Nietert Honored with Max Fox Preceptor Award

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
1981: Donald Griffith, MD
Ben Lawton, MD '46
1982: Thomas 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
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

The SMPH recently presented William Nietert, MD '78, a longtime leader in the Wisconsin Medical Alumni Association (WMAA) and one of the best known family physicians in Wausau, Wisconsin, its Max Fox Preceptor Award.

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

Nietert has been a preceptor to SMPH medical students for 16 years, welcoming them into his practice to shadow him and learn as he cares for his patients.

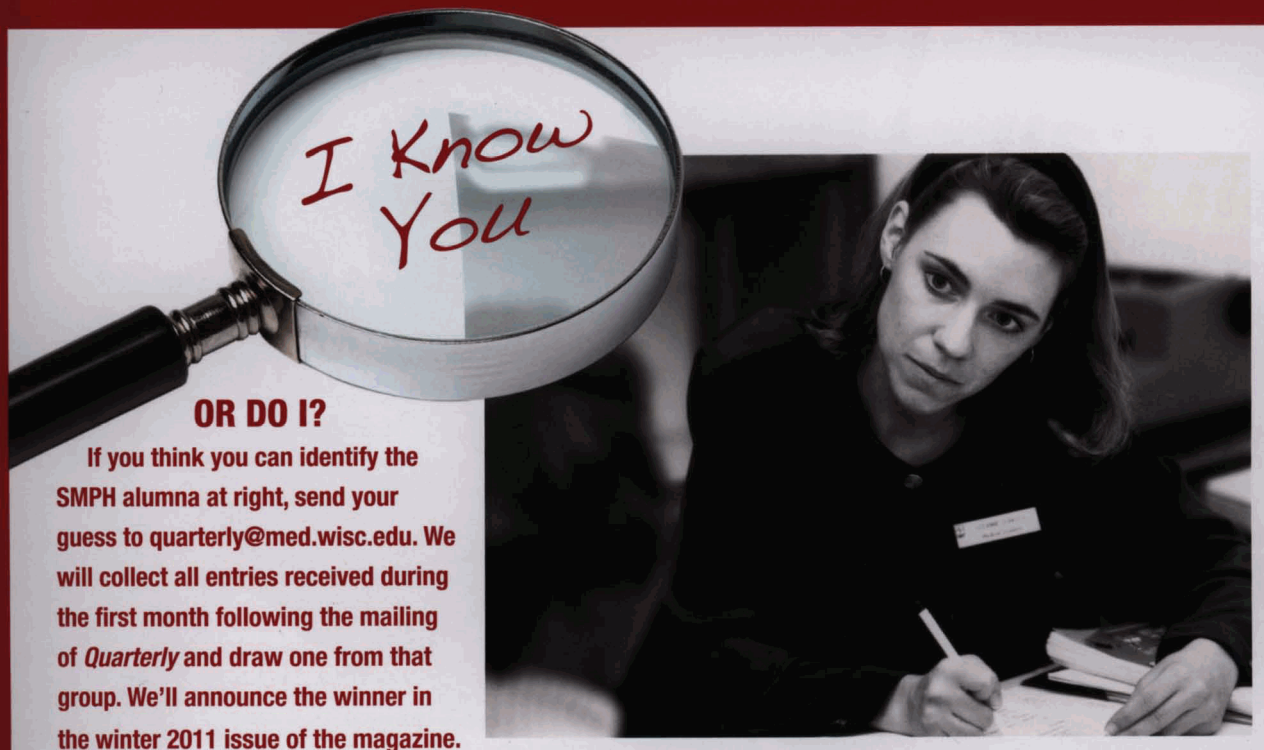
He has been a family physician at Kronenwetter Clinic in Mosinee, a small town near Wausau, since 1981. He was medical director of Marywood Convalescence Center from 1981 to 1993, medical director of the Adult Day Center from 1984 to 2000 and has been medical director of Kenney Park Convalescence Center since 2008. He has held leadership positions in state and national associations of nursing home medical directors.

After receiving his medical degree from the SMPH, Nietert completed his internship and residency at UW Department of Family Medicine Residency Program in Wausau.

An active leader in the WMAA for many years, Nietert was president for the 2004-2006 term. He also served as president of his medical school class.

The Max Fox Preceptor Award was created by Herman Shapiro, MD '32, 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.

Nietert, seated above at the celebration, was joined by D.J. Freeman, MD '52 (left) and A.A. Koeller, MD '61.



OR DO I?

If you think you can identify the SMPH alumna at right, send your guess to quarterly@med.wisc.edu. We will collect all entries received during the first month following the mailing of *Quarterly* and draw one from that group. We'll announce the winner in the winter 2011 issue of the magazine.

HINTS: This alum liked to sit in the back of the class, on the left side. Her anatomy "tank-mates" from the first semester became her closest medical school friends. She went on skiing road trips to Colorado and Utah during spring break each year with fellow medical students. She did a six-week elective in Costa Rica.

OUR LAST "MYSTERY ALUM" WAS GORDON KOLTIS, MD '81.

After completing a radiation oncology residency at UW, Koltis briefly joined a practice in Maine and then spent two years at Allegheny General Hospital in Pittsburgh. In 1987, he and his wife, Marit, their dog and two cats began a two-year trip around the U.S. in a motor home. He worked locum tenens here and there to pay for their ambitious (successful) attempt to see the entire country while they were still young and healthy.

In 1989, they settled in Greenville, North Carolina, where Koltis soon went into private practice and created a cancer program in a nearby community hospital where no cancer treatment had been available. He served as the chairperson of that hospital department for 20 years, during which time he built and opened a private cancer center in the Carolina Radiation Medicine Cancer Treatment Center. The new center offered leading-edge radiation cancer treatments of many kinds. Two years ago, Koltis sold the practice to 21st Century Oncology.

Koltis' focus has changed from clinical medicine in the treatment of cancer to health, wellness and nutrition as they relate to wellness and cancer prevention. He continues to provide consulting services in radiotherapy, radiation safety and cancer center development, but also now goes fishing, does bird watching, plays guitar and travels the world.

Twelve people identified Koltis (and two guessed wrong). The winner, Steven Nichols, MD '81, says Koltis became "one of the most charismatic members of our class."

Nichols was a U.S. Navy family physician and flight surgeon for 23 years. He also was medical director of two major Navy hospitals before retiring from the military in 2001. He's currently a staff physician at the Hillcrest Family Health Center in Waco, Texas.

"On Call"

Three family medicine physicians tell *Quarterly* what they've been up to

Resident Ani Saryan checks two siblings at UW Health Fox Valley Family Medicine.

ALAN STROBUSCH, MD '80

Family medicine is full of transitions. After many years in primary care at ThedaCare Physicians in Waupaca, Wisconsin, I recently became medical director of the Wisconsin Veterans Home at King. This new role includes supervision of the healthcare team delivering care to 720-plus veterans and their eligible dependents.

Family medicine was my interest from early on in medical school. A rural rotation in Grantsburg, Wisconsin, cemented my commitment to family practice and rural medicine, despite professors urging me into specialty practice. I stayed in Madison for my residency, and after finishing, I started an independent rural family practice in New London, Wisconsin, sharing office space with Donn Fuhrmann, MD '76.

I feel family practice is the most varied of all the specialties. Days and nights are filled with interesting patients and diagnostic dilemmas. Caring for extended families uniquely positions you to recommend family-specific health screening and preventive advice.

Over the years I've taught and mentored numerous medical students, residents, nurse practitioners and physician assistants. I've realized that by giving back in this way, I'm able to learn and challenge myself more.

I served the Wisconsin Academy of Family Physicians as a board member, president and chairperson. And I have traveled and networked with many state and national medical leaders.

I'm less involved today as my perspective changed in 2005, when our youngest son, Kyle, was diagnosed with a rare form of childhood cancer called rhabdomyosarcoma. Kyle is doing well today, but it made me realize the importance of spending more time with my family.

As I reflect on my 30-year career, I realize being a family physician is more than just a doctor-patient relationship. I became a friend, confidant and advisor to my patients. I was a part of their lives and they were a part of mine. My patients have taught me things I did not learn in medical school—patience, kindness, confidence and the strength of the human spirit. Family medicine can enrich a physician's life beyond measure.

LYNN BUDZAK, MD '90

I'm currently working at the Matsu Veterans Administration (VA) Outpatient Clinic in Wasilla, Alaska. I was in private practice in DePere, Wisconsin, for 12 years. But as the clinic rapidly expanded, I felt less and less satisfaction with my career. About four years ago, I changed pathways and went to the Green Bay VA Outpatient Clinic.

Getting involved in federal medicine has been a tremendously refreshing change in my career. I made a lateral move within the VA system a year ago and now I'm the only physician staffing the Matsu Clinic.

My practice involves veterans from all military genres, but the majority here in Alaska are older Vietnam veterans. I provide a lot of long-term disease management, with many problems resulting from Agent Orange exposure. The job is really getting busy!

I chose family practice because I enjoy doing a little of everything. During medical school, I envisioned myself providing cradle-to-grave care for a rural community. I selected the UW Family Medicine Residency Program in Eau Claire because I wanted a program where I didn't have to compete with residents in other specialty training programs for patients. I received a good foundation there.

Family practice can be very rewarding but it is a very demanding, often under-respected, specialty.

My most memorable case was from private practice. It entailed a lady who had self-referred to multiple specialists for treatment of her hypertension (cardiology), her new-onset diabetes (endocrinology) and osteoporosis (orthopedics). Each specialist cared for each problem. I became her favorite doctor when I correctly diagnosed her Cushing's disease.

I've been having many fun adventures on weekends since moving to Alaska, including doing some great hiking in places such as Reed Lakes and watching the Iditarod. I now understand why Dr. Dave Werner ('69) has practiced in Palmer, Alaska, for so many years.

The VA motto is "Serving those who served." I strive to provide compassionate care each and every day. Every patient has a story to tell so I try to truly listen. I want to pay back the men and women who have put their lives on the line for our freedom.

CHRISTOPHER WITKE, MD '00

I provide care at Viewmont Family Medicine in Hickory, North Carolina, which is part of Catawba Valley Medical Center. I've been in practice here for almost two years after leaving Beaver Dam, Wisconsin, where I worked for about six years.

