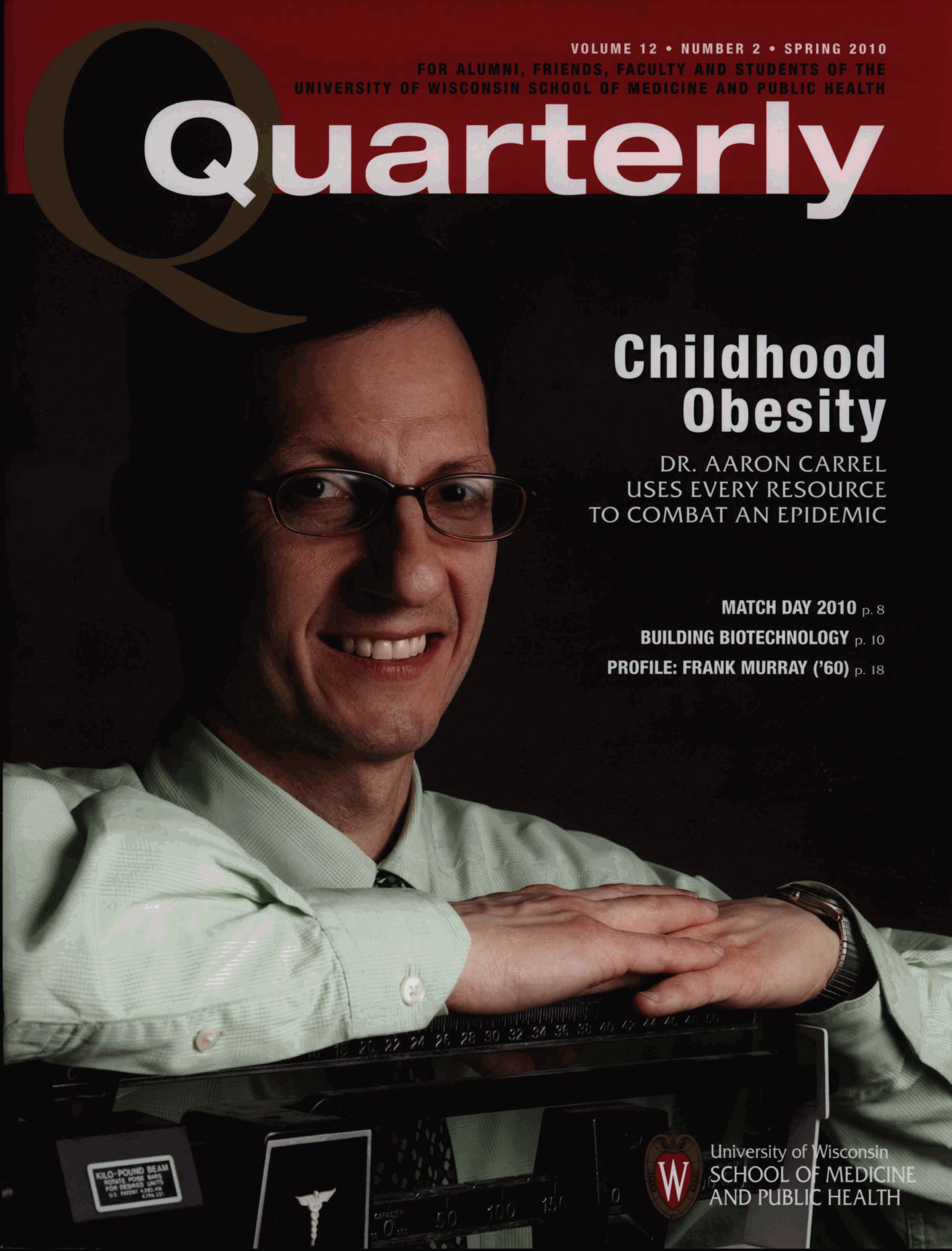
VOLUME 12 • NUMBER 2 • SPRING 2010
FOR ALUMNI, FRIENDS, FACULTY AND STUDENTS OF THE
UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

Quarterly



Childhood Obesity

DR. AARON CARREL USES EVERY RESOURCE TO COMBAT AN EPIDEMIC

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

EDITOR
Dian Land

ART DIRECTOR
Christine Klann

PHOTOGRAPHY
Mac Bailey
Todd Brown
Chris Frazee
John Maniaci
Paul Myers

PRODUCTION
Michael Lemberger

WISCONSIN MEDICAL ALUMNI ASSOCIATION:

EXECUTIVE DIRECTOR
Karen Peterson

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

For editorial information, call (608) 261-1034.

For address corrections and to reach the WMAA, call (608) 263-4915.
E-mail us at quarterly@med.wisc.edu

CALENDAR

MAY 2010

THURSDAY, MAY 13 • STUDENT HONORS AND AWARDS BANQUET

2 p.m. Health Sciences Learning Center

FRIDAY, MAY 14 • GRADUATION DAY

10 a.m. Recognition Ceremony, Union Theater
7:30 p.m. Graduation Party, Monona Terrace

AUGUST 2010

THURSDAY, AUGUST 5 • MAX FOX EVENT

Honoring William Nietert, MD '78
Wausau, Wisconsin

SEPTEMBER 2010

SUNDAY, SEPTEMBER 26 • WHITE COAT CEREMONY

1 p.m. Memorial Union Theater

OCTOBER 2010

OCTOBER 8 – 9 • HOMECOMING WEEKEND

Reunions for Classes of 1965, 1970, 1975, 1980, 1985, 1990, 1995, 2000 and 2005

FRIDAY, OCTOBER 8

10 a.m. *Quarterly* Editorial Board Meeting
1:30 p.m. Fall WMAA Board of Directors Meeting
4 p.m. Tours of the Health Sciences Learning Center
6 p.m. Homecoming Dinner at the Memorial Union

SATURDAY, OCTOBER 9

Time TBD Tailgate Party at the HSLC
Time TBD Wisconsin vs. Minnesota Football Game

NOVEMBER 2010

SATURDAY, NOVEMBER 13 • UWHC RESIDENT TAILGATE PARTY

Health Sciences Learning Center
Wisconsin vs. Indiana Football Game

University of Wisconsin
SCHOOL OF MEDICINE AND PUBLIC HEALTH

CONTENTS

QUARTERLY • WINTER 2010 • VOLUME 12• NUMBER 2

Spring Fun on Campus

With the first hints of spring arriving after a winter that hit early and hard, runners eagerly take to the Temin Lakeshore Path and other trails on campus.

ROBERT N. GOLDEN, MD

Following a prolonged and difficult process, the U.S. Congress passed an historic healthcare reform law. The final product can be viewed like the proverbial cup as being either partially filled or partially empty. Of course, it is both.

While we applaud the momentous occasion of extending healthcare coverage over time to millions of currently disenfranchised Americans, we also recognize that there are several serious issues still confronting us regarding the fundamental structure of healthcare in this country. In this issue of the *Quarterly,* you will read about several innovative and inspirational programs that seek to address several key challenges.

It is clear that as a nation we are in the midst of a growing epidemic of obesity. This is especially problematic for our children. Pediatric obesity is a classic example of a complex, multifactorial problem that includes not only medical but economic, social and other societal factors. If our children do not have universal access to good nutrition, physical education and activity programs at school, the most well intentioned pediatricians will face serious challenges in trying to provide the optimal environment for preventing or at least addressing obesity in their patients.

The innovative and pioneering Dr. Aaron Carrel of our pediatrics department tackles this issue head-on. We are pleased and proud that several of his initiatives received their initial support from the Wisconsin Partnership Program (WPP), the endowment created by the Blue Cross/Blue Shield conversion that aims to improve the health of the people of Wisconsin. Aaron's work is a wonderful example of how the WPP, the School of Medicine and Public Health and the state are partnering to address a major public health and medical issue.

Regardless of how effective the current new federal legislation may prove to be, we will always face the sobering reality that there are never enough resources to treat every condition in every patient in the country. So it was extremely timely and inspiring (as well as provocative) to participate in the school's second annual bioethics symposium, which had as its theme "Reforming Health Care Ethically: Waste, Tradeoffs and Rationing."

This wonderful event brought together thought leaders from near and far, including Dan Wickler from Harvard (a former SMPH faculty member); Julian LeGrand, who served as health advisor to former British Prime Minister Tony Blair; and UW-Madison faculty. The symposium captured the full attention and active participation of 350 people from across campus. We thank the Department of Medical History and Bioethics, chaired by Susan Lederer, and symposium organizers Drs. Norman Fost and Gretchen Schwarze for organizing the event.

Another important approach for ensuring the health and well-being of the public is embodied in the strong public policy advocacy of Physicians for Social Responsibility (PSR). We are so proud that professor emeritus Dr. Jeffrey Patterson is leading this influential group. In addition to tackling nuclear proliferation, PSR advocates for safe energy and a healthier environment.

As the flowers begin to bloom in Madison, we see other telling signs of spring. These include the annual festivities associated with Match Day, our excitement as we anticipate graduation and recognition ceremonies for our medical and other students, and yet another opportunity for "hope to triumph over experience" as we welcome a new season for the Milwaukee Brewers.

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

JOHN KRYGER, MD '92

As I write my last "Message" as president of the Wisconsin Medical Alumni Association (WMAA), I have a moment to look back on past years and forward to many more.

It has been a great honor to serve as WMAA president during the past two years. The experience exceeded my expectations in many ways. I have met many great alumni from around the state who have been long-standing supporters of our medical school. I appreciate everyone's willingness to step up and participate! I have also had the pleasure of working with great students, faculty and support staff of the school. Their dedication to excellence motivates me to become better.

It has been a goal to see the WMAA become a bigger supporter of student scholarships. I feel more strongly than ever that this must continue to be a primary mission and responsibility of SMPH graduates. Our students are most vulnerable in these difficult economic times. As alumni, we have the ability to support them with gifts that strengthen the SMPH and the medical community as a whole. With strong scholarship support we can continue to help and encourage students to pursue medical careers in communities that need physicians the most.

It is especially urgent that we dig deeper to give to our students NOW. The Great People Scholarship Program will continue to match your donations for only a limited remaining time. What an amazing opportunity this is for us! Watch for another request in the mail very soon.

The WMAA helps students in many other ways with several activities throughout the year. In fact, the WMAA is one of the most recognized student supporters. Alumni throughout the state have volunteered to host students as part of the new Alumni Shadow Program, which you will be reading more about in the future, and the Wisconsin Host Program across the country.

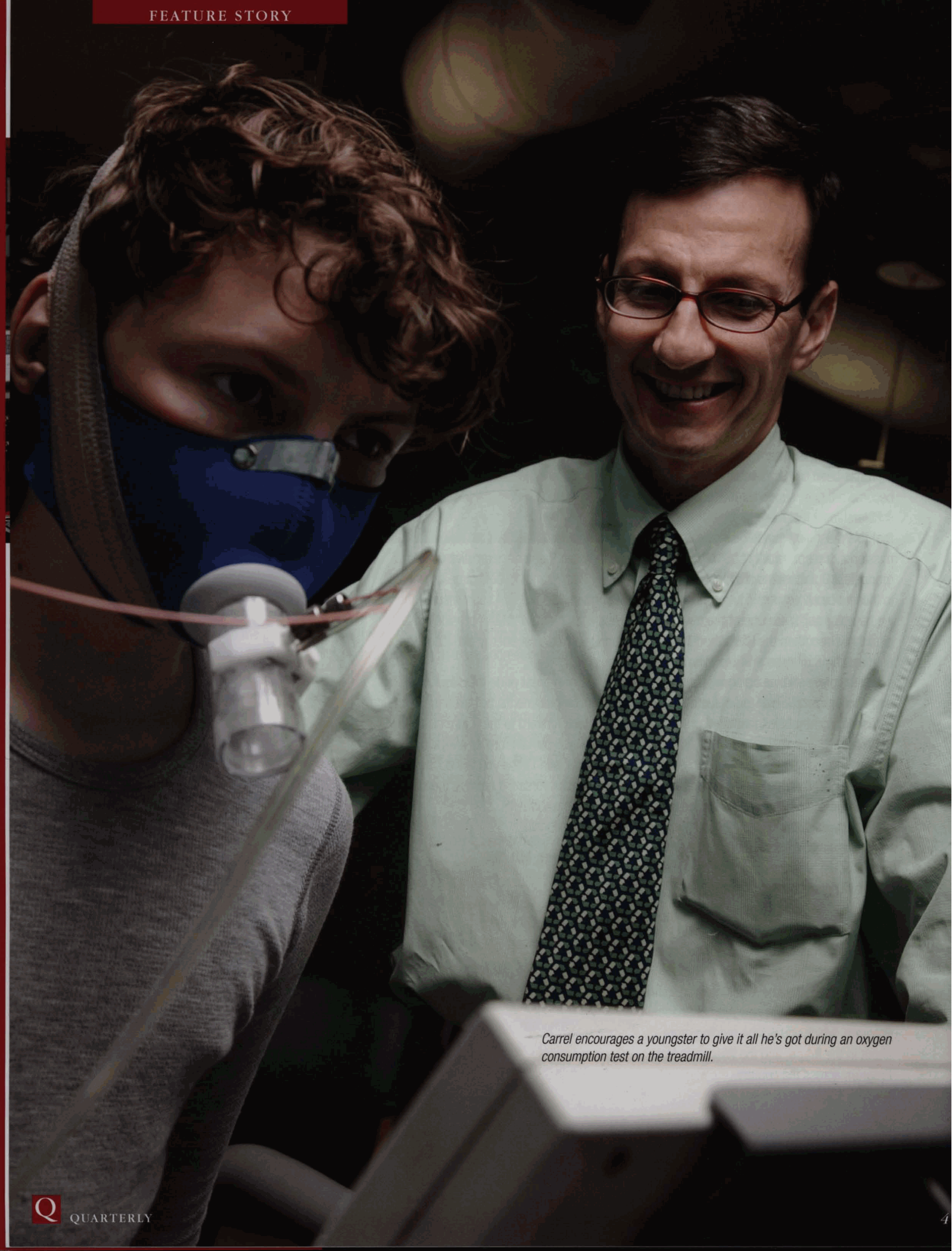
The WMAA also offers many more benefits to its members than in the past. We continue to produce the finest alumni magazine in the country, the ***Quarterly***. Editors Chris Larson, MD, and Dian Land do an outstanding job. We have nine classes celebrating their class reunion this fall during Homecoming Weekend. We have spearheaded an effort to communicate better on Facebook, and the most recent graduates have taken great advantage of this technology. Our Web site continues to evolve and be a resource to our alums. I hope you continue to explore these opportunities to stay engaged.

I am excited for the future of the WMAA. I wish to thank Dean Robert Golden and all of the associate deans for their outstanding support of the WMAA. We continue to have the finest staff to continue our efforts with Karen Peterson, executive director, Mary Redlin, and Joyce Jeardeau. Donald Fuhrman, MD '76, will soon assume the reigns as the next WMAA president. He brings a wealth of energy and ideas to the post.

It is with great pride that I look back on our accomplishments, but even greater pride that I look forward to the future of the WMAA. I know I will remain forever a loyal and active supporter, and I hope you will do the same. Please ask yourself: If not me, then who? If not now, then when?

On Wisconsin!

John Kryger, MD '92
WMAA President
Middleton Society Fellow



Carrel encourages a youngster to give it all he's got during an oxygen consumption test on the treadmill.

BY AARON R. CONKLIN

Childhood Obesity

PEDIATRIC ENDOCRINOLOGIST AARON CARREL HAMMERS AT THE PROBLEM—FROM THE EXERCISE PHYSIOLOGY LABORATORY TO THE SCHOOLYARD

Aaron Carrel, MD, was one of the people who saw it coming, a good 10 years before the rest of America did.

The pediatric endocrinologist started noticing it in his clinic at University of Wisconsin Hospital and Clinics, where the size of his young patients began to increase at an alarming and impossible-to-ignore rate.

"We were treating grade-schoolers who weighed more than 200 pounds," recalls Carrel, associate professor of pediatrics at the University of Wisconsin School of Medicine and Public Health (SMPH). "As I was finishing my UW pediatric endocrinology fellowship, we had already begun to see a marked increase. And we really had no services we could offer these patients."

Fortunately, that's no longer the case. Today, at a point where one in every six children is battling obesity and the U.S. Centers for Disease Control and Prevention puts the price tag of contending with obesity upward of $147 billion a year, Carrel and his colleagues are on the vanguard of an issue that First Lady Michelle Obama has made her signature public-policy campaign.

Doctors like Carrel definitely appreciate the Obama love, and the resultant publicity and public-policy dollars that have accompanied it. But in the reality of day-to-day care, different issues take precedence.

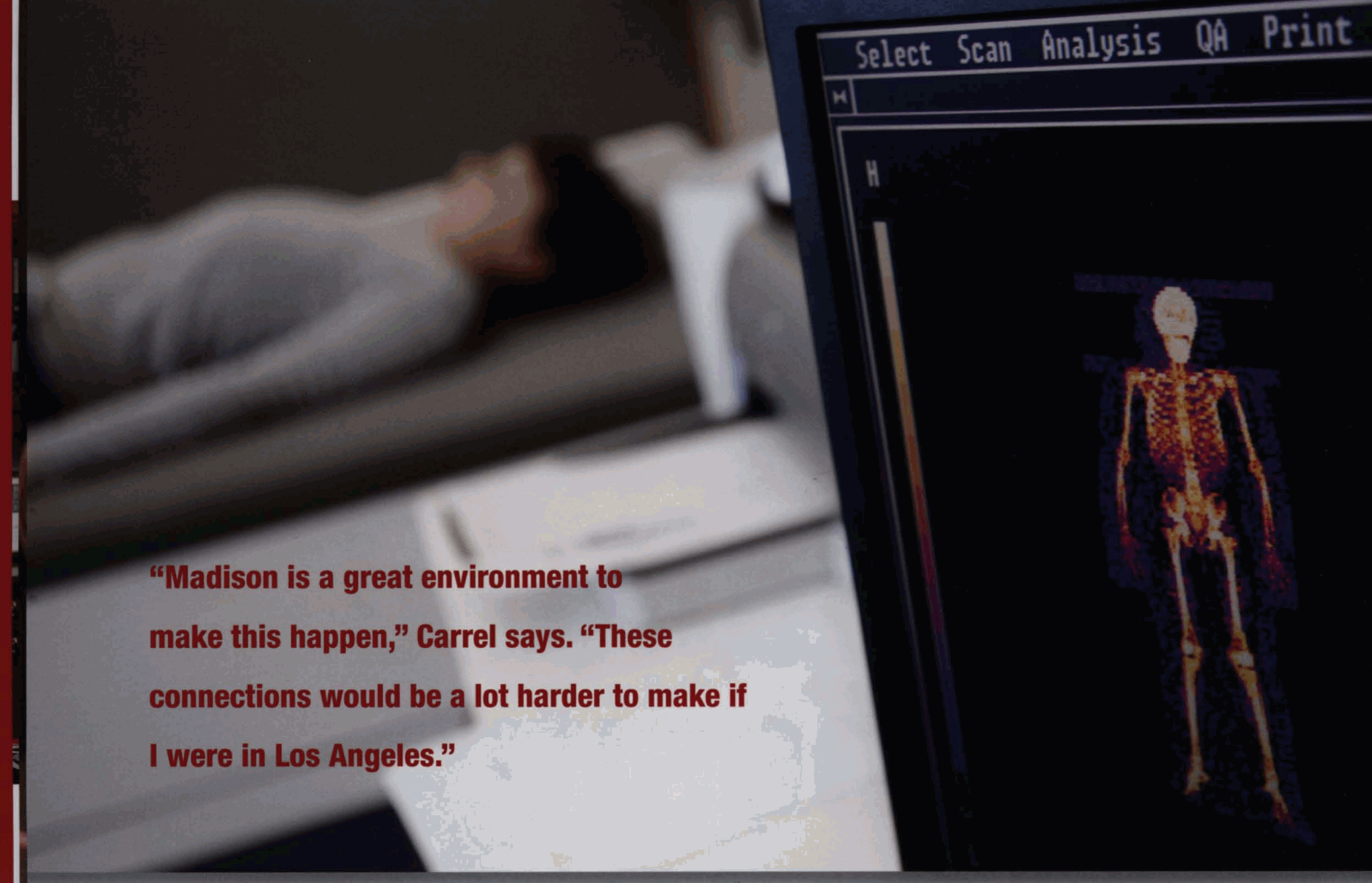
"As we think about obesity, we don't even really have a measuring stick to talk about it," says Carrel, sitting in his office in UW Hospital and Clinics. "The truth is that body mass index (BMI) doesn't accurately predict health outcomes for children, and without a universal measuring stick, we can't actually compare to see which children are fit and which are not."

In the pediatric fitness clinic at UW Health's Sports Medicine Center, Carrel and his staff use a different array of tools to measure the fitness of the kids they counsel and treat each week. They begin with something called a DXA scan, a visual tool that provides an accurate breakdown of body composition—the actual weight of muscle, bone and fat, and where exactly it's located.

Research and experience have shown that it's both easier and more realistic to motivate children by focusing on something positive, like the amount of muscle they have versus body fat. Changes in their lifestyle are reflected in their bodies, and the kids love being able to see a scan that shows them just how much progress they're making.

Ask Randy Clark, MS, the exercise physiologist who's worked with Carrel in the peds fitness clinic for much of the last decade, and he'll tell you that watching the fitness light go on in kids is the big payoff.

–Continued on next page



"Madison is a great environment to make this happen," Carrel says. "These connections would be a lot harder to make if I were in Los Angeles."

"I tell people that it's great working with UW athletes and helping them try to win championships," he says. "But with these kids, you're changing lives."

Clark pauses a moment.

"But you can't do what we're doing without a physician champion."

At first glance, Carrel, 43, seems an unlikely candidate for the role. The man Clark describes as "very unassuming" is soft-spoken and humble, deftly dodging the spotlight as he carries on with his work.

Carrel earned his medical degree in 1992 at the State University of New York at Buffalo, the same place he met his wife of 20 years, psychiatrist Lisa Hunter, MD. The two fell in love as first-year medical students; within three weeks of the start of year two, they had decided to get married.

Job offers led them to Madison, where Carrel would meet his mentor in pediatric endocrinology, David Allen, MD, SMPH professor of pediatrics. Allen, along with Alexandra Adams, MD, associate professor of family medicine, are now his closest physician colleagues in the battle against pediatric obesity.

The bulk of Carrel's medical research has focused on Prader-Willi syndrome, a rare genetic disorder whose symptoms often include obesity. Even here, he's found ways to view the larger picture.

In a very real sense, Carrel's entire career has been about forming dynamic connections.

"Change grows from a few leaders," he says. "I see a value in relationships, bringing people together to work on big issues like pediatric obesity."

Besides, he jokes, a smile briefly lighting up his face, "I think if I sat in my office all day and wrote grants, I'd go crazy."

He's also not unaware that his Midwestern location helps to grease the skids.

"Madison is a great environment to make this happen," Carrel says. "These connections would be a lot harder to make if I were in Los Angeles."

He even recruits his own family members. The Carrels' two sons, Elijah, 13, and Jacob, 16, helped their dad make new healthy food guideline recommendations for the Madison Metropolitan School District.

"At first, they were concerned," says Carrel. "They thought I was going to say, 'no cupcakes.'"

No way, says Hunter, who's actually the one who bakes the cupcakes in their home.

"The kind of work Aaron does might invite a dad to be rigid about these things," she says. "But there's nothing restrictive about him. Although I have to mention that he's not a fan of sugary sodas."

Carrel's colleagues marvel at the interactions, too.

"One of the things that amazes me about Aaron is his ability to connect with the kids," says Clark. "He has a knack for establishing a rapport and making them comfortable. And his energy level? It's unstoppable."

No argument here. A look at some of the obesity-related projects with which

Carrel is involved reveals that, throughout Wisconsin, he is hammering away at the problem from a variety of angles:

- In the Milwaukee area, Carrel is concentrating on Latino students at the Bruce Guadalupe School to evaluate the role of the environment in their health and fitness. Supported by a grant from the Wisconsin Partnership Program (WPP), the project has Carrel working with urban planners, architects and transportation experts to try to learn if there are ways to manipulate and improve an urban environment that doesn't naturally promote fitness.
- Using money from the Wisconsin Department of Health Services and the WPP, Carrel is working with public health nutritionists and master gardeners at UW-Green Bay to set up the Got Dirt? Garden Initiative in Brown County, Wisconsin. It's a school and community intervention that encourages kids to create and tend community gardens.
- Carrel was instrumental in forming Wisconsin Prevention of Obesity and Diabetes (WiPOD), an educational consortium that includes clinicians and researchers from the SMPH and collaborators in the UW-Madison College of Agricultural and Life Sciences and the UW School of Nursing. "The idea was, how can the university have a strong voice in preventing childhood obesity," explains Carrel. "Because it's become pretty clear we won't be able to prevent it from the doctor's office."
- On the political front, Carrel serves on Wisconsin Governor Jim Doyle's Council on Health and Fitness, providing key information and advice to the state's top politician. Carrel has also been a strong advocate of legislation proposed last month by Wisconsin Representative Ron Kind, which would unite the grocery industry, state healthcare systems and government in searching for solutions to the crisis. He's also been supportive of proposed legislation that would mandate fitness testing in Wisconsin public schools beginning in the third grade.

And, not least, Carrel is responsible for creating the UW Pediatric Fitness Clinic. In 2001, along with exercise physiologist Clark, nutritionist Marcy Braun, RD, and pediatric nurse Susan Gold, RN, he turned an interesting idea that was occurring to the group into a reality.

While the clinic's primary purpose was to serve as a resource for young patients struggling with obesity, it wasn't long before the staff began partnering with counselors and educators to develop school-based fitness interventions.

In 2003, a yearlong project with River Bluff Middle School in Stoughton, Wisconsin, showed that altering the traditional physical education curriculum to include activities children with weight issues could more easily incorporate into their daily lives—riding bicycles at home instead of playing dodgeball in the gym—made a measurable fitness difference. A few years later, Carrel's research would also prove that in the absence of school-based fitness interventions—specifically, during the three months of summer break—fitness gains essentially evaporated.