I now work in an outpatient-only practice, providing acute care, preventive medicine, chronic medical care and outpatient procedures. This lets me enjoy more time with my wife, Michelle, and our three children—Jacob, 10, Lauren, 8, and Sophia, 3.

In medical school, I was torn between obstetrics-gynecology and family medicine. I ultimately chose family medicine because I could deliver babies, which I did for six years after residency, but also could provide care for the entire family. I've had families in my practice in which I delivered the youngest member yet also cared for the great-grandparents.

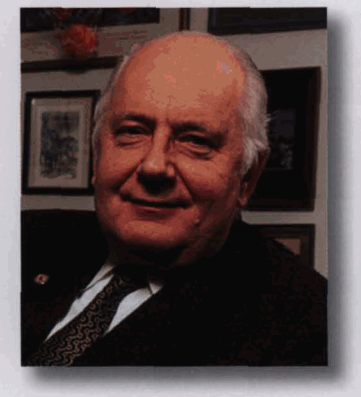
I enjoy the different challenges family medicine brings, from the breadth of knowledge required to the diversity of patients seen in the clinic each day. One day, for example, I delivered a child, performed a lumbar puncture on another ill child and had to tell a 90-year-old patient of several years that she was terminally ill and would not leave the hospital. This required an array of procedural skills as well as an ability to relate in different ways with different kinds of patients.

I completed my internship and residency at the Methodist Medical Center, part of the University of Illinois College of Medicine at Peoria, and served as chief resident for my final 18 months.

Family medicine is an ever-evolving specialty. It provides many different avenues to practice—solo practitioner or part of a group, independent or employed. You can choose what aspects of family medicine you enjoy and make them part of your practice.

I like the flexibility I have in practice and the diversity of my days as well as the freedom to spend time with my family. The medical school prepared me very well for my journey in family medicine and although I no longer live in Wisconsin, I will always be a Badger at heart.

LAESSIG RECEIVES NATIONAL PUBLIC HEALTH LABORATORY AWARD



The Association of Public Health Laboratories (APHL) posthumously awarded its 2010 Lifetime Achievement Award to Ronald Laessig, MD, at its annual meeting in June.

Laessig was director of the Wisconsin State Laboratory of Hygiene (WSLH) from 1980 until his retirement in 2006. He was also a professor of pathology and laboratory medicine, as well as population health sciences at the SMPH. Laessig passed away in March 2009.

The APHL's Lifetime Achievement Award honors individuals who have established a history of distinguished service to APHL, made significant contributions to the advancement of public health laboratory science or practice, exhibited leadership in the field of public health and/or positively influenced public health policy on a national or global level.

Laessig's wife, Joan, received a standing ovation when she accepted the award from current WSLH Director and SMPH Professor of Population Health Sciences Charles Brokopp, MD.

Earlier this year, the APHL, the Centers for Disease Control and Prevention and the Jeffrey Modell Foundation announced the creation of the Dr. Ronald H. Laessig Memorial Newborn Screening Fellowship to honor Laessig's commitment to research and advocacy for newborn screening.

The APHL works to safeguard the public's health by strengthening public health laboratories in the U.S. and across the world. In collaboration with its 800-plus members, the APHL advances laboratory systems and practices, and promotes policies that support healthy communities.

LEVINE APPOINTED PRIMATE CENTER DIRECTOR

Jon Levine, PhD, a neurophysiologist at Northwestern University since 1984, is the new director of the Wisconsin National Primate Research Center. He also is an SMPH professor of physiology.

Levine takes over from Joseph Kemnitz, PhD, SMPH professor of physiology, who stepped down at the end of 2009 to return to the faculty. Levine assumed the position on September 1, 2010.

At Northwestern, Levine conducted studies with primate models, including collaborations with UW-Madison researchers, but the bulk of his research involves rodent models.

"I see it as a great advantage to have experience in both research worlds," explains Levine, who gained his first experiences with monkeys as a post-doctoral fellow at the Oregon National Primate Research Center in 1982. "The great majority of current research and proportionally 'hot' areas of progress are rodent based. That I can walk easily in both worlds gives me a broader perspective and broader knowledge base from which to operate."

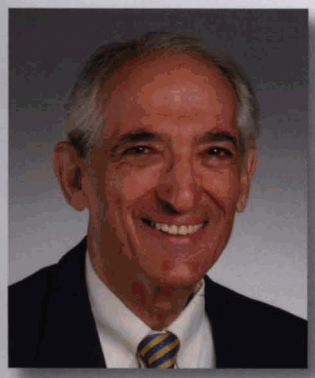
The Wisconsin National Primate Research Center is one of eight federally-supported primate research centers and the only one in the Midwest.

Levine oversees a staff of about 200 people, although as many as 250 researchers use the facility.

The center houses about 1,400 primates representing three different species, mostly rhesus macaques. Studies are done on HIV vaccine development, regenerative medicine (replacing diseased or damaged tissue) and reproduction, and aging and metabolic disease.

Levine says some of the most exciting developments in human health will be part of the center's research portfolio.

GOODFRIEND GIVEN LIFETIME ACHIEVEMENT AWARD



The American Heart Association's Council for High Blood Pressure Research recently honored Theodore L. Goodfriend, MD, professor of medicine and pharmacology at the SMPH, with its Page-Bradley Lifetime Achievement Award.

Goodfriend's laboratory was the first to describe angiotensin and bradykinin receptors. The discoveries served as the basis for the development of a whole class of drugs for treating hypertension—angiotensin receptor blockers (ARBs). Millions of people take the drugs today, making ARBs a billion-dollar business.

Goodfirend's laboratory was also the first to bring attention to the importance of oxidized fatty acids in obese people with hypertension, currently an area of active research internationally. He is the author of more than 135 journal articles.

After graduating from the University of Pennsylvania Medical School, Goodfriend completed his residency in internal medicine at Barnes Hospital in St. Louis and a postdoctoral fellowship in biochemistry at Brandeis University. He joined the SMPH faculty in 1965.

Goodfriend was an early example of a physician with a deep interest in public health. He was the faculty member who helped medical students form MEDiC, the free clinics for Madison underserved patients, and he oversaw medical students at another free clinic in Wautoma, Wisconsin, that served migrant workers.

He has been based at the William S. Middleton Memorial Veterans Hospital for 35 years and is currently the associate chief of staff for research there.

A dedicated teacher, Goodfriend has earned six teaching awards, including the WMAA's Distinguished Clinical Teaching Award.

INSTITUTE FOCUSES ON SCHOLARS' PROFESSIONAL DEVELOPMENT

Twenty-five scholars from Wisconsin and across the nation came to the SMPH in early June for the first annual Health Equity Leadership Institute (HELI). The goal of the week-long institute, titled Building Collaborative Research Teams, was to accelerate the professional development of HELI scholars by exposing them to the challenges and potential of health equity research.

"We designed the programming to showcase the many health equity research resources here on the UW-Madison campus, introduce scholars to our community research partners and foster professional networking and a collaborative working environment for our scholars and faculty," says Sarah Esmond, MS, administrative director of the Collaborative Center for Health Equity (CCHE).

The CCHE, a division of the UW-Madison Institute for Clinical and Translational Research, sponsored the HELI with colleagues from the University of Pittsburgh Research Center of Excellence on Minority Health Disparities.

The program was structured to include large didactic sessions as well as small group sessions, special events, field trips and mentoring opportunities.

Sessions and presentations included, among others, "Framing Community-Engaged Health Equity Research," "Writing for Publication and Grantsmanship" and "Getting the Most From a Mentorship Relationship."

Scholars also gave presentations describing their research and participated in a mock study session like those sponsored by the National Institutes of Health (NIH).

CCHE is committed to increasing the number of investigators, particularly minority investigators, who are engaged in health disparities and health equity research, and who are successful in securing academic appointments and independent funding through the NIH and other federal agencies.

The Changing Landscape of Headaches

Philip Bain, MD '85, has seen dramatic progress in the science behind headaches in 17 years. He's used it to improve the care of his headache patients—and he's written three books on the subject.

by Sharyn Alden

The year was 1993—a pivotal point in the career of Philip Bain, MD '85. It was the year he began thinking seriously about headaches.

Following medical school, Bain completed his residency in internal medicine at the Medical College of Wisconsin (MCW). He was one of the first residents in MCW's primary care track for internal medicine. During the next three years, he worked in primary care at a multi-specialty group practice in West Bend, Wisconsin, and then moved to a small office in Hartland, not that far from his hometown of Lake Geneva.

After obtaining an added qualification certificate in geriatrics in 1992, Bain wanted to diversify his clinical practice as he looked to the future.

"I asked myself: What group of patients do doctors generally shy away from in primary care?" he says. "Since I had moved to a new area, I thought this would help me build a practice. I also wanted a field where active research was occurring, and where there was a great need to help the younger part of my practice."

He decided that he wanted to learn more about the treatment of patients with headaches, so he arranged a visit to the Cleveland Clinic Headache Unit. It was there that he began to understand the significant impact headaches can have on people.

Headaches have been a strong interest of his ever since. In the intervening 17 years, Bain has watched the science underlying headaches change dramatically and has written three books on the subject.

Coincidentally, 1993 was also a milestone year in the history of headache treatment. That's the year the medication Imitrex came on the market. The drug has revolutionized the treatment of patients with migraines.

"Last year, in conjunction with the 50th anniversary of the American Headache Society, members voted that the introduction of Imitrex has been the single most important event in the field of headache care in the past 50 years," says Bain.

While headaches have been reported since Babylonian times, even today they often are under-diagnosed and misunderstood. But for those who have headaches, the suffering is real indeed.

Migraines are the most common, and most debilitating, of headaches, affecting more than 28 million people in the U.S.

"More people are afflicted with migraines than with asthma and diabetes combined," Bain says. "About 18 percent of adult women suffer from migraines—that's one in six women!

In the past, migraines were commonly ascribed to hysterical, hypochondriacal women. But as science caught up with the field, the causes of migraines and other headaches were gradually sorted out, validating headache sufferers' complaints and moving headaches from a neurosis to a biologically-based disorder.

Currently, clinicians think that when a genetically prone individual comes in contact with a specific trigger, identifiable or not, a cascade of events begins in the back of the brain, Bain says.

"The nerves in the back of the head are part of the visual cortex," he explains. "When these nerves are activated, events thought to be related to the visual aura symptoms reported by a significant minority of migraine sufferers occur."

When these nerves in the back of the brain are stimulated, a wave of additional nerve activity slowly moves forward. The ends of the nerves located near blood vessels release chemicals that dilate the arteries and lead to inflammation.

"As the process continues to spin out of control, the forward-moving nerve activity stimulates nerves in the neck," he says. "These nerves then stimulate nerves in the brain's nausea and pain centers, leading to a full-blown migraine."

The mysteries of migraine have unfolded over the years Bain has focused on headaches and attended national headache scientific meetings.

"It's been a fascinating journey. It seems like every year, science gives us a few more pieces to the migraine puzzle," he says. "Sooner or later, we will figure it all out."

Despite the success of Imitrex, however, Bain has learned that the effective treatment of headaches is not focused only on medications. He encourages patients to make healthy lifestyle choices that can bring relief from headaches.

"Patients need to learn what triggers their headaches—which foods, beverages or alcohol," he says. "And they need to understand that they require restorative sleep, and shouldn't skip meals."

Unfortunately, he says, many people don't want to do the hard work.

Bain has authored two books on headaches and is currently working on a third with Dawn A. Marcus, MD, a neurologist at the University of Pittsburgh. Their first, published last year, was *Effective Migraine Treatment in Pregnant and Lactating Women: A Practical Guide.*

Their second book, *The Woman's Migraine Toolkit: Managing Your Headaches from Puberty to Menopause,* should hit the shelves in the next few months.

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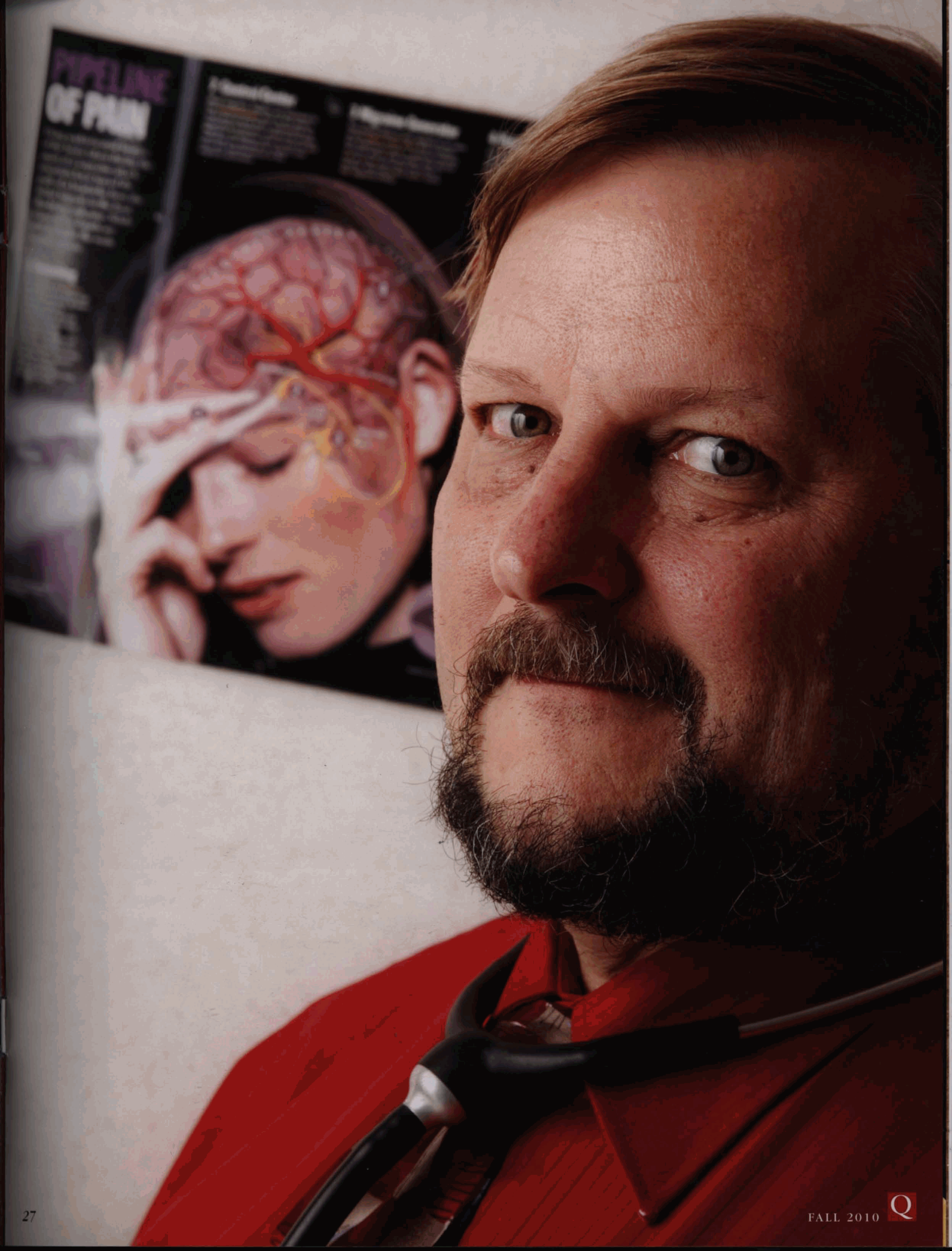
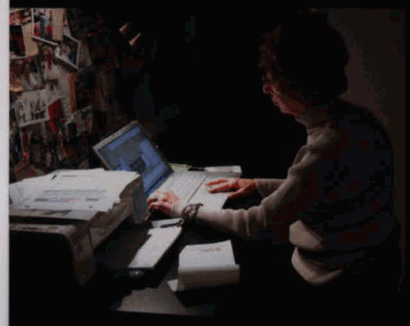

PIPELINE
OF PAIN

Chronic Sleep Loss Takes Bigger Toll Than Thought

A new study in rats has shown that chronic restricted sleep—five nights of four hours a night—affects the brain in a way similar to that seen after acute sleep deprivation.



The study, which appeared in the *Proceedings of the National Academy of Sciences*, adds to the growing evidence about the negative effects of restricted sleep for both the brain and body.

Many people are sleep restricted, either because they must be or choose to be, says Chiara Cirelli, MD, PhD, associate professor of psychiatry, who led the research.

"People count on catching up on their sleep on the weekends, but it may not be enough," she says.

This "casual" lack of sleep can be harmful.

"Even relatively mild sleep restriction for several nights can affect an individual's ability to perform cognitive tasks," Cirelli says.

Researchers kept rats awake 20 hours a day over five days while continuously recording their brain waves with a sophisticated EEG as they were asleep and awake. The EEGs measured slow wave activity (SWA), the best marker of an individual's need to sleep as well as the intensity of sleep that follows a period of wakefulness.

The SWA analysis showed that the sleep restriction produced intense recovery sleep following each wake cycle, with both deeper and longer sleep.

Knowing that chronic sleep restriction evokes the same brain responses as acute sleep deprivation will help scientists better understand the harmful effects of all kinds of sleep loss, says Cirelli.

Alarm Helps Diabetes Patients Monitor Blood Sugar

A new sensor that sounds an alarm when blood sugar is out of line could help Type 1 diabetes patients better control their disease, according to a new study.

The sensor and transmitter are embedded in the skin, normally the abdomen, where they continuously monitor blood sugars and send the information to an insulin pump. Patients can get new readings every five minutes.

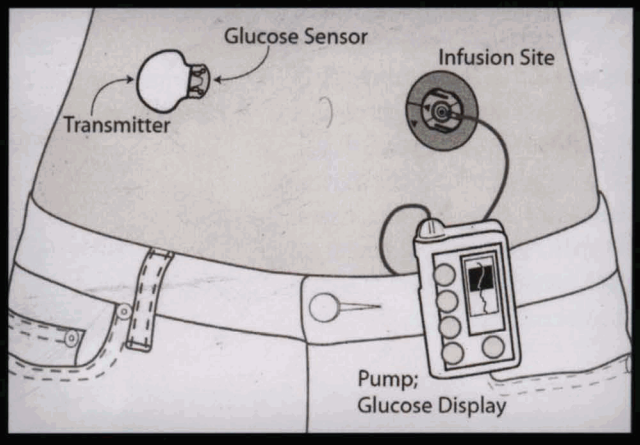
"If the blood sugars are getting too high or too low, the sensor sets off an alarm alerting the patient to take corrective measures," says endocrinologist Melissa Meredith, MD, SMPH associate professor of medicine, who directed the UW portion of the multi-site study.

Eight of her patients used the technology as part of the 18-month Medtronic-funded study involving 485 patients at 30 sites. The patients had been controlling their disease with multiple insulin injections.

Blood sugar levels for all patients involved in the study dropped an average of 15 percent within three months of starting the sensor, and that level remained throughout the duration of the study.

Cost, however, may be a major drawback, says Meredith. Transmitters run $1,000 while sensors cost $10 each. Most insurance companies will pay for insulin pumps, but not all of them will fund the cost of the transmitters and sensors.

The technology could greatly help some patients, such as pregnant women with Type 1 diabetes.



"Risks to babies are well-defined if blood sugars are not controlled," Meredith says.

The study appeared recently in the *New England Journal of Medicine*.

Rhesus Monkeys Found to be Self-Aware

SMPH researchers have found that under specific conditions, a rhesus macaque monkey can recognize itself in a mirror and perform actions expected from an animal that is self-aware.

The finding, from the laboratory of Luis Populin, PhD, professor of anatomy, casts doubt on both the relevance of the "mark" test used to establish self-awareness and on the existence of a "cognitive divide" between higher and lower primates.

With the test, a harmless mark is put on the animal where it can only be seen in a mirror. If the animal stares at the mirror and touches the mark, it is said to be self-aware: It recognizes its own reflection, not that of another animal.

People, chimpanzees and select other animals pass this test, but rhesus macaques have long failed it. The new study, published recently in *PLoS One*, shows that rhesus monkeys can still be self-aware.

Populin had placed head implants on two rhesus monkeys to study the effects of Ritalin on prefrontal cortex-controlled behaviors and neural mechanisms that make them possible. Graduate student Abigail Rajala noticed that the implanted monkeys looked in a small nearby mirror while examining and grooming their heads near the implant. The monkeys also used the mirrors to examine body areas they had never seen, particularly the genitals.