The findings were the strongest argument yet for the importance of school-based interventions in solving the pediatric obesity crisis, and they haven't been lost on Carrel. Currently, he and the staff at the pediatric fitness clinic are working on a year-long fitness intervention with a racially diverse group of students at Cherokee and Sherman middle schools in Madison.

The racial diversity angle is critical, stresses Carrel.

"It's our minority children who are more at risk for obesity and the poor impact of obesity," he says. "We've gone into the schools and done testing among these kids, built on earlier studies we've done in the lab. Our focus has been to translate what we've done in the exercise physiology laboratory to the schoolyard."

Carrel is as aware as anyone that the answers to the pediatric obesity epidemic won't come quickly or easily, that change will come in small steps. He looks at the many ways in which public policy, research and education have successfully encouraged millions of people to stop smoking over the years, and he talks about what he calls "the momentum to change."

When he does, Carrel's eyes take on a hopeful shine.

"People are looking to us for leadership on this issue," he says. "I think every day about how critical pediatric obesity is. And I think about how we can change it."

PHOTOS BY TODD BROWN

Match Day

An overflow crowd of anxious, animated people squeezed into Alumni Hall in the Health Sciences Learning Center on Thursday, March 18, 2010. They were there for Match Day, the day when the 140 or so soon-to-graduate School of Medicine and Public Health (SMPH) students would learn where they will be heading for the next phase of their medical training.

On the previous Monday, the students found out whether they had matched with a residency program but had no idea where they would spend the next three to seven years of their training as physicians. So there was plenty of drama as they opened envelopes to learn where they'd be going for their residencies. The school tradition is to have each student announce the location and specialty in front of their classmates, family members and other people in attendance.

About 36 percent of SMPH students matched to primary care residencies, which includes pediatrics, internal medicine and family medicine, says Dean of Students Patrick McBride, MD '80, MPH.

"There are still a substantial number of students choosing primary care specialties," he says. Fifteen percent of students matched to internal medicine, which was up four percent from last year.

General surgery matches also went up—from eight percent in 2009 to 10 percent this year.

"This will be very helpful due to a significant shortage of general surgeons in the state and country," says McBride.

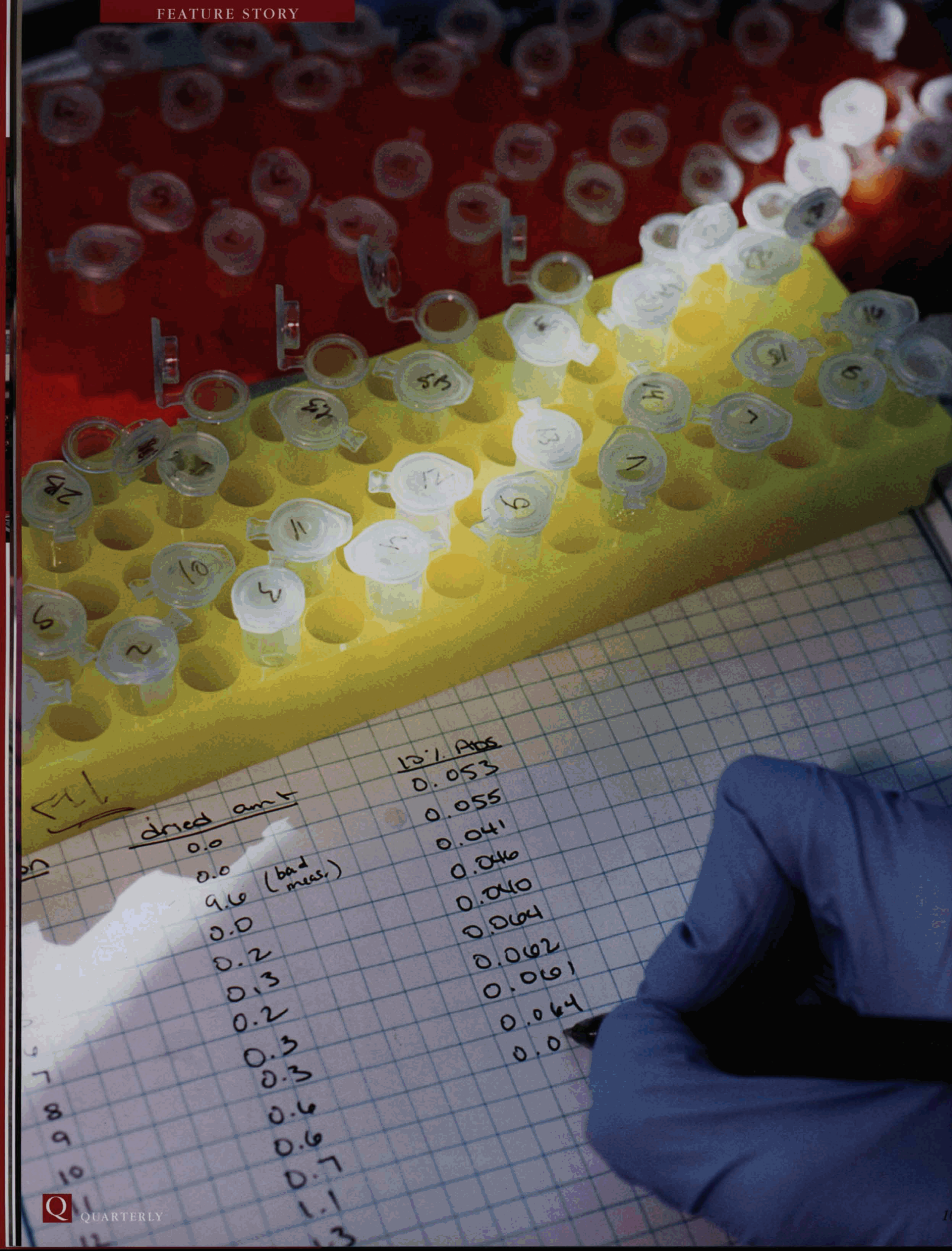
Approximately 10 percent of the class also matched to either anesthesiology or emergency medicine.

SMPH departments promote their specialties through student interest groups, says Chris Stillwell, SMPH director of academic and career development. And students receive career advising based on their interests, values and aptitudes for specialties.

Of the 32 students entering a residency program in Wisconsin, 24 will participate in UW-affiliated programs.

Visit med.wisc.edu/26795 to see more Match Day stories, photos.

Olamide Zaka, opposite, pushes a pin into Nashville, marking where she will do an internal medicine residency at Vanderbilt. From left, Kevin Thao shows his son that he will be working on an MPH and a research fellowship next year, Bryan Webster is proud to have landed a family medicine residency at UW and Sara Schullo, with significant other on hand for support, is thrilled to be heading to Hennepin County Medical Center in Minneapolis for her general surgery residency.


dried amt
0.0
0.0
9.6 (bad meas.)
0.0
0.2
0.3
0.2
0.3
0.3
0.6
0.6
0.7
1.1
1.3
13. Abs
0.053
0.055
0.041
0.046
0.040
0.064
0.062
0.061
0.064
0.0

BY KURT ZIMMERMAN

Building Biotechnology

THE SCHOOL'S COMMITMENT INCLUDES AN EDUCATIONAL PROGRAM AND A NEW TOWER

Five years ago, Jennifer Bufford, who has a bachelor of science degree in medical microbiology and immunology, was looking for a springboard to the next step in her career. She wanted to advance from being a departmental leader at the University of Wisconsin Hospital and Clinics into an institutional management role. And she wanted an opportunity to apply the science she knew so well.

Those goals led Bufford to enroll in 2006 in the Master of Science (MS) in Biotechnology Program at the University of Wisconsin School of Medicine and Public Health (SMPH). Created in 2002, it is the only program of its kind in the United States, with graduates now working across the globe.

"The mixture of science, business, ethics and law was intriguing," remembers Bufford, "and I really sensed the program would challenge me."

While most of her classmates came from biotech start-ups or global pharmaceutical companies, Bufford felt they all shared a common vision.

"At orientation, a panel of alumni shared their experiences with us. One panelist used the figure of speech 'Jack of All Trades,'" she says. "In a way, it summed up what I wanted out of the program—to integrate knowledge and use what I learned to help people bring their disciplines and areas of interest together. I wanted to be a leader."

In a field as relatively young as biotechnology, opportunities for entrepreneurship are not limited to risky start-up companies. New partnerships, alliances and collaborations are the cornerstone of healthcare provider groups and research organizations, and well-developed facilitation skills are required to manage these relationships.

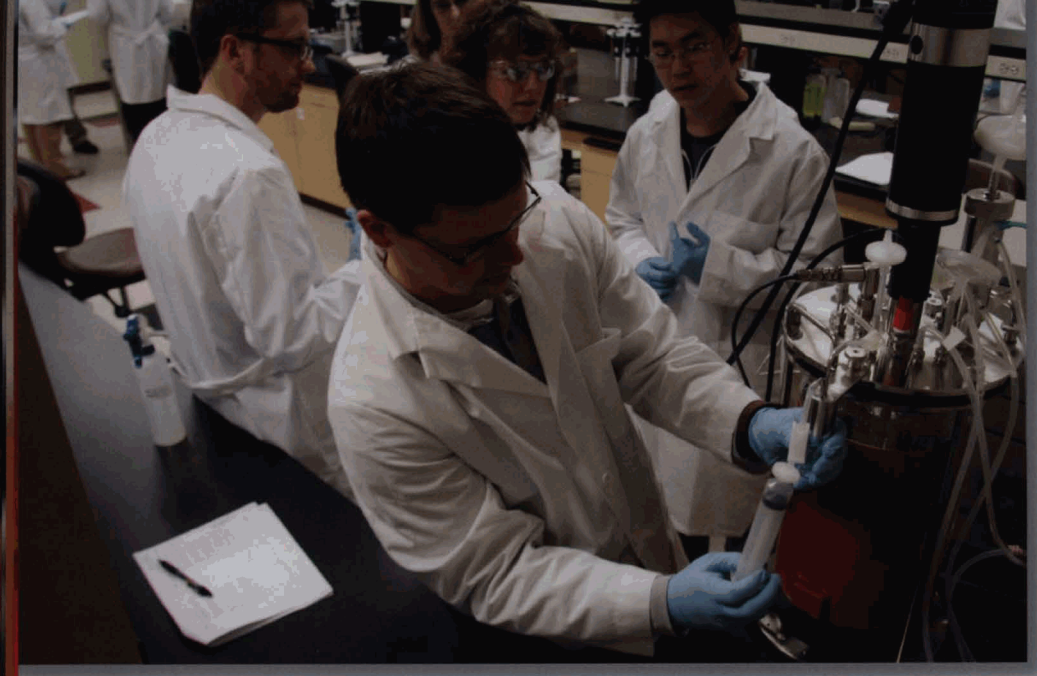
Bufford today works as the program coordinator for the UW-Madison Institute for Clinical and Translational Research and the Wisconsin Genomics Initiative, both of which involve the SMPH and the Marshfield Clinic Research Foundation. The Medical College of Wisconsin and UW-Milwaukee are also key players. Her job largely involves managing

Bufford and Humberto Vidaillet, director of the Marshfield Clinic Research Foundation, discuss details of the Wisconsin Genomics Initiative.

an intricate array of interactions between the collaborating organizations.

The educational program that helped Bufford achieve her goals is a prime example of the SMPH's commitment to expanding biotechnology in the state. Construction of the third tower of the Wisconsin Institutes for

PHOTO: UW-MADISON UNIVERSITY COMMUNICATIONS



Seth Taapken (center) plans to apply the new broad perspective and hands-on experience he's gotten from the program to his work as a stem cell scientist at the WiCell Research Institute.

Medical Research will be the next very visible example in the coming years.

A UNIQUE PROGRAM

The MS in biotechnology program launched under the leadership of Richard L. Moss, PhD, senior associate dean for basic research, biotechnology and graduate studies at the SMPH.

"The program was founded on the idea that we would train students beyond traditional specialties and prepare them to navigate scientific, legal, regulatory and business issues," says Moss, executive director of the MS program.

An interdisciplinary team of faculty from both the UW and the surrounding biotechnology community fused their expertise in fields including molecular science, business, law, policy, regulation and bioethics. The resulting curriculum provides the training students need to fully assess, apply and commercialize new technologies.

As of 2010, the program has produced almost 200 graduates. Student cohorts composed of 25 to 30 working professionals advance through the two-year program by attending evening and weekend courses. The students' diverse backgrounds range from bench scientists to product managers to policy makers.

Ahmed M. Osman, an executive pharmacist with Target Corporation who commutes to classes from Minneapolis, is interested in biotechnology drugs, which are manufactured in a process called recombinant DNA technology.

"The scope of the courses appealed to me because it helped me understand how these many factors influence the development of new products," says Osman, who will graduate in 2010.

"The potential economic advantages that stem from biotechnololgy and the resulting translational research, in which scientific discoveries are quickly applied to real life, are not minimal," notes Moss. "These advantages can play a real role in the future of Wisconsin."

Recent years have also seen increased representation from students with hands-on patient healthcare experience. These students recognize that the future will require them to manage—or forge—links between biotechnological innovations and the actual delivery of healthcare.

Says Ryan Turner, a cardiovascular technologist at St. Mary's Hospital in Madison, "My goal was to learn about drug and medical-device development, and the steps between discovery and regulatory approval."

RESEARCH TO INDUSTRY

The program's broad nature has been key to driving forward important new technologies. One field in particular—stem cell research—has required participants to navigate a pipeline rife with legal, political, social, scientific and business challenges.

"The science of stem cells is really still in its infancy," remarks Seth Taapken (Class of '09) of his work at the WiCell Research Institute in Madison.

But the broad perspective he has developed through the program has helped him move past potential obstacles in his work environment.

"The classes came together to show all aspects of the development of biotechnology products. At the end I could really see the overall product development process, from scientific discovery, to intellectual property

protection, to manufacturing, clinical trials and finally business strategies," he says. "This is extremely helpful to me in my work—to be able to forecast or understand challenges that may not come to light until much later in the development process."

Jared Finger (Class of '10) is a laboratory manager and scientist at Cell Line Genetics, which provides services that allow stem cells to be safely administered in a clinical setting. Such services will be critical in preventing potentially devastating setbacks in early clinical trials.

"As stem cells move toward clinical applications, quality assurance and control will become a required component to all stem cells," he says. "The path to full application is filled with so many twists and turns—a company must forecast and prepare. The courses provided a solid understanding of the issues my company faces as we attempt to develop new product lines."

BUILDING ON SUCCESS

For SMPH, the success of the MS in Biotechnology Program and its reach to specialized audiences highlights an emerging and extremely important area of emphasis: economic impact.

"The potential economic advantages that stem from biotechnology and translational research, in which scientific discoveries are quickly applied to real life, are not minimal," notes Moss. "These advantages can play a major role in the future of Wisconsin."

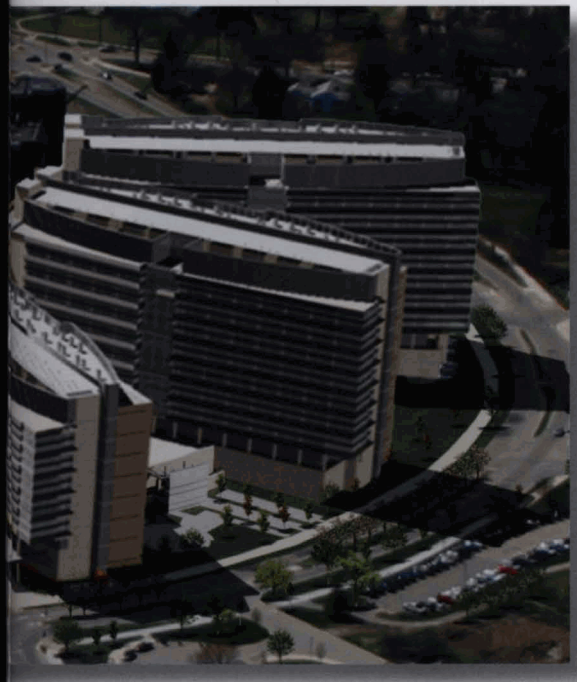
A $75 billion worldwide industry, biotechnology—with its jobs and opportunities—is growing steadily as new technologies migrate to the marketplace. Wisconsin's excellence in research has given rise to a vibrant biotechnology community composed of both start-up companies and global biotechnology organizations. As a result, more than 85 percent of the MS program's graduates have remained in or relocated to Wisconsin.

For now, the school is choosing to build, quite literally, on this success with the further development of the Wisconsin Institutes for Medical Research (WIMR). Designed to advance and embrace novel and collaborative ways of doing biomedical research, the facility promotes new and productive partnerships between physicians and scientists from varying disciplines, focusing on diseases and public health issues of common interest and concern.

Ultimately, the facility will consist of three towers, each representing a link in the bench-to-bedside to community chain. The first WIMR tower, home to the UW Carbon Cancer Center, opened in fall 2008. Construction of the second tower, to house programs in molecular medicine, cardiovascular sciences, neurosciences and eye research, will begin by mid-2011. The third tower will further enhance the translation and commercialization of discoveries made at the school.

Tower III will provide opportunities for the development of new research initiatives but could also serve as an incubator to new enterprises borne out of SMPH research, says Moss, who is overseeing construction of the two remaining towers.

–Continued on page 38



The third WIMR tower (rendered at top right) will enhance the translation and commercialization of scientific discoveries.

Scholarship Supports Hospital Managers' Interest in Biotechnology

In 2009, the University of Wisconsin Hospital and Clinics (UWHC) announced the President's Scholarship, providing support for management-level employees wishing to pursue the master of science in biotechnology at the SMPH.

"Ultimately, both the scholarship recipient and UWHC benefit in our participation in the program," says Donna Katen-Bahensky, president and chief executive officer of UWHC. "Who better to assist our organizational response and use of biotechnology at UWHC than one of our own, who can apply the learnings of the program with their own understanding of our mission of patient-focused care? This educational program uniquely positions us to bring the innovation of the biotechnology industry into the work that we do on behalf of patients."

The first recipient of the President's Scholarship was Matthew J. O'Brien, BA, RRT, RPFT, manager of the Pulmonary Diagnostic Laboratory at the hospital.

The lab provides testing of over 375 patients per month on an outpatient, inpatient and research basis. O'Brien has been a UWHC employee since 1986.

"As we have grown into a world class healthcare facility, there has been an evolving demand for technical expertise," remarks O'Brien. "UW Hospital is well known for contributing to advances in biotechnology. The cooperative relationship between the hospital and university often helps to drive innovation."

BIOTECHNOLOGY CENTER MARKS 25TH ANNIVERSARY

Only three Madison-area companies were working in biotechnology in 1985. Now there are more than 150 biotech firms nearby, and the state is recognized as a premier site for biotechnology research and industry.

The UW-Madison Biotechnology Center helped foster this growth, says Richard Burgess, PhD, the SMPH professor emeritus of oncology who was the center's founding director.

In March, the center celebrated 25 years of operation, and the community recognized its steady growth into an interdisciplinary hub of the Madison area's growing biotechnology business.

The center also maintains close ties with scientists in many UW departments, says current director Michael Sussman, PhD, professor of biochemistry.

Its three missions: promote facuty research within the Genome Center (a center within the center); offer core facilities, including DNA sequencing, DNA synthesis, mass spectrometry and other technologies; and provide education and outreach biotechnology for the campus and state.

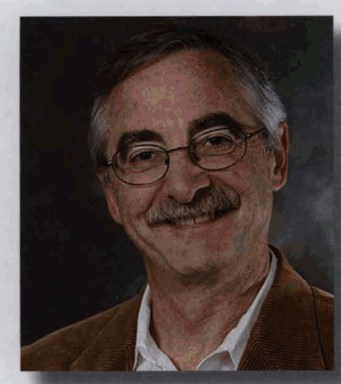
Wisconsin has deep roots in biotechnologies such as farming and brewing, and Burgess was determined that the center address state problems from the beginning. One early project looked at "greener" ways to make paper pulp with fungus instead of synthetic chemicals.

The center's effort to foster greater understanding of the beneficial role high-tech entrepreneurs play has paid off.

"In the middle 1980s, almost everyone being trained in biological science was going to the coasts," says Burgess. "Now there are thousands of jobs in the area, and we have attracted a lot of significant talent."

PHOTO: UW-MADISON UNIVERSITY COMMUNICATIONS

PATTERSON HEADS PHYSICIANS FOR SOCIAL RESPONSIBILITY



Jeffrey Patterson, DO (PG), professor emeritus of family medicine at the SMPH, has been named president of the board of directors of Physicians for Social Responsibility (PSR), an international group that works to rid the world of nuclear weapons.

Patterson, who is also a practicing physician at the UW Health Northeast Clinic, will serve in the leadership role through the end of the year.

The PSR membership includes 32,400 healthcare professionals, medical students and concerned citizens.

Formed in 1961, the organization gained recognition after publishing research that brought forth the dangers of nuclear testing.

Patterson says that since then, the group's main objective has been to encourage global disarmament of nuclear weapons.

"We have about 25,000 nuclear weapons in the world," says Patterson. "Instead of eight or nine countries having them, it could proliferate to 20 or 30. India and Pakistan have threatened nuclear attacks in the past that if executed, would have created enough smoke into the atmosphere to cause freezing temperatures in the northern hemisphere for up to 10 years."

Active in PSR for many years, Patterson has traveled extensively in the former Soviet Union, including to Chernobyl. He has lectured about the effects of nuclear weapons and radiation there, in Europe and the United States.

PSR, which won the Nobel Prize for Peace in 1985, has also been involved in efforts to educate the public and politicians about the health effects of climate change.

NATIONAL EXHIBIT CELEBRATES WOMEN IN MEDICINE AND SCIENCE

"Changing the Face of Medicine," a national traveling exhibition honoring the lives and achievements of American women in medicine, past and present, was on display in the Health Sciences Learning Center (HSLC) atrium this winter.

Ruth Bleir, PhD, an SMPH neurophysiologist who was among the first American scholars to examine gender bias in scientific research, was featured on a panel titled "Making a Difference."

Other panels included "Transforming the Profession," "Inspiring Others," "Confronting Prejudice," "Fighting for Rights" and "Local Legends."

The exhibition, also consisting of two interactive kiosks offering access to the exhibition Web site, was sponsored by the American Library Association and the National Library of Medicine.

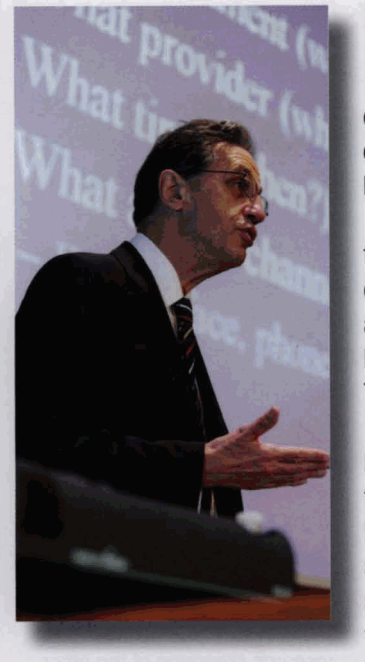
Judith Leavitt, PhD, professor of medical history and bioethics at the SMPH, and Gloria Sarto, MD '58, PhD, SMPH professor emeritus of obstetrics and gynecology and co-director of the UW Center for Women's Health Research, were among the national planners.

"We are extremely proud to have been part of this important project, which highlights the rich diversity of women physicians in our country and the broad range of medicine they have practiced," says Micaela Sullivan-Fowler, assistant director for marketing and strategic communications at UW-Madison Ebling Library for the Health Sciences.

The SMPH was one of 61 sites chosen to display the exhibition.

A separate exhibit showcasing the art of Wisconsin women physicians was also on display in the Ebling Library.

SYMPOSIUM EXPLORES THE ETHICS OF HEALTHCARE RATIONING



Rationing of healthcare is generally a taboo subject in America. But many experts feel it may be a big part of the problem plaguing the U.S. healthcare system.

Several of the experts came to the SMPH recently for an open discussion of the topic at a symposium titled "Reforming Health Care Ethically: Waste, Tradeoffs and Rationing."

Organized by Norman Fost, MD, and colleagues in the Department of Medical History and Bioethics, as well as Gretchen Schwarze, MD, assistant professor of surgery, it was the school's second annual bioethics symposium.

Some 350 people filled Alumni Hall for the symposium.

Julian LeGrand (left), PhD, former chief advisor for health to Prime Minister Tony Blair, talked about market and government forces that affect patient choices and help define what services should be offered. Dan Wikler, PhD, of the Harvard School of Public Health (and formerly of the SMPH), led an interactive exercise in which audience members were asked to make difficult decisions.

A panel consisting of UW-Madison experts then discussed aspects of rationing: problems that arise in relying on patient preferences and market principles; how UW Hospital decides which services to offer; how other advanced countries ration health services; and how nonmedical factors such as social and economic policies determine health.

Panelists included Dan Hausman, PhD, a philosopher of economics; Jeffrey Grossman, MD, SMPH senior associate dean for clinical affairs and CEO of UW Medical Foundation; Tom Oliver, PhD, population health sciences expert on comparative healthcare systems; and Stephanie Robert, PhD, professor of social work and population health sciences.

SUDDEN CARDIAC ARREST PROGRAM FUNDED

A multidisciplinary team of UW physiologists and cardiac specialists has launched a new program to study the mysteries of sudden cardiac arrest, thanks to a grant from the National Heart, Blood and Lung Institute.

The grant, which will pay $9.77 million over five years, will establish a program to study sudden cardiac arrest due to calcium-triggered arrhythmias. Researchers will explore the genetics and electrophysiological mechanisms of inherited diseases and syndromes such as catecholaminergic polymorphic ventricular tachycardia (CPVT), long QT syndrome and hypertrophic cardiomyopathy. In each instance, sudden cardiac arrest is associated with a surge in catecholamines (of which adrenaline is one) in response to stressors such as exercise.

"This grant demonstrates our strength in translational research, in bringing science from the bench to the bedside," says principal investigator Richard Moss, PhD, professor of physiology and senior associate dean for basic research, biotechnology and graduate studies at the SMPH.