When the mirrors were covered, the behaviors disappeared.

The study sheds new light on the way in which self-awareness evolves.

"It suggests that there is not a cognitive divide separating hominoids from lower primates," Populin says.

Inherited Brain Activity Predicts Childhood Anxiety Risk

Clinicians soon may be able to diagnose and treat kids at risk for anxiety earlier than ever, thanks to an SMPH study in young monkeys that pinpoints brain regions related to developing the problem.

"We believe that young children who have higher activity in these brain regions are more likely to develop anxiety and depression as adolescents and adults," says Ned H. Kalin, MD, chair of the Department of Psychiatry, who led the research.

The study was published recently in *Nature*.

The researchers performed positron emission tomography scans on the brains of 238 young rhesus macaque monkeys, all belonging to the same extended family.

The scans demonstrated increased activity in the central nucleus of the amygdala and anterior hippocampus in monkeys known to be anxious. The degree of anxious temperament could be predicted by the level of each animal's brain activity.

The researchers also saw that genes and environmental factors affected the two brain regions differently.

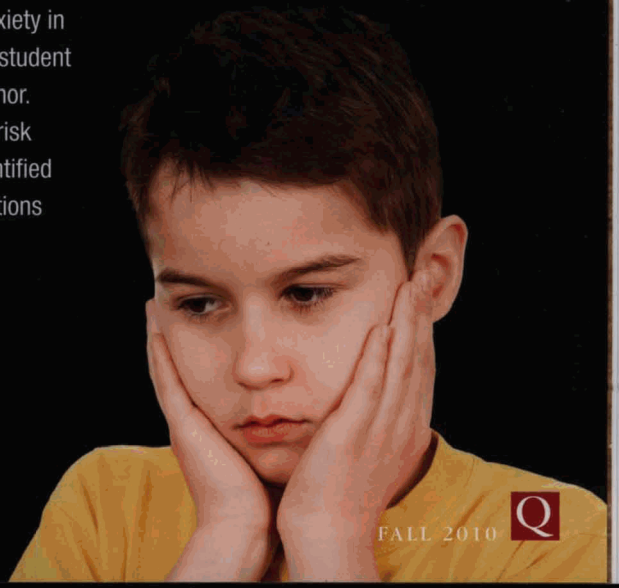
"We found activity in the anterior hippocampus to be more heritable than in the amygdala," says co-author Jonathan Oler, an associate scientist in psychiatry.

The discovery may lead to novel ways to detect anxiety in children, says graduate student Drew Fox, also a co-author.

"Markers of familial risk for anxiety could be identified by understanding alterations in genes that influence hippocampal function," says Fox.

Kalin sees tremendous opportunity for preventing children from developing full-blown anxiety.

"We think we can train vulnerable kids to settle their brains down," he says. "The earlier, the better."



The Second Half

by Thomas A. Zdeblick, MD

***Zdeblick is chair of the SMPH Department of Orthopedics and Rehabilitation. This essay is an adaptation of the address he presented to the Spine Society when his term as president ended last year. It was also published in the journal* Spine.**

In the first half of my career, I learned to operate. I figured out that efficiency is all about sequencing in the operating room. About visualizing each step in a procedure, then performing that sequence in a subconscious flow, without repeating, backtracking or perseverating. I learned to never rush, and I stuck to the dictum that I would never leave the OR unless I was happy…no misgivings or uncertainties allowed to linger. It became apparent to me that although technically beautiful operations were my goal, they did not always lead to success. This is really disheartening to a young surgeon. No one likes an unhappy patient.

So I learned from those still-miserable patients. I learned that the patient factor was much more important than the technical factors. Understanding why a patient is really there to see you is the key to patient selection. Not every referred MRI needs an operation. When I learned to say no to the patients I knew were not going to improve with surgery, my practice, and my sense of satisfaction, improved tremendously. This is not easy to do! We want to take care of our referral sources, and we like operating. However, excessive pain issues, anger, ongoing litigation, symptom magnification and noncompliant behavior are all valid reasons to say no. I learned that frustration and desperation (either mine or the patient's) were not good indications for surgery. I have been chastised for getting good results because I will only operate on patients I know will get better. But that's the whole point, isn't it? That's the art of what we do.

I learned those lessons well in my first half, and have tried hard to impart all that to my residents and fellows. That's what really got me thinking about the second half. As I traveled and trained and lectured to surgeons around the country, and reflected back on my own training, I began to see what's missing in the surgeon.

Our training took a lot out of us—long hours, sleepless nights, missing friend's events, away from family. Sure, we learned to get it done and to be reliable, available and above getting hurt. But there was a price to pay. The defense mechanisms we built up and the time constraints we worked under made it harder to connect–not just with our patients, but with each other as well.

Too often I talk to surgeons who are busy, respected and successful, but unfulfilled and unhappy. Too much complaining. Too much self doubt. With introspection, many of us realize we have too few friends outside of medicine, and either few outside interests or not enough time to enjoy them. It does not have to be that way. When asked how I like the 80-hour resident work week, you might be surprised to hear that I like it. Yes, it's harder to train residents, these residents are not as good or as tough as we were, they do not know what it's like to work all night, they have way more help than we had. But they have the opportunity to be better people, and better physicians, because of it. Today's residents have more time to hang with friends, raise a family or coach a soccer team. Their ability to interconnect with each other, with their family and friends, and eventually with their patients, is better than mine was.

So what have I learned that will make the second half of my career better—and that I hope all of you will learn earlier than I did?

For one thing, I learned to listen. To listen to my staff. Nurses, assistants and mid-levels pick up on many patient nuances that we often overlook. I learned to listen to my patients. To let them go on a little longer before cutting them off. To listen to what really irritates them about their condition, to what is really bothering them. To let their specific situation guide my comments. Situational awareness is what I call it (and residents call it "spine-chiatry").

I learned to listen to my friends when they tell me they never see me because I am too busy. I learned to make time for what is really important in life. I learned to observe, and be patient with, people I train. Some surgeons are intuitive. They see the picture immediately and know how to make it change effortlessly. A kind of surgical Zen. Others, though, are mechanical and need to think through each step. Recognizing this difference, and working with each resident

Zdeblick (left) hopes the lessons he learned in the first half of his career will make him an even better surgeon, teacher, friend and family man in the second half of his career.

appropriately, takes extra effort, but it's worth it.

I've learned to stop in the hall and talk with friends. Sure, I'm in a hurry, but when someone walks by with a "How you doin'," I actually answer them honestly now–and I've learned to appreciate the resulting connection. I've learned to lean on others. We often think we exist as an island of rock. We are not. I've realized that some of my closest friends are members of our small spine society, yet I may only see them once a year. That can change.

I've learned to stop fixating on all the negatives that bombard us every day. Granted, there are more rules governing our behavior, more daily hassles. But we still have phenomenally challenging and rewarding jobs, and it's easy to lose sight of that. I like to remind myself regularly of all the positives that result from what we do.

Finally, I've learned that feeling myself—who I am and the impact I have on those around me—is what's important. To be vulnerable, and human, makes for deeper connections. When patients are injured or impaired, they prefer us when we're real. They understand us better when we show emotion, when we share feelings with them, when we really care about them by offering help even when we don't have a surgical answer.

I guess one of the most important things I've learned for the second half is that I don't have all the answers. In fact, I think I have fewer answers than when I started. But it's easier now to admit it to patients. To say I do not know why they hurt, or to admit that I cannot help them. There's so much more than being identified as a surgeon. The advice we give is just as important as the procedure we perform. It's my hope that we as surgeons can change in increasingly thoughtful ways.

Each time we interact with a patient, we have options on what to recommend. We should strive to

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Seeking Submissions

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

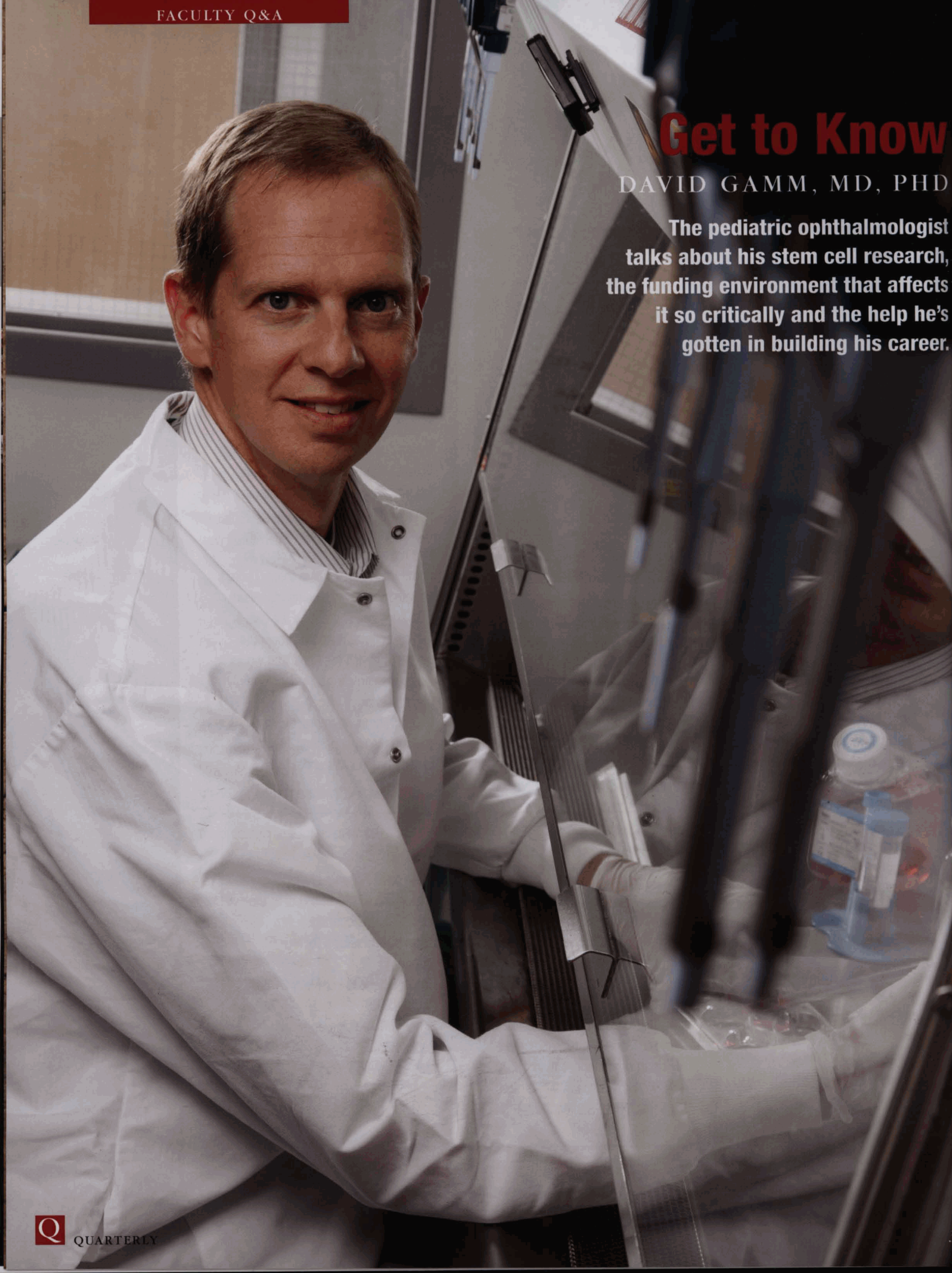
Our guidelines are as follows:

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
Madison, WI 53705

Or e-mail quarterly@med.wisc.edu



Get to Know

DAVID GAMM, MD, PHD

The pediatric ophthalmologist talks about his stem cell research, the funding environment that affects it so critically and the help he's gotten in building his career.

Embryonic stem cell research was recently shut down across the country, then the ban was lifted. Are things back to normal in your lab?

Research is mostly back to normal for the time being, but the uncertainty of not knowing if funding will be shut off again is a problem. Until there's a more permanent solution, there will continue to be cause for concern.

In what ways would your work, your career, suffer if things stayed uncertain?

There's now a generation of young scientists focused on embryonic stem (ES) cell research and its applications for the treatment of human disease. It's what we do. It's not a side project for us, and we're now making that push to compete for federal funds, promotion and tenure so we can continue our work. If the government won't fund ES cell research, it will be impossible to pursue it in a university setting, which in turn would chase away investigators and their graduate students and post docs. It becomes a downward spiral.

What alternatives do you have?

I've diversified. In addition to ES cells, my lab, like many others on campus, uses induced pluripotent cells (iPS), which are adult cells reprogrammed back to an ES state. We're very excited about this; however, the complicating factor is that in order to validate iPS cells as a model system and a source of bona fide retinal cells, we need to compare them to the gold standard—ES cells. So, research on iPS cells cannot move forward as efficiently as we'd like without concurrent ES cell research.

What is your broad area of research?

Our focus is on understanding the steps involved in producing retinal cells, and how these cells can be used to treat retinal degenerative diseases (RDD). The prototypical inherited form of RDD, known as retinitis pigmentosa, is caused by almost 100 different gene defects, all leading to blindness. We're also studying combined blindness/deafness syndromes, such as Usher syndrome. The acquired form of RDD that we are interested in is age-related macular degeneration, which is prevalent among the elderly population. The common thread among all these RDDs is degeneration of photoreceptors in the retina.

When did you first get involved in stem cell research?

When I came to Wisconsin from Michigan in 1999 to do my ophthalmology residency and pediatric fellowship, I had no idea I'd eventually do stem cell research. Right after my fellowship ended, I applied for a National Institutes of Health Mentored Clinical Scientist Development Award (K08), which supports clinicians and surgeons who also wish to become laboratory-based researchers. That's when I decided to work with stem and progenitor cells in the context of retinal development and disease. I established relationships within the Waisman Center with renowned scientists such as Clive Svendsen, PhD, and Su-Chun Zhang, MD, which resulted in exciting projects.

What's your lab like now?

Currently, I have five outstanding scientists in my lab at the Waisman Center, with two more joining us soon. Two very talented undergraduate students also contribute a great deal to our work.

Where exactly do stem cells fit in?

We're trying to understand the molecular switches that guide the differentiation—or maturation—of stem cells along the retinal lineage. The more we understand how these cells mature, the safer, more reliable and efficient they will be to use. In the process of studying these mechanisms, we have also learned how to derive retinal cell types that hopefully will be of use in clinical practice. Ultimately, we'd like to use the photoreceptors and retinal pigment epithelial cells generated from ES and iPS cells to replace cells that are dead or defective due to degenerative disease.

What brought you to Wisconsin in the first place?

It was a foregone conclusion that I'd go to the University of Michigan in Ann Arbor for college. But after I finished my MD/PhD, I decided I'd try something different. I thought about Johns Hopkins for residency, but I chose Wisconsin after talking to Dan Albert, who then was the chair of the SMPH Department of Ophthalmology and Visual Sciences. The dedication that the department has to producing excellent ophthalmologists and scientists sold me. Since arriving, I've never been disappointed.

Have you received a lot of support along the way?

I've gotten more support than I could have asked for. Right after residency, it was challenging to divide my life between patient care, research and family. But there were many people interested in helping me succeed. The support and enthusiasm I felt gave me the confidence to weather the more challenging times. People who especially come to mind in that regard are SMPH deans Philip Farrell and Robert Golden, the current ophthalmology and visual sciences chair Paul Kaufman and others in the department, Waisman Center director Marsha Selzer and David Walsh, former president of the UW System Board of Regents.

How about support from foundations?

I receive a great deal of support from foundations. The Eye Research Institute and the Retina Research Foundation have been instrumental, and I recently was awarded the Retina Research Foundation Murfee Chair. David Walsh also has provided funding and, even more importantly, a great deal of encouragement. Also, I'm an investigator for the Foundation for Fighting Blindness, the largest private organization dedicated to finding cures for retinitis pigmentosa.

What about teaching?

Outside of my immediate lab, I teach clinical and surgical ophthalmology to medical students, residents and fellows. I've also taught classes on retinal development and stem cell biology as part of graduate school courses.

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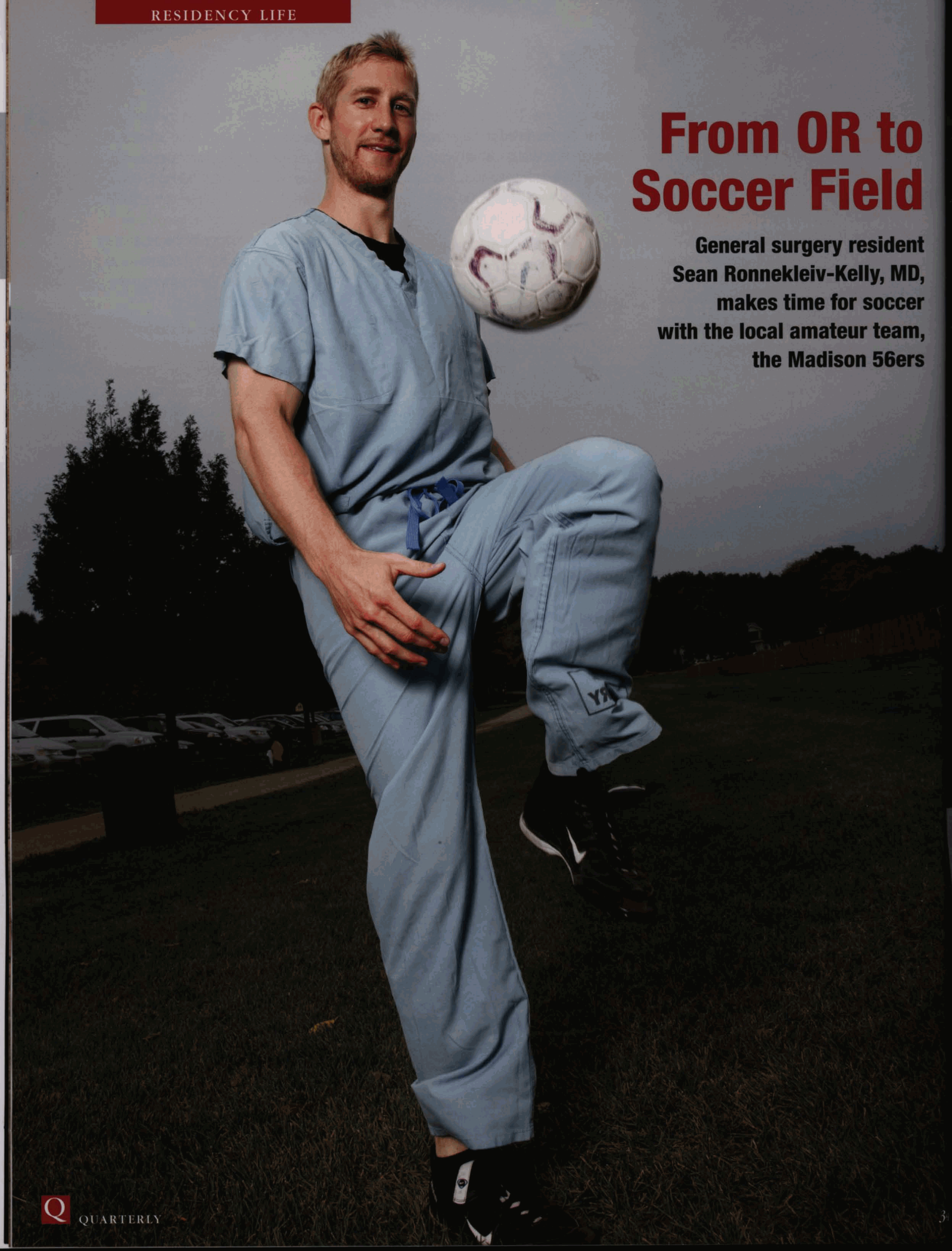


From OR to Soccer Field

General surgery resident Sean Ronnekleiv-Kelly, MD, makes time for soccer with the local amateur team, the Madison 56ers

by Eric Anderson

During the day, Sean Ronnekleiv-Kelly, MD, is a one of the top general surgery residents at UW Hospital and Clinics. In the evenings and during weekends this past summer, the 30-year-old was a starting defender for the Madison 56ers, one of the top men's amateur soccer teams in the country.