Moss says the grant is a multi-investigator program project that builds upon historic excellence at UW-Madison, which has long been a leader in studying and treating patients with inherited arrhythmias and has strong basic research in the area, including invaluable research core facilities that develop and characterize animal models of cardiac disease.

Besides Moss, lead investigators for the program include Lee Eckhardt, MD, assistant professor of cardiovascular medicine; Jonathan Makielski, MD, professor of cardiovascular medicine; and Hector Valdivia, MD, PhD, professor of physiology, all of the SMPH. Michael Ackerman, MD, professor of pediatrics at the Mayo Clinic Medical School, is also an investigator.

FACULTY TO SERVE ON MORGRIDGE INSTITUTE LEADERSHIP TEAM

Three SMPH faculty members have been chosen to serve on the leadership team of the Morgridge Institute for Research, the private side of the new Wisconsin Institutes for Discovery (WID) at UW-Madison.

The scientists include James Thomson, PhD, professor of anatomy; Thomas "Rock" Mackie, PhD, professor of medical physics; and Paul Ahlquist, PhD, Howard Hughes Medical Investigator and professor of oncology. They will join four others on the leadership team.

Each will lead one of the five research areas that have been chosen to focus on.

MORGRIDGE
INSTITUTE FOR RESEARCH

Thomson will head the regenerative biology program, which includes stem cell science; Mackie will head the medical devices program and Ahlquist will head the virology program. Pharmaceutical informatics and education research are the two additional areas that will be emphasized.

"We will focus world-class talent on advancing discoveries in these research challenge areas that have tremendous potential for improving the health of millions of people around the world," says Sangtae "Sang" Kim, PhD, executive director of the institute. "Our mission is to accelerate the ability to treat, cure or eradicate such devastating diseases as diabetes, hepatitis C, cancer and heart disease."

Kim will also serve on the leadership team, as will Miron Livny, PhD, professor of computer sciences; Susan Millar, PhD, a scientist in the Wisconsin Center of Education Research; and Nirupama "Rupa" Shevde, PhD, director of education and outreach at the WiCell Research Institute.

While WID will not open until December 2010, research in the Morgridge Institute has been under way in the Thomson lab since his appointment was announced two years ago. The research programs of the other scientists have also begun. The institute now employs about 30 research staff and development professionals.

MCBRIDE NAMED UW-MILWAUKEE DISTINGUISHED ALUMNUS

The University of Wisconsin-Milwaukee (UW-M) Alumni Association has named Patrick McBride, MD '80, MPH, a distinguished alumnus for 2010. The elite award will be presented at the 2010 Alumni Association awards reception in May and during commencement.

McBride, a professor in both the departments of medicine and family medicine at the SMPH, is also associate dean for students.

After graduating from UW-M and then earning his medical degree from the SMPH, McBride completed a master's degree in public health and his residency at the University of South Carolina (USC). The USC honored him twice, in 2003 with its Distinguished Physician Alumnus Award and in 2008 with its Distinguished Public Health Alumnus Award.

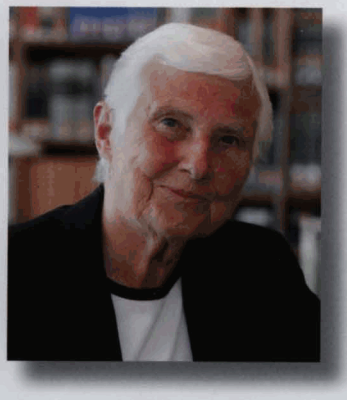
In the area of education, McBride created a comprehensive preventive-cardiology curriculum for SMPH students, residents and fellows in many specialties. He developed and implemented statewide teaching programs on cardiovascular risk factors for physicians, nurses, dietitians and physician assistants. He also developed an innovative nutrition curriculum for health professionals.

His research interests include preventive cardiology, risk factors and the quality of cardiovascular disease prevention in practice. An investigator on several National Institutes of Health grants, he has authored more than 100 publications on heart disease and prevention.

In the area of clinical care, McBride helped develop a comprehensive clinical preventive-cardiology program. It includes inpatient and outpatient cardiac rehabilitation, a busy preventive cardiology/cholesterol clinic, a stress management program and other clinical initiatives for people at risk for cardiovascular disease.

He recently was named president of the Wisconsin Division of Health's Heart Disease and Stroke Alliance and is a past president of the American Society of Preventive Cardiology.

SARTO HONORED WITH LIFETIME ACHIEVEMENT AWARD



The Wisconsin Women's Health Foundation (WWHF) recently honored Gloria Sarto, MD '58, PhD, with its Lifetime Achievement Award. Professor emeritus of obstetrics and gynecology at the SMPH, Sarto is also the co-director of the UW-Madison Center for Women's Health Research.

A clinician, researcher, administrator, national leader, mentor and overall champion of women's health, Sarto was recognized by the WWHF for her excellence in the area of general women's health.

She has been a trailblazer throughout her career.

Sarto was the first female obstetrics-gynecology resident at UW-Madison, and later the first to do amniocentesis with genetic testing, now a commonly performed procedure.

She was a founding member of the Society for Women's Health Research. The group has helped bring national attention to the fact that many diseases affect women differently than they affect men, and that women have been largely excluded from clinical trials.

Sarto was chief of clinical services at Prentice Women's Hospital in Chicago, then chair of obstetrics and gynecology at the SMPH's Milwaukee Academic Campus. Later she became chair of the Department of Obstetrics and Gynecology at the University of New Mexico, the first female chair of an obstetrics-gynecology department at a major university. She returned to UW-Madison in 1998 and became a professor in the Department of Population Health Sciences. She later helped found the Center for Women's Health Research.

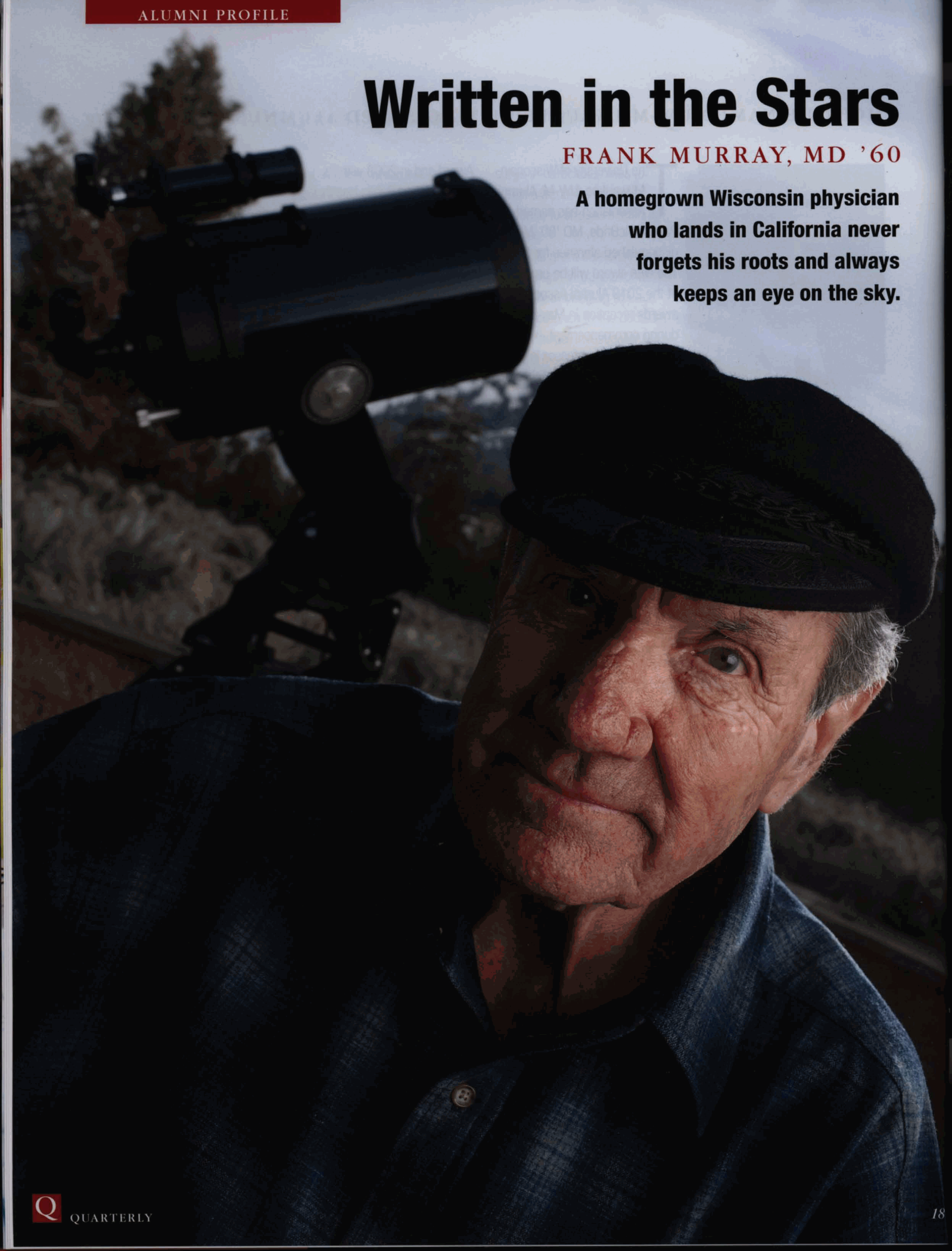
In 2003, Sarto was elected president of the American Gynecological and Obstetrical Society, the first woman president since its inception more than 100 years ago.

Sarto was the recipient of the 2001 WMAA Citation Award.

Written in the Stars

FRANK MURRAY, MD '60

A homegrown Wisconsin physician who lands in California never forgets his roots and always keeps an eye on the sky.



by Sharyn Alden

There's an old adage that says if you give children two things—roots and wings—you've given them all the tools they need to successfully make their way the rest of their lives.

It may seem like a stretch, but in a way that describes important themes that have run through the life and medical career of Frank Murray, MD '60, a retired internist with modest Badger State beginnings who eventually directed medical care at the massive Kaiser Permanente of Southern California.

Growing up in the rural town of Montfort, Wisconsin, Murray was thrilled to be able to see far beyond the local farmlands and "fly to the moon and stars" after he got his first telescope at age eight. The seeds of wonderment about science were planted while he was a boy and later a student. But other serendipitous guideposts along the way also fueled his distinguished medical career and his life-long interest in astronomy.

TELESCOPES TRAINED

Today, Murray, who resides in the San Bernardino Mountains at Big Bear Lake, California, is living a life that some might say is aimed at the North Star. With his home situated at an altitude of around 7,000 feet, Murray is closer than ever to the stars.

Conveniently situated nearby, the Big Bear Discovery Center provides access to three powerful telescopes—one of which is Murray's. As a volunteer at the center, he is there often, advancing the education of visitors from near and far through very popular "star-gazing parties." With the help of the telescopes, he wows schoolchildren and adults alike with insightful presentations on astronomy. Groups have varied in size from 50 to 500.

"In 2003, when the orbits of Earth and Mars were closer together than anytime in about 60,000 years, the parking lot was packed," he says.

Murray particularly enjoys educating young minds.

"We talk about things such as the Big Bang Theory and what galaxies are all about," he says.

REUNIONS COUNT

In April, Murray was in Wisconsin to reconnect with his medical school roots—for the 50th anniversary of his SMPH Class of 1960 graduation. As the class representative, he had been very busy behind the scenes, heading the reunion's organizational efforts.

"I called many classmates and encouraged them to attend the event at the Madison Club," he says. "Dick Normington traveled the farthest—all the way from Australia."

While he was in Wisconsin, Murray also reconnected with his friend and mentor, Gabriele M. ZuRhein, MD, a professor emeritus of pathology and laboratory medicine at the SMPH. She celebrated her 90th birthday on April 6, 2010, and Murray made sure to join the festivities.

"She was my escort at graduation, when I received my medical degree, and through the years we have kept in touch," Murray says, adding that he conducted award-winning research with ZuRhein as a medical student.

Murray remains close to the members of his Montfort High School class as well. In fact, the Class of 1948 held its 62nd high school reunion this spring—and Murray made a point to be there.

Of the 21 members of the class, 12 surviving alums have maintained a strong bond. Unlike some classes that get together every decade or so, this close-knit group gathers every five years.

FATED FOR MEDICINE

Murray's father, who didn't have a university degree, strongly encouraged his three children to go to college. He thought his eldest son would make a good lawyer, engineer or doctor.

"I may have disappointed my dad when I said none of those professions intrigued me, but I was interested in science and math," Murray says.

He won a scholarship to UW-Madison and in 1952 earned a bachelor's degree in psychology.

A curious turn of events occurred when he joined the U.S Army. During his second week of basic training, the master sergeant asked if anyone knew how to type.

Among the few people to raise their hands, Murray was chosen to work as the company clerk. Later he was transferred to a medical unit and sent to the University of Louisville to train as an EEG technician.

Working in that role brought the possibility of a future in medicine ever closer to reality.

"The opportunity linked my natrual interest in science to the world of medicine," Murray says.

It also fueled his deep curiosity about how things work and his interest in problem solving.