"It's excellent," Ronnekleiv-Kelly says of resuming his soccer career, which included playing for the National Collegiate Athletic Association Division II Colorado School of Mines from 1998 to 2001. "I figured any sort of competitive soccer was past its time."

Time was the main reason he wasn't on the field very often during his first two years in the seven-year UW general surgery residency program.

"After about a year, I realized that I missed it too much, so I started trying to play a little bit more," says Ronnekleiv-Kelly, who grew up in Portland, Oregon.

He eventually learned about the 56ers, who compete in the Midwest Region of the National Premier Soccer League (NPSL).

"Originally, I came out just to practice with the team to get back into shape," Ronnekleiv-Kelly says. "I didn't expect to be able to play with them, because everyone is at such a high level."

But he ended up being an integral part of the team, which went 8-2 to win the Midwest Region championship and advanced to the NPSL Final Four tournament July 29-31 in Madison, Alabama. Unfortunately, the 56ers lost both of their matches at the event. But Ronnekleiv-Kelly and his teammates were pleased with their perfomance.

Jim Launder, the 56ers coach, says Ronnekleiv-Kelly is a very good one-on-one defender and also a good leader.

"He's a sound technical player—he doesn't try complicated stuff and he picks the right choices most of the time and he makes it work. You can't go wrong with a guy like that," says Launder, who has an extensive coaching resumé that includes guiding UW-Madison to the 1995 NCAA championship. "Plus, he's just a great human being, a great guy to have around the team. So for me, he fits perfectly with us."

Somehow, Ronnekleiv-Kelly has managed to effectively juggle his time between the demanding residency program and playing competitive soccer.

"He's one of our top residents," says Greg Kennedy, MD, PhD, Ronnekleiv-Kelly's mentor in the program. "It's amazing that he's been able to play competitive soccer at the level he is and still be the top-shelf resident he is."

The UW general surgery residency program offers doctors a varied experience.

Residents begin by performing basic operations such as hernia repair, cyst removal, appendectomies and simple mastectomies. They rotate initially through a variety of surgical specialties, including thoracic, vascular, pediatric and transplant.

The next step emphasizes critical care, with rotations on the burn, cardiothoracic and trauma services as well as in a private hospital general surgery service.

Residents graduate to rotations at UW Hospital and Clinics and the William S. Middleton Memorial Veterans Hospital in Madison. Here they begin serving as first assistant on many major operations and primary surgeon on most operations of moderate difficulty.

Senior residents then return to pediatric surgery and trauma surgery services for in-depth training, with additional time spent on breast surgery, minimally invasive surgery, thoracic and vascular rotations.

Despite working up to 80 hours a week at the hospital during most of the residency, Ronnekleiv-Kelly missed only one game and a handful of the 56ers' twice-weekly evening training sessions.

"Weekends I was on call, it was a home game that I might be able to get to and then the weekends when I was off call were the weekends we were traveling," Ronnekleiv-Kelly says of the 56ers' schedule, which included games in Milwaukee, Eau Claire, Minneapolis and Chicago.

Launder says he's worked with players of all types of backgrounds and professions during his long coaching career, but nothing quite like this.

"Not anyone in that occupation or at that high level," he says.

Ronnekleiv-Kelly earned his undergraduate degree in chemical engineering at Colorado School of Mines before changing directions and attending the University of Colorado School of Medicine in Boulder. UW's surgery residency was his first choice following graduation.

"UW is one of the top surgical residency programs in the country," Ronnekleiv-Kelly says. "I ranked them first in my match and luckily they selected me as well, so it just worked out perfectly."

But Ronnekleiv-Kelly does have a specific interest: surgical oncology. To that end, he recently started a two-year stint during which he'll focus on research in a lab headed by Kennedy, who specializes in colon cancer.

"Sean is truly one of our brightest—he scores well above the 85th, 90th percentile on all of our exams," says Kennedy, assistant professor of surgery at the SMPH. "And you'd never know it; he doesn't brag at all."

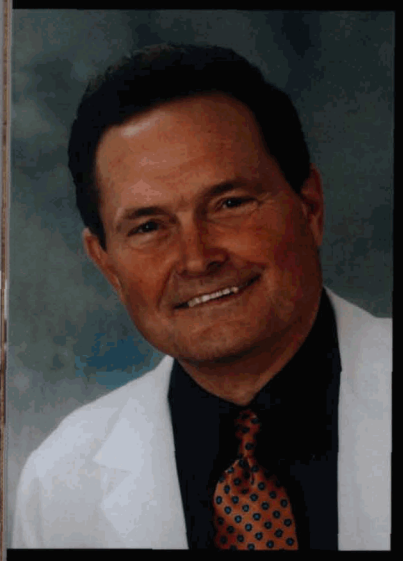
Ronnekleiv-Kelly is much the same on the field—not flashy, just smart and effective. During one late-season match, the 56ers' captain was substituted and tried to put the captain's armband on Ronnekleiv-Kelly. But he declined, allowing a younger teammate to take the honor.

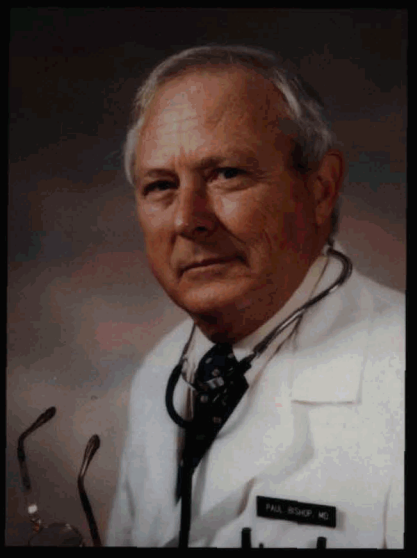
Besides, he hopes he has plenty of games left to play down the road. Now that Ronnekleiv-Kelly again has a competitive soccer career, he's looking to extend it.

"The next two years I'm doing research, so my schedule is a lot less strenuous—it's closer to 50 or 60 hours a week instead of 80," he says. "So hopefully I'll be able to get into better shape, closer to where I was when I was 20 or 21."

That's just about the average age of his 56ers teammates, whose ranks include mostly college players and a few teenagers who recently graduated from high school.

"Some of the younger players sometimes will give me a hard time about being 30," Ronnekleiv-Kelly says. "Luckily, there are a few other people who are older than me."





The Bishop Family

BELIEVES IN FAMILY MEDICINE

by Ann Grauvogl

During the years just after World War II, William Middleton, MD, dean of the UW-Madison medical school, showed a young Paul Bishop, MD '49, what it meant to be a family doctor. Middleton was the quintessential clinician, and he transferred his passion for patient care to thousands of medical students.

Nearly 30 years later, Bishop's son Mark (MD '73) studied at the medical school under Middleton, an experience that fortified much of what he had learned growing up as the son of a dedicated family physician.

"I think I have experienced the best of both worlds as a foundation upon which to build a perspective on medical practice," says Bishop, who practices in Mineral Point, Wisconsin. "I had the exposure to a true master of medicine in Dr. Middleton's mentoring, reinforced and displayed through the life and practice of my dad."

Middleton's influence continues in the gift Bishop and his five brothers—Neil, Edmund, Paul, Alan and William—gave to endow the Dr. Paul R. and Alice P. Bishop Memorial Award at the SMPH.

The award will be presented annually to a third-year medical student enrolled in the Wisconsin Academy for Rural Medicine (WARM). Created to memorialize their parents' dedication to family medicine, the sons asked that preference be given to recipients with a strong work ethic who are compassionate and will go the extra mile for their patients.

"We need more family physicians," Bishop says. "Every single patient needs to have a family doctor, someone who's looking at the entire context of their life."

Paul Bishop was that kind of physician.

After a University of Texas internship with Harvey Slocum, MD, a U.S. Army colonel and former chief of anesthesiology at Walter Reed General Hospital, Bishop moved his young family to Haynesville, Louisiana, planning to stay only a couple years. But his practice boomed, and the family ended up staying for eight years.

Though he was in grade school, the young Bishop recalls it well.

"I remember being assigned the task of writing an essay about the person I most admired," he says. "My classmates wrote about George Washington, Christopher Columbus, Abraham Lincoln, and the like. I wrote about my dad. I saw that he had a significant impact on the lives of others, and I wanted my life to count as much."

The family moved back to Wisconsin in 1959, arriving to a temperature of 20 below zero and six inches of new snow. Paul Bishop joined Gibbs Zauft, MD '50, whom he knew from medical school days, in Sauk City, Wisconsin. The Zauft and Bishop Clinic was the beginning of the Prairie Clinic, which still operates today.

The elder Bishop was well-suited to rural doctoring. He was from the small Wisconsin town of Cassville and seemed to enjoy the personal relationships that developed with his patients who were community people, his sons say.

In Louisiana, Paul Bishop regularly made house calls. Anytime anyone called, the question was not if the doctor would go but how soon.

"I never saw him ever begrudge going to see someone," says oldest brother Neil.

A rural Louisiana daughter called every Sunday, he remembers.

"'Mama's not feeling well,' she'd say," he recounts. "'You'd better come out.'"

Neil would drive his dad to the family home, where he was always treated to

William Middleton, the quintessential clinician, showed countless students what it means to be a familty physician. Both Paul Bishop and his son Mark studied under Middleton.

a heaping plate of food while the doctor visited his patient.

When Neil came home from college to Sauk Prairie, his dad again asked him to accompany him to an older man's house. The man needed to be hospitalized and had no money for an ambulance, so the Bishops drove him there.

After graduating from medical school, Mark Bishop spent the last two years of his family practice residency working with his father.

"Dad was the most ethical, honest and dedicated physician I have ever known or worked with," he says. "The genuineness of dad's character was in his innocence and humility. He did not recognize his own greatness."

The elder Bishop surely would have appreciated Erin Kimball, MD '07, a young physician who exemplifies why the SMPH established the WARM program.

A native of City Point, Wisconsin, population 250, she spent five months at Krohn Clinic in Black River Falls, Wisconsin, during her fourth year of medical school. The longitudinal rural track was a pilot program for WARM, which will graduate 25 rural physicians a year by 2015.