"I began hanging around the emergency room at the university hospital there," he says. "I thought, 'This is really interesting, maybe I should go to medical school.'"

So in 1956, as his destiny played out, Murray entered medical school at UW-Madison.

"I look back on those years now as being among the happiest experiences in my life," he says. "I thought to myself, 'This is heaven.' At medical school they were teaching us such interesting things."

Murray and his wife, Ione, were happy at home as well. They welcomed the birth of the first of their six children during those medical school days.

"I'll never forget the timing of the birth. He was born right before I took my first gross anatomy class exam," Murray says, adding that a second child was born before he graduated from medical school.

PASSION FOR WORK

After finishing his residency in 1964, Murray joined Einar Daniels, MD '34, and others in a small internal medicine group in Wauwatosa, Wisconsin, where he practiced for about 10 years.

"It was very rewarding to get to know patients in many ways beyond what they had come to see me for," he says.

But a trip to a critical-care medicine conference in California in 1971 took Murray in an entirely different direction. He was offered a job at Kaiser Permanente Medical Center in Harbor City outside Los Angeles.

—Continued on page 38

"On Call"

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

Rebecca Dale, a resident in anesthesiology at UW Hospital and Clinics, adds medication to a patient's IV in the OR.

WILLIAM McIVOR, MD '90

These days, I spend about 40 percent of my time in the OR on thoracic, vascular and trauma cases. The rest of the time I spend teaching—as director of medical student simulation education at the University of Pittsburgh School of Medicine (UPSOM) and associate director of the Peter M. Winter Institute for Simulation Education and Research (WISER) at Pitt.

Through teaching, I've been able to attract many Pitt students into anesthesiology, and I've been able to bring simulation into our medical school's curriculum and demonstrate its merits to the academic community.

I matched in general surgery, but quickly realized that I didn't have the stamina or dedication to the field to become a surgeon.

During my internship, while I was in cardiovascular surgery, I really enjoyed taking care of patients in the intensive care unit postoperatively—starting them on vasoactive medicines and watching their vital signs change.

The anesthesiologists were taking care of a patient population I enjoyed, were working in an environment I liked—and they were getting bathroom and lunch breaks! What wasn't to love?

I did my internship and first two years of anesthesiology training at the Maine Medical Center, and my final year at UPSOM, where I did cardiothoracic anesthesiology.

From residency, I went to Mercy Hospital in Janesville, Wisconsin. It was a thrill to work with classmates Scott Miller, Joel Henry, Dan Stadler, Todd Swenson and Jeanine Harding. After four years there, I went back to UPSOM to pursue a career in academia.

Anesthesiology has taken all the interesting elements of medicine (anatomy, physiology, pharmacology, internal medicine and others) and brought them into a focus that I find fascinating. The lifestyle the specialty affords allows me to be a part of my family and raise my three children, Abigail, Alan and Mallory.

I've had a marvelous career as a teacher, thanks in part to the commitment my department and my specialty have made to that activity.

TIMOTHY GUNDLACH, MD '85

I'm a member of Southeast Anesthesiology Consultants in the Charlotte, North Carolina, area, practicing primarily at Carolina Medical Center-Union in nearby Monroe. I do a wide variety of cases, including orthopedics, general surgery, urology, ear-nose-throat and obstetrics-gynecology, including labor and delivery.

I chose anesthesiology because I wanted to be able to work with surgical patients throughout the course of their procedures. I am involved in the preoperative workup and optimization of the patient. I prescribe and administer the anesthetic, including nerve blocks for postoperative analgesia. I continue to treat the patient in the postanesthesia care unit, and later on the floor or in the intensive care unit. I also have the opportunity to provide labor analgesia with epidurals.

I did my residencies at State University of New York at Buffalo. I was in general surgery from 1985 to 1989, which included one year of research in surgical oncology. I was in anesthesiology from 1989 to 1991.

One case really changed my life. I was a fourth-year surgical resident, having just finished a year of surgical research. My chief resident and I had a patient who had been on the surgical service for several weeks who just kept getting sicker. When we brought her to the OR, our attending wanted to do a quick cholecystectomy and get out. When the chief resident and I started to do a thorough exploration, the attending threw the chief out of the OR and finished the case with me. The woman ended up needing a cholecystectomy, total colectomy and iliostomy. When I literally fell asleep on my feet while maturing the iliostomy, I realized I was not going to be a surgeon.

The next day, I interviewed with the chair of the anesthesiology department for a position that opened up that day. About eight years later, I ran into the surgeon who was the coordinator for the residents. When I told him I thought I had made the right choice and that I was better as an anesthesiologist than I would have been as a surgeon, he responded, "Well, you'll never know, will you?" I've never doubted my career choice since.

I've been active in the American Society of Anesthesiologists, advocating with politicians in Washington, Madison, and now Raleigh for laws and regulations that will improve patient safety and keep the field of anesthesiology attractive to new physicians.

MEGHAN KEHOE, MD '05

I joined a group with nine other anesthesiologists at Mercy Hospital in Janesville, Wisconsin, last August. Mercy is a busy regional hospital with a recent Level-2 Trauma center designation. The majority of the time, I am providing anesthesia for a mix of procedures, including cardiac, neuro, pediatrics, gynecology, urology, ENT and general surgery. At times I am called to the obstetric floor to administer regional anesthetics for C-sections during deliveries and epidurals for pain control during labor. I also evaluate patients in our pre-anesthesia clinic and supervise a team of certified registered nurse anesthestists.

During medical school, I enjoyed courses such as gross anatomy, neurology and physiology in the first year and the variety of pathophysiology courses in my second year. Once I was on surgical rotations in the hospital, I found the OR to be a very exciting, dynamic environment. I discovered that I liked doing procedures and assisting in surgeries, but I was always curious about what was happening on the other side of the curtain.

Some of my medical school teachers, such as Dr. George Arndt and Dr. Thomas Kloosterboer, discussed with me the field of anesthesiology and helped me to realize that it could be a good fit for me. After graduating from medical school, I completed a transitional year program at St. Joseph's Hospital in Milwaukee. I then returned to UW Hospital and Clinics to finish my anesthesiology residency.

During my last year of residency, I became engaged to Dr. James Oujiri, currently a first year cardiology fellow at UW Hospital. I knew I needed to stay near Madison, as James had four more years of training. I also wanted to stay in the area because I am close to my family, who mostly reside in Brookfield, Wisconsin.

Now that I am settled working as an anesthesiologist, I am gearing up for oral boards in September. The studying never seems to end! I enjoy my work, being able to connect with patients, evaluate them individually and decide on the best course of action to take for each patient and procedure. Applying my knowledge of physiology, anatomy and pharmacology to each situation and having to think quickly on my feet keeps the days flying by. I can't believe I've been in practice for almost one year now.

CLASS NOTES *compiled by Joyce Jeardeau*

CLASS OF 1945

John Irvin retired in 1990 from his internal medicine practice of 39 years in Monroe, Wisconsin. He has been curling twice in Scotland and enjoys playing the guitar.

CLASS OF 1950

George Graf retired from internal medicine and as a Navy flight surgeon-emergency medicine (Captain USNR-MC). He urges people to read *Prevent and Reverse Heart Disease* by Caldwell Esselstyn, Jr., MD, stating that "it is a landmark study." He and his wife, Mary, have taken a tour around the world. George also helped start two four-year nursing schools that graduate about 130 nurses each year.

CLASS OF 1955

Henry Chrystian Anderson is credited with being "instrumental in the health system's quality initiatives" by the SwedishAmerican Health System. In 2002, the Dr. Henry C. Anderson Quality Award was developed by SwedishAmerican. The award, their highest honor of distinction and appreciation, is given to an individual who has made significant contributions to improving healthcare quality.

Lawrence Field has taught dermatology surgery in more than 60 countries. He recently donated $100,000 to the American Society for Dermatologic Surgery to start the Lawrence Field, MD, International Dermatologic Surgery Educational Exchange Fund. It will provide dermatologic surgeons who possess his same passion for learning and teaching an opportunity to travel abroad to communities interested in and needing to build the technical skills and knowledge that affect patient care.

CLASS OF 1960

Since retiring, **Richard Edwards** works one day a week at the Richland County Free Clinic and one day a week at the Richland County Jail in Richland Center, Wisconsin. He enjoys hunting, fishing and traveling. He was in family practice from 1961 to 2001 at the Richland Medical Center.

Paul Gohdes has retired to Tucson and is involved in volunteer activities that aid the homeless and advocate for immigration reform. He also enjoys traveling and is able to "find ample opportunities to do so" with his children living coast-to-coast and in Rome. He worked for 27 years as the staff pathologist at the Theda Clark Medical Center in Neenah, Wisconsin, and also worked for two years with the Division of Foreign Quarantine in the U.S. Public Health Service.

Leslie Klevay says climbing Mt. Fuji in 1989 was "one of the great adventures" of his life. Another was the nutrition survey of Panama he conducted in 1967 for the World Health Organization (WHO). He has been an advisor to the National Institutes of Health, the U.S. Pharmacopeial Convention, the Commonwealth of Australia, the American Council on Science and Health and the WHO. In retirement, he has canoed the upper 80 miles of the Mississippi River (with the assistance of classmate Jim Urban and Robbie Urban).

Kent Mannis says he still "enjoys getting up in the morning and eating, reading, going from place to place and doing all the other thing that retired old guys do, with both increased (and decreased) frequency." He spends winters in Florida and summers in Madison.

Richard Normington retired two years ago from a psychiatry practice and now has a part-time position with the Mental Health Review Tribunal, which is the overseer of Australia's progressive system of outpatient involuntary care. He enjoys tennis, traveling and being with family in Australia and the U.S.

CLASS OF 1973

Richard Kozarek was recently named president of the World Gastroenterology Organization (WGO), a federation of 109 national societies and four regional associations of gastroenterology representing over 50,000 individual members worldwide. Richard is also the executive director of the Digestive Disease Institute at Virginia Mason Medical Center in Seattle. He is past president of the American Society of Gastrointestinal Endoscopy (ASGE) and the 2005 recipient of the ASGE's highest honor, the Schindler Award.

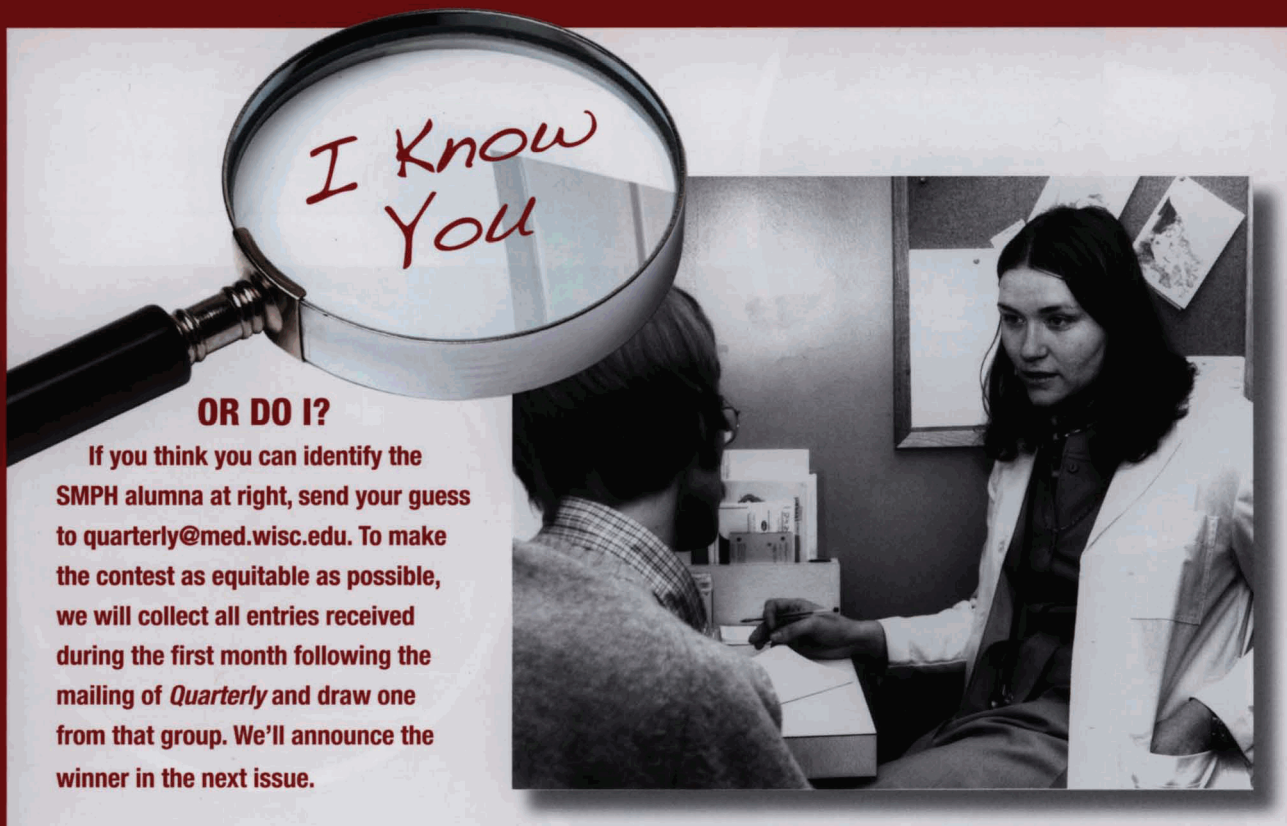
IN MEMORIAM

Donald Taugher, MD '50
January 9, 2010
Monterey, California

Sheldon Wagner, MD '57
July 19, 2009
Corvallis, Oregon

Timm Zimmermann, MD '66
December 16, 2009
Madison, Wisconsin

Read more in Inbox.



OR DO I?

If you think you can identify the SMPH alumna at right, send your guess to quarterly@med.wisc.edu. To make the contest as equitable as possible, 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 next issue.

HINTS: This alum lived with two other female medical students—meaning that about 30 percent of the women in the class lived under one roof. As a first-year medical student taking gross anatomy, she also took a Saturday class in pottery and a night class in lingerie making at Madison Area Technical College. Later, as the 40,000th board-certified family physician, she appeared on the cover of *Parade* for a story about women becoming physicians.

Our first "mystery alumnus" was Jack D. Heiden, MD '58

After earning his medical degree, Heiden did an internship at General Rose Memorial Hospital in Denver and then an orthopedic surgery residency at UW Hospital and Clinics.

A general orthopedic surgeon at Meriter Hospital in Madison and SMPH professor for 47 years, he is still working—at the Madison veterans hospital and also a free clinic.

Heiden is the father of Eric, who won five gold medals in speedskating at the 1980 Olympics, and daughter, Beth, who won a bronze medal at those Lake Placid Olympics and also excelled at cross-country skiing and later cycling.

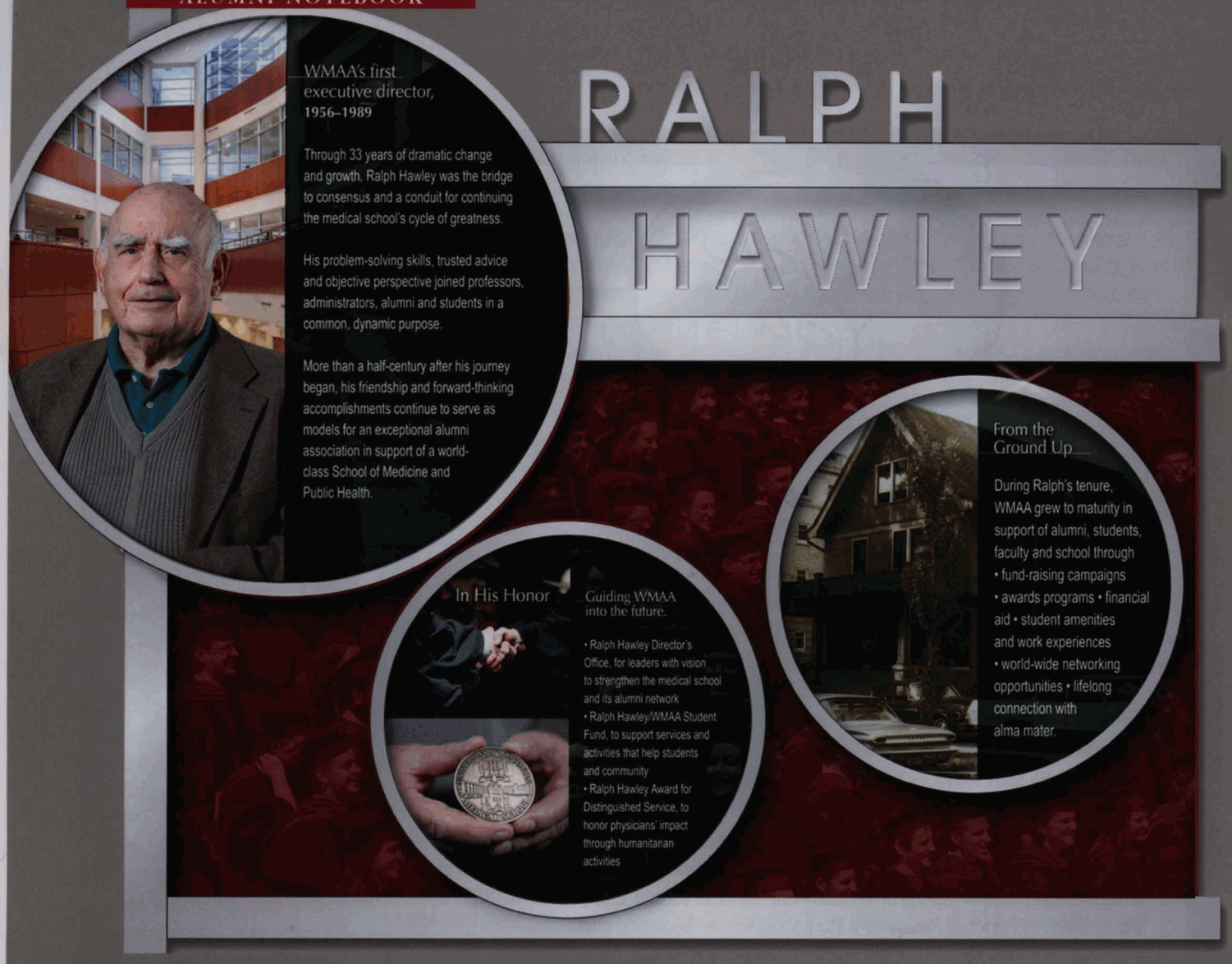
As their kids were growing up, Heiden and his wife, Nancy, sharpened skates, shoveled snow off Lake Mendota to make skating rinks and chauffeured the youngsters to meets.

The senior Heiden has always enjoyed sports himself—including biking, rowing, hiking, cross-country skiing and fly-fishing.

Twenty-two readers identified Heiden in the intial "I Know You" contest. The first to answer correctly was William Reddan, PhD. We sent him a WMAA clock as a prize.

Now retired, Reddan was a faculty member in the SMPH preventive medicine department (now the Department of Population Health Sciences) and spent many years working in the pulmonary function laboratory.

"I met Jack while I was coaching a UW soccer club," reports Reddan. "Both his children were outstanding competitors."



The WMAA Honors Hawley

OFFICE FACELIFT BRINGS MORE VISIBILITY

The next time you visit the Wisconsin Medical Alumni Association (WMAA) on the fourth floor of the Health Sciences Learning Center (HSLC), you will know for certain that you've reached your destination!

That's because the WMAA now has a stronger, brighter presence on the school's adminstrative floor. In an effort to give the WMAA more visibility with alumni, students, faculty and staff, the association has gotten a facelift.

The "welcome area" will be visible the moment you step off the elevators. On the newly repainted wall, a large sign will let you know you're in the right place.

Joyce Jeardeau, our new WMAA staff member, will be there to greet visitors. You will be able to relax in our reconfigured lounge area, visit with staff or read the *Quarterly*. Of course, the student candy bowl will be there.

We are also proud to announce that as part of our redesign, the WMAA executive director's office will be named after Ralph Hawley, the organization's co-founder and first director. Next to the office will be a fitting tribute to Ralph—the "Ralph Hawley" plaque (above)—a wonderful visual representation of his long history with and many contributions to the WMAA.

In addition to these changes on the fourth floor, the WMAA will also have a higher profile in the HSLC atrium. Here a new "wall of honor" will celebrate the important contributions alumni and students make to the WMAA and to their communities.

High-impact visuals on the wall between two very busy lecture halls will tell our story, both celebrating our past and promoting our future. WMAA former presidents and award recipients also will be honored here as will Medical Student Association presidents.

The changes have just been made. Be sure to come see—and take pride in your medical alumni association.

From Tears

Lee Eckhardt, MD, a UW Health physician who specializes in cardiovascular medicine, balances her busy work life with painting. This one, titled *From Tears*, appeared in a recent Ebling Library exhibit on art by local women physicians.

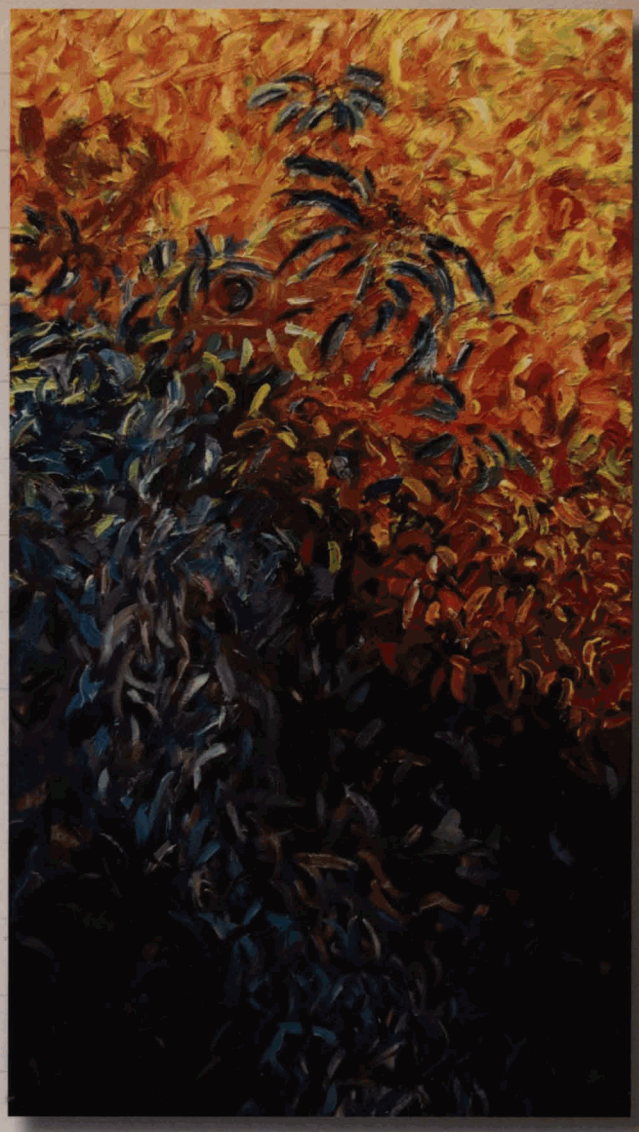
Eckhardt explains the genesis of *From Tears*.

"This painting truly comes from the heart—and the heart of frustration. As doctors, we try to maintain an objective point of view so as not to allow emotions to influence our actions.

"Occasionally, unexpectedly someone or some situation resonates with us and overwhelms that emotional distance.

"Once this happened to me when I was caring for a young mother with terminal cardiac disease. I felt a deep sadness for everything in this life she would never know/experience/see/enjoy/hate/love as her young life was slipping away.

"Unable to make her condition better or change the course of events, I felt frustrated and helpless. So, I tried to create something beautiful from that sadness. That is what this painting is about, creating a thing of beauty and joy from tears and sadness."



Seeking Submissions

Healer's Journey showcases writing, photography and other expressive works by members of the SMPH extended family that reflect personal experiences in our world of healing. Our hope is that showcasing thoughtful written and visual pieces will allow more humanity into our busy lives.

Our guidelines: Manuscripts can be no longer than 1,000 words. Subject matter should relate to any aspect of working, studying or living at the SMPH or in the medical field generally. Submissions are subject to editing. Photographs must be high-resolution.

Send submissions to: quarterly@med.wisc.edu or *Quarterly*, HSLC Room 4293, Madison, WI 53705.

Get to Know

YOLANDA TAI BECKER, MD

Associate Professor of Surgery

Becker describes how she became a UW Health transplant surgeon, the role she's playing in refining the SMPH clinical curriculum and what she's learning from participating in a national leadership program.

What were your initial interests during medical school and residency? As a medical student at Johns Hopkins, I tried lots of things, but I fell in love with surgery. I went to Vanderbilt for my residency. I was interested in plastic surgery, vascular surgery, oncologic surgery. During my residency, I was going to do a breast cancer fellowship at the NIH. Then I met my husband -to-be, Bryan Becker, a nephrology fellow at Vanderbilt (now an SMPH professor of medicine). So I decided to stay in Nashville.

How did you get into transplant surgery? Someone on the transplant service at Vandy asked if I'd like to come into their lab and do immunology work. I ended up in that lab for two years and thought it was great. We did basic research on transplant tolerance. Then I got into the transplant service.

Who were your role models and mentors? There was only one female resident in general surgery and one female faculty I encountered, an endocrine surgeon, when I was in medical school. They didn't have what I wanted, which was a traditional family. I had several excellent role models during my residency who were women. And John Tarpley, my program director in general surgery, was great. He taught us it was the whole patient that mattered. His favorite

saying was, "Adversity is a constant, but misery is a choice."

How did you end up at Wisconsin? It was very fortuitous. I went to a meeting in Breckenridge, Colorado, on transplant tolerance to do a poster and presentation. I was introduced to Dr. Hans Sollinger, chief of the UW transplant division. Afterward, I didn't think much about it. I was still thinking of being a breast cancer surgeon. But at the end of my research fellowship, Bryan said, "You're never going to be happy unless you do transplant."

Did you have reservations at first? I was worried about the lifestyle. You have to be available at all hours of the day and night. You can't predict when someone will be generous enough to donate an organ. It can be chaotic. There's a lack of control.