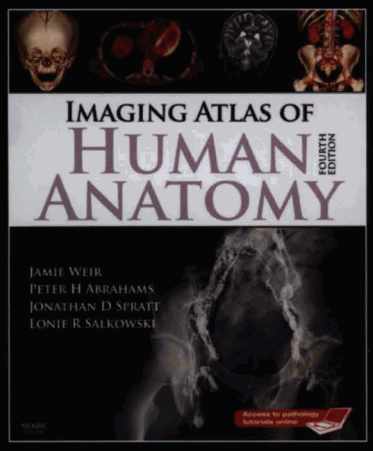
"It was the best choice I made," Kimball says. "Working with the doctors and nurses at the Krohn Clinic and Black River Memorial Hospital, I learned the art of medicine and what it really means to be a physician."

This year, Kimball has fulfilled the promise of her rural training. She recently began practicing in Black Creek, Wisconsin, where she is the only family doctor in a town of 1,200.

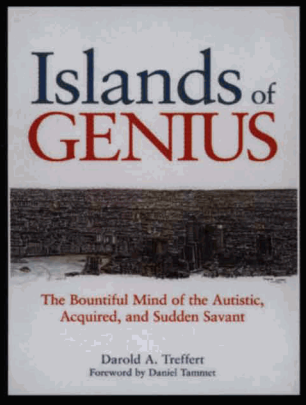
"Whenever I have the chance, I encourage young medical students to spend as much time in smaller hospitals and clinics as they can," she says.

To learn more about WARM or to make a gift online, visit med.wisc.edu/warm.

Imaging Atlas of Human Anatomy, Fourth Edition



This new textbook for medical students and healthcare providers offers a solid foundation for understanding human anatomy. The authors, including Lonie Salkowski, MD, associate professor of radiology at the SMPH, offer a complete three-dimensional view of anatomical structures and their relationships within the body through a variety of imaging modalities. In addition to extensive updated cross-sectional imaging with computed tomography and magnetic resonance imaging, a new section in nuclear medicine imaging has also been incorporated. Revised legends and labels ensure that readers have the most up-to-date visual resource. In addition, the book comes with online access to 10 pathology tutorials (with another 24 available for sale). In print and online, this atlas aims to widen applied and clinical knowledge of human anatomy. Authors include Salkowski's associates in the United Kingdom, Drs. Jamie Weir, Peter Abrahams and Jonathan Spratt.

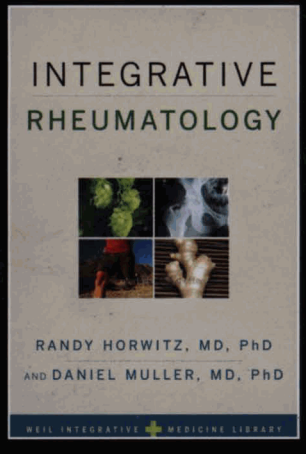


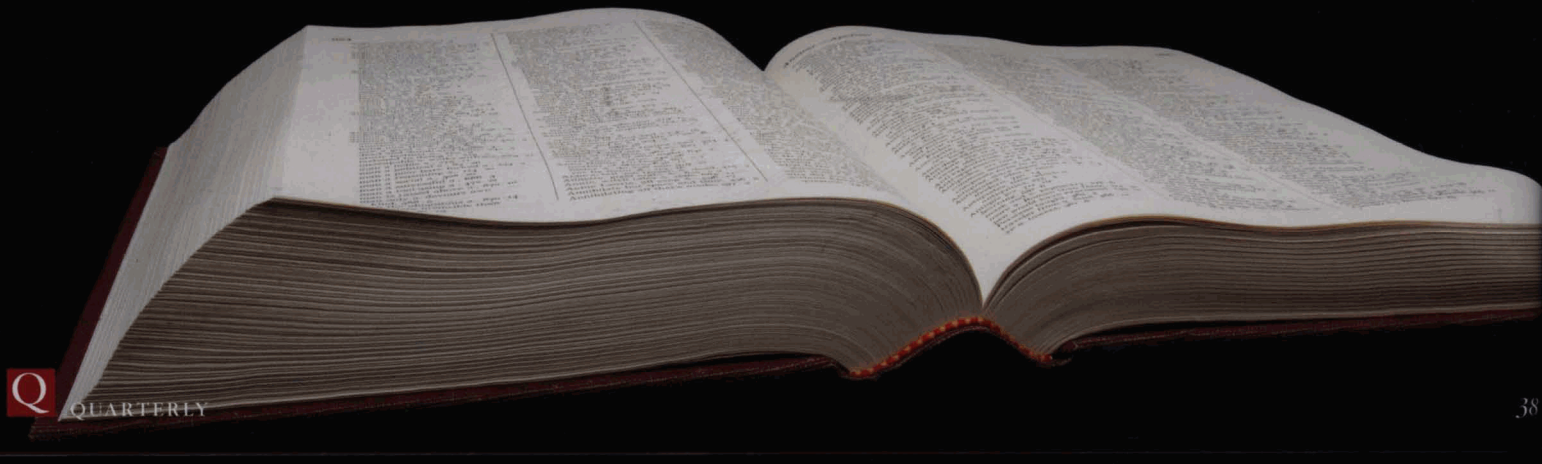
Islands of Genius

For 47 years, Darold Treffert, MD '58, has studied the minds and worlds of savants, people with developmental disorders who possess areas of spectacular ability within their overall limitations. In his second book, Treffert introduces several remarkable individuals with savant syndrome, and looks at the causes and manifestations of the condition. The book explores recently-discovered phenomena, such as "genetic memory," or the capacity of some people to know things that they never learned, and "acquired savantism," in which a "neuro-typical" person unexpectedly develops savant-like abilities following head injury or stroke. Explaining that such cases point toward an untapped ability in us all, the book describes techniques for discovering and accessing this dormant potential. Suggestions for ways parents, teachers and others can nurture savants' talents into more practical purposes are also offered. Above all, Treffert shows that brilliance in everyone should be celebrated.

Integrative Rheumatology

In this book, authors Daniel Muller, MD, PhD, and Randy Horwitz, MD, PhD, offer a new perspective on disease and symptom management, blending conventional medicine with alternative approaches not typically included in a Western medical practice. Muller is associate professor of medicine, section of rheumatology at the SMPH and Horwitz is assistant professor of clinical medicine and medical director of the Arizona Center for Integrative Medicine at the University of Arizona. The authors describe how lifestyle interventions and mind-body approaches, which are generally better tolerated, can be incorporated into conventional medical therapies to improve quality of life and reduce medication dosages. Contributing researchers and clinicians highlight specific gaps in conventional rheumatologic care and examine how alternative approaches may be ideally suited to address these missed opportunities. The authors introduce topics such as acupuncture, meditation, nutritional therapies, exercise, herbal medicine, Ayurveda and energy medicine.





ALUMNI PROFILE *Continued from page 26*

Aimed more at women headache sufferers than practitioners, this book covers topics such as alternative approaches to treating migraines, headaches' relationship to hormonal levels, the role of exercise and how to get more out of doctor visits.

Bain's third book, *Treatment of Headaches in the ER and Urgent Care*, will be released in April 2011. It aims to fill an important gap, alleviating the frustration patients, emergency department personnel and insurance companies often feel around headaches.

"ER physicians generally haven't had extensive training in headache care, and headache patients presenting to the ER often are desperate for help," Bain says. "The book tries to outline a useful strategy that should be welcomed by all involved."

After practicing in Hartland for many years, Bain and his family moved back to Madison in 2006. He and wife Carole Bain, MD '86, MPH, have three children, Ben, a senior at UW-Madison, Eric, a freshman at the University of British Columbia, and Eryn, a student at Madison West High School.

Bain joined the Dean Clinic and currently is the site chief in internal medicine at the East Clinic.

The Bains love taking part in Madison activities such as Concerts on the Square. And Bain likes the fact that he can ride his bicycle all over town, even the 22-mile trip to work and back when weather permits.

During his leisure time, he enjoys reading, especially about human behavior and why people make the choices they do.

Books such as *Nudge, Improving Decisions about Health, Wealth and Happiness* and *Predictably Irrational: The Hidden Forces that Shape our Decisions* are two recent favorites.

"How people decide what to do spills over into medicine, especially involving areas such as medication compliance and shared decision making," he says.

In June, Bain traveled to Honduras with his son to participate in Global Medical Brigades, which provides medical services to people in need. During the week, Eric helped in triage and shepherded waiting patients to see his father and the other doctors. The physicians saw some 300 patients each day for three days.

"Disabling headaches were one of the top 10 reasons patients traveled long distances to the clinic to see a doctor," Bain says. "It was fascinating to see that some of the very same problems faced by patients in Madison were also experienced by people half a world away."

HEALER'S JOURNEY *Continued from page 31*

put aside all the other reasons that pull our decision-making in conflicted directions, and honestly do what is right for that patient. By acting honestly, and from a core of enlightened compassion, we can better stay in touch with the feelings we had when we first began our careers in medicine. No matter where you are in your career, you can start the second half today. You can decide to feel better about the incredible work you do.

Before I finish, I wish to speak about feeling family deeply. We control very little of what happens to us in life. But we can choose how we act, react and learn. I wish to thank Maddie, my youngest, for teaching me how important friends are, especially when you really, really need them. I wish to thank John for showing me how to face incredible tragedy with the strength and resolve to continue to do the right thing. I wish to thank Catherine for her love through these years, and for teaching me to feel intensely and to listen to my heart. And finally, AJ and Julie: Although the holes you have left are huge, I will fill them with the lessons you have taught me—about the simple, slow pleasures of life, about embracing diversity and individuality, about compassion for the less able, and for the understanding that although we are all so fragile, our connections are what give us strength.

FACULTY Q&A *Continued from page 33*

And your clinical activities?

I have a general pediatric ophthalmology practice. I do all types of strabismus surgery (surgery to "straighten" eyes) in both kids and adults, as well as cataract surgery, tearduct procedures and some types of eyelid surgery in children. I also examine preemies and, of course, patients with retinitis pigmentosa. I enjoy having a diverse pediatric eye practice.

That doesn't leave very much time for anything else.

I am blessed with a wonderful, fun family that keeps my priorities in order. My wife, Marilyn, and I have three kids—Emily, 15, Anna, 13, and Joe, who is 10. I'm heading to a soccer game in Waunakee right now—probably more than one.

PHYSICIANS IN POLITICS

Recent articles in the "Alumni Profile" section of the *Quarterly* touched on the subject of the growing number of physicians in politics. This topic appears to have broad appeal. "Dozens of Doctors Seek Seats in Congress" was a headline in *USA Today* last spring.

Though physicians in politics are nothing new, for me it resonated more clearly following our alumni profile on my classmate Ada Fisher, MD '75 (SMPH), MPH '81 (Johns Hopkins), titled, "Is There a Doctor in the House?" (*Quarterly*, Spring 2006)

Dr. Fisher, who is precinct vice chairman and North Carolina Republican National Committeewoman, ran for U.S. Congress in 2006. She ran as a Republican candidate for North Carolina's 12th congressional district. I spoke with Ada by phone recently and discussed with her the trend of more physicians in politics.

According to Dr. Fisher, "Physicians rank very high as far as being trusted, especially in matters of healthcare reform."

She added, "More doctors are finding that serving in Congress is a fulfilling alternative to seeing patients, especially in this changing and sometimes frustrating medical practice environment."

Another doctor-turned-public servant is Congressman Steve Kagen, MD '76, who was featured in the fall 2009 issue of the *Quarterly*. Kagen is now running for a third term after winning a congressional seat in a hard-fought election in 2006. His motives for serving in the U.S. Congress appear to be mainly altruistic.

As was mentioned in the article by *Quarterly* contributing writer Susan Lampert Smith, Kagen's parents had instilled a sense of public service in him and what he saw as a physician made him want to go to Washington to change things. He was distressed that some of his patients with serious asthma and allergies would forgo drugs and treatments they couldn't afford.

Kagen himself added, "Ultimately, it was the fact that government was not helping my patients. I heard the same stories every doctor hears."

The number of physicians seeking congressional seats throughout the nation was tallied last spring at 47. Some of them were seeking second- and third-term re-election. During the present midterm election, the subject of doctors in Congress has received increasing attention, with political pundits weighing in on the trend.

James Thurber, director of the Center for Congressional and Presidential Studies at American University, was quoted recently in the *Green Bay Gazette*.

"I can't authoritatively say it [a high number of physicians running for office] hasn't happened, but I can't remember it and I've been watching since the early 1970s."

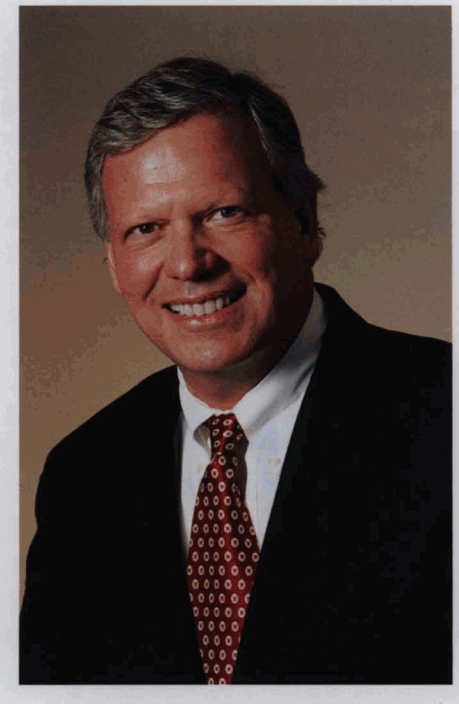
The American Medical Association adds to the subject of doctor-representatives, saying, "If a number of them win, it could alter the debate about how to implement (or even 'repeal and replace') the healthcare reform bill recently signed into law."

Healthcare reform offers clear political reasons for parties to recruit doctors to run. On this key issue in the midterm elections, doctors have the trust of a clear majority of Americans.

As *USA Today* notes, a March Gallup poll found that more than three in four Americans trust doctors to "do the right thing" on health policy, far more than trust President Obama or Republican leaders on this issue.

Physicians are trained to listen, then problem-solve, said Thurber.

"It's not surprising more physicians would be seeking seats in Congress, given the focus on health-care reform in recent years. It's a direct reflection of the fact we've had a major debate about health-care reform and there have been doctors attending these town hall meetings. Obviously, this issue has stimulated more doctors to consider public service," he said.



It remains to be seen what impact this trend of physicians in public service will have on government, but in the short term, the public will surely turn to their doctor-Congressmen for guidance on the thorny issue of healthcare reform.

Christopher Larson, MD '75
Quarterly Editorial Board Chair

Inbox

SUBJECT: CHOOSING A FAMILY MEDICINE RESIDENCY

An iPhone application developed by Kathy Oriel, MD, helps fourth-year medical students identify the family medicine training program that may be the best fit. To download the app and see a video, go to med.wisc.edu/28514.

SUBJECT: RESEARCHERS RIDE FOR ALZHEIMER'S

Barbara Bendlin, PhD, and Michele Ries, PhD, of the Alzheimer's Disease Research Center, participated in the regional leg of a cross-country bike ride to promote awareness of Alzheimer's disease. For videos and more, go to med.wisc.edu/28747.

SUBJECT: DEPARTMENT OF FAMILY MEDICINE CELEBRATES 40TH

The department officially celebrated its 40th anniversary in July 2010. To see pictures of the festivities, historic shots of faculty members and the clinics where they worked, go to med.wisc.edu/28322.

SUBJECT: EXPERIMENTAL SURGERY HELPS CHILD WITH TOURETTE'S

Using a procedure called deep brain stimulation, SMPH neurosurgeons Leland Albright, MD, and Karl Sillay, MD, saw remarkable results for a Wisconsin boy with Tourette's syndrome. To see a video that aired nationally, go to uwhealth.org/28894

SUBJECT: NEW WEB SITE FOR CANCER RESEARCHERS

The UW Carbone Cancer Center Web site for researchers has a new look. Check it out at cancer.wisc.edu. The new design complements the cancer information for patients on uwhealth.org, and more effectively represents how discoveries made in the laboratory translate to comprehensive patient care.

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:
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Madison, WI 53705

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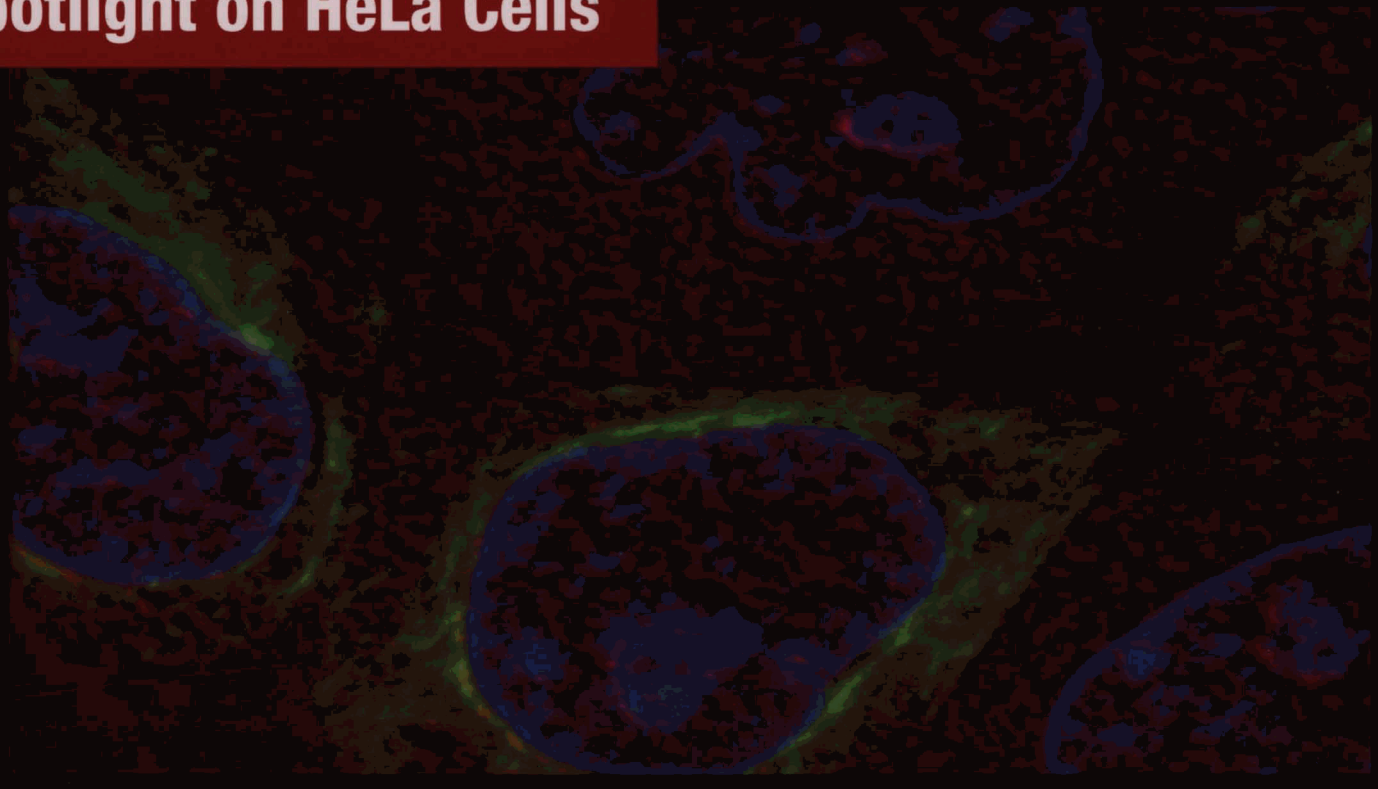
Spotlight on HeLa Cells



HeLa cells play a leading role in *The Immortal Life of Henrietta Lacks* by Rebecca Skloot. Hundreds of students, faculty and staff are reading the book as part of the campus-wide "Go Big Read" this year.

The SMPH has organized many related activities, including an exhibit titled "Informing Consent: Unwitting Subjects in Medicine's Pursuit of Beneficial Knowledge," on display in the Ebling Library Historical Reading Room through March 31, 2011. A Web site of health sciences Go Big Read resources, partners and discussions can be found at http://projects.hsl.wisc.edu/gbr/keck.html. Images of HeLa cells used by UW-Madison researchers, such as the ones shown here, are also included courtesy of the medical school's W.M. Keck Laboratory for Biological Imaging.

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