What changed your mind? Bryan, who is extremely supportive, helped me realize that I liked the basic science, the patients, the complexity of transplant.

How did you make your decision? Dr. Sollinger sent me a handwritten note and called me and said he'd like me to come and look. I didn't know anything about Wisconsin. But I visited and met some incredibly kind people. I learned this is one of the best transplant programs in the country. After the fellowship, we decided to stay here because Bryan was asked to be division chief of nephrology.

Was it the right decision? Yes, Madison has been a great place to raise a family. We have two eight-year-old kids—Ian and Anna.

How has being a mother affected your work? Being a working mom resonates with many of the other women I work with. Those women have been a huge support to me, especially in the OR and the transplant offices.

What are your clinical duties today? I concentrate on laparoscopic donor nephrectomies and kidney and pancreas transplants as well as dialysis access surgery. In 2008, we did 103 living donor kidney transplants and 185 deceased donors for a total of 288. In 2009, we did 86 living donors and 167 deceased for a total of 253.

My advice to students? Do something you're passionate about and could be good at. Then take a leap of faith, trusting that it will all fall into place. It won't just be a job; it will define who you are.

How did you get involved in the curriculum? In 2001, Dr. Bing Rikkers, the chair of surgery, asked me if I would direct the third-year general surgery clerkship for medical students. It was a great opportunity. I came to realize that I had a passion for teaching students and residents in addition to taking care of patients. Then I took over the fourth-year surgery clerkship too, staying on for seven years.

What other curriculum activities have you participated in? I shared a 50 percent job on the Innovations in Medical Education grant with Dr. Ann Ruscher, ('91), a pediatric anesthesiologist I had partnered with in the OR. We looked at the curriculum for years three and four. Then I took over organizing Core Day.

What is Core Day? That's when we bring the entire third-year class back together to review things we think are core to medicine but are not ordinarily covered in the curriculum—palliative care, breaking bad news, talking about outcomes and healthcare disparities. Drs. James Cleary, Shobbina Chheda, Jan Haedt and Gretchen Schwarze supply the content. By encouraging medical students to think about these topics and practice talking about them with standardized patients, we hope to develop doctors who are more humanistic.

Are there additional curriculum activities you've worked on? We are working to incorporate public health curriculum into years three and four with a Wisconsin Partnership Program grant team led by Associate Dean of Medical Edcuation Dr. Christie Seibert. I work closely with the Dean of Students office to make sure our policies make sense to students.

What advice do you have for students? Do something you're passionate about and could be good at. Then take a leap of faith, trusting that it will all fall into place. It won't just be a job; it will define who you are.

What other education activities are you involved in? My whole CV speaks to education. I sit on many national clinical education committees and advisory boards. My professional life is a combination of clinical activity, education and leadership.

What are you doing to enhance your leadership skills? I'm completing a competitive national leadership program called the Hedwig van Ameringen Executive Leadership in Academic Medicine Program, or ELAM. For many years our school has supported this program for women; several SMPH physicians have participated.

What's the ELAM program about? The goal is to acquire the skills needed to become an effective, fair leader. You learn communication and business skills, how to manage a group, have difficult conversations. You also do an institutional action project.

What's your institutional action plan? It's on peer review of the clerkships. We have a lot of student feedback, but not from fellow faculty members. This will tell us how we're doing with the clinical curriculum from their point of view.

Is there a potential for you to take a larger leadership role in the future? I have appreciated the support given to me by my department and the school to participate in ELAM. This has been a significant time commitment. The training will allow me to more fully understand my current roles and hopefully grow into greater participation both locally and nationally.

What do you do in your spare time? I like to read novels, primarily murder mysteries. It helps me decompress. I average about two books a week. I also play the piano, mostly classical, and in the past I rode horses.

Current Farmer, Future Physician

GENA COOPER, MED 2

Gena Cooper may be the poster child for the old saying:

"You can take the girl out of the country,
but you can't take the country out of the girl."

by Mike Klawitter

Gena Cooper grew up on a farm just southwest of Milwaukee and served as Alice in Dairyland, Wisconsin's key spokesperson for the state's dairy industry.

Now she's a second-year student at the SMPH and hopes to someday return to her bucolic roots—as a doctor in a rural or farming community. She's keeping up with her studies while running a dairy farm in Columbus, Wisconsin, with her husband.

Cooper says a career in medicine was something she's wanted since her days as a student at Mukwonago High School. As an undergraduate at UW-Madison, she majored in biochemistry, which she felt could provide the background she needed to get into medical school.

After earning her BS degree in 2005, Cooper applied to the SMPH but was put on a waiting list. It was during this time she encountered a "good twist of fate."

"I applied for the position of Alice in Dairyland," she says. "A week after graduation, I went through the finals process, which lasted three days. A panel of agriculture and public relations professionals observed me and interviewed me on my knowledge of agriculture, my ability to connect with the community and how to use that knowledge in media campaigns, speeches and other outlets. It's a very rigorous process and very stressful."

Cooper was eventually chosen Wisconsin's 58th Alice in Dairyland, which is a full-time position with the Department of Agriculture, Trade and Consumer Protection. She served for a year starting in June 2005.

"I spent most of my time in media settings doing interviews for television, radio, newspaper and the Internet. And I spoke at a wide range of events including county fairs, local service organizations, agricultural conventions and the Wisconsin Legislature," she says. "My job was very dynamic and required me to stay up to date on what was happening in agriculture."

Cooper believes that working on a farm has reinforced her goal of wanting to become a doctor. "Farming brings you down to the most natural level....it makes the cycle of life real and the connection to health real," she says.

After completing her term as Alice, Cooper was hired by the Department of Agriculture as a bio-industry analyst and participated in a renewable energy task force formed by Governor Jim Doyle.

Two years later, Cooper decided she needed to make a major change in her life.

"I liked what I was doing, it was interesting and challenging, but I didn't love it," she says. "I was still drawn to medicine. I wanted to connect with the community, reach out to individuals and make a difference in a real way."

Cooper's entry into the SMPH came at the same time as the school was creating the Wisconsin Academy for Rural Medicine (WARM). The program accepts students committed to working in rural communities of Wisconsin where shortages of doctors and medical facilities occur.

"I was very excited to learn about the WARM program," says Cooper. "It just seemed to fit my interests and my goal of serving people involved in agriculture and also using science and medicine to do that."

While Cooper felt it was right to pursue her dream, she also understood the risks.

"I was taking a big leap of faith, because I had a job I liked and was working with interesting people," she says. "Similar to other students who come back to school, you question why you are giving up so much. Now that I am here and doing it, I realize it was a no-brainer, because this is where I belong and this is what I want."

While her family eventually stopped farming in Mukwonago, Cooper is now a partner in a dairy farm in Columbus with her husband, Brian Kurth, who earned a dairy science degree from UW-Madison.

"He is the farmer, but I do a lot of the work on the business end, including the paperwork," she says. "I make sure the work gets done and that everything is running smoothly. Brian is a great person and passionate about farming."

Cooper says she does more than put pencil to paper and occasionally gets her fingernails dirty.

"While Brian was building our new farm, I spent a lot of nights and weekends helping install milking machines and stalls for the cows that live in the barn," she says. "But I don't get to ride the tractors. They're just too big!"

Cooper believes that working on a farm has reinforced her goal of wanting to become a doctor.

"Farming brings you down to the most natural level," she says. "Everything you do pertains to sustaining life, producing food to keep life going. We grow crops to feed our animals; they make milk and that helps build strong bones. Farming makes that cycle real and the connection to health real."

She also sees similarities between caring for farm animals and caring for humans.

"You can tell an animal is sick by how it acts, the way it walks, how it comes into the barn. All of that has made me more observant," says Cooper. "I know there will be a great parallel to human medicine when I see what's different with a patient's demeanor and determine what that may mean for the patient's health."

Cooper says she's prepared for the day when she will have to leave her business behind to do her WARM rotations in Rice Lake and Marshfield, Wisconsin. She's excited about what the future may hold.

"WARM is such an excellent opportunity for me," says Cooper. "It's such an honor to pursue my dream of serving a Wisconsin farming community as its doctor. I can't wait to see where the next steps of my training will take me."

Kiss Stealthy Form of EBV Goodbye

The same virus that causes relatively mild mononucleosis, the "kissing disease," can also cause severe mono as well as several potentially deadly kinds of cancer.

Now SMPH researchers think they can kiss a stealthy form of Epstein-Barr virus (EBV) goodbye—or at least shut it down enough to successfully treat several of the dangerous diseases it causes.

Using Hsp90 inhibitors, a class of drugs being clinically tested to treat other kinds of cancer, the researchers found that the drugs were the first to stop the latent form of EBV infection—the kind most commonly associated with cancer—from causing disease. Shannon Kenney, MD, SMPH professor of oncology and medicine, led the McArdle Laboratory for Cancer Research team.

The researchers focused on one key viral protein, EBNA-1, which is found in every EBV-infected cell. After discovering that EBNA-1 itself must have Hsp90 in order to function in cells, the scientists conducted three different experiments to see what would occur when they exposed EBV-infected cells to Hsp90 inhibitors.

In all three experiments, the results showed a dramatic reduction in EBNA-1-related activity. The drugs prevented human EBV-related tumors from growing in mice, protected immune cells from transforming into tumors and killed established tumor cells at low, nontoxic doses.

"This discovery suggests a new way of treating patients with severe mononucleosis and EBV-driven cancers, particularly immuno-compromised AIDS and transplant patients," says Kenney, also an infectious disease expert at UW Hospital and Clinics and a member of the UW Carbone Cancer Center.

The study appeared in the Proceedings of the National Academy of Sciences.

New Model for Macular Degeneration

Exposing albino rats to moderately intense light has produced a new animal model for the most common cause of severe vision loss in humans—age-related macular degeneration (AMD).

The new model could help "provide important new insights into the pathogenesis" of AMD, according to a commentary in a recent edition of the *Journal of the American Medical Association.*

While AMD is the leading cause of blindness in people over 60, there hasn't been a good animal model of the disease until now, says lead author Daniel Albert, MD, SMPH professor of ophthalmology and visual sciences.

"This new model gives us a chance to study causes and treatments at the various stages of the progression of macular degeneration," says Albert, director of the UW Eye Research Institute.

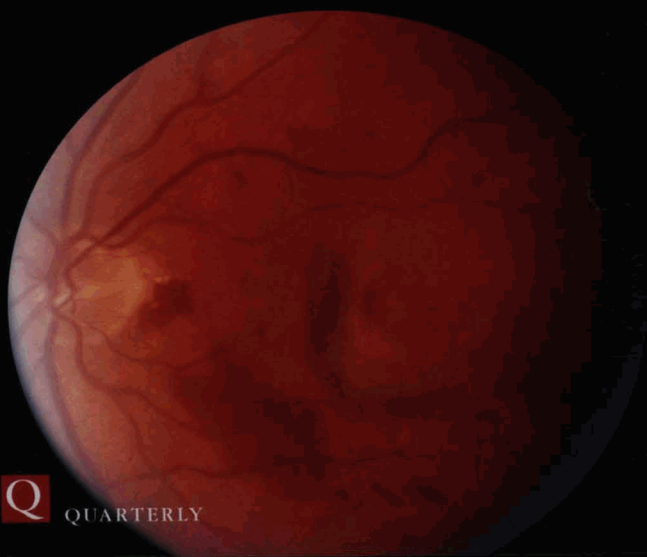
Nader Sheibani, PhD, was a co-author on the study.

Another co-author, Richard Dubielzig, PhD, a professor of veterinary pathology, noticed in reviewing slides of the eyes of aging albino rats that they had abnormal blood-vessel proliferation invading into the retina. Albert realized the rat eyes looked like slides taken from his AMD patients.

The researchers worked out a method of bringing on the disorder more quickly by exposing the rats to 12 hours a day of 3,000-lux light for periods of one, three or six months. The longer the exposure, the more advanced was the blood vessel proliferation that developed.

Albert says the lights were only moderately intense. But albino rats, which lack natural pigmentation, are exquisitely sensitive to light.

The research was published recently in the *Archives of Ophthalmology.*



Macular degeneration forms in a human eye.

Coaxing Living Cells to Move

SMPH researchers have shown they can make immune cells in living fish embryos move the way they want them to, simply by shining a focused beam of light on them from their microscope.

The study appeared recently in Developmental Cell.

Scientists can imagine astonishing clinical possibilities for the remotely activated cell-moving ability.

"Could you move immune cells to wounds to help fight infections?" asks lead author Anna Huttenlocher, MD, a professor of medical microbiology and immunology and of pediatrics. "Could you control the movement of T-cells to kill tumors?"

The goal was to visualize how immune cells migrate to inflammation sites.

The researchers focused on PI(3)K, an important regulator of cell migration and other cellular processes. It's thought to activate another protein called Rac.

Huttenlocher, who treats patients with chronic inflammation at American Family Children's Hospital, uses zebrafish embryos because she can see individual cells inside them with a confocal microscope.

Graduate student Sa Kan Yoo, PhD, used a tool developed by a collaborator, who showed in test tube studies that he could induce cell movement. A light beam activates cells tagged with a substance that responds to light by becoming fluorescent.

With a spotlight on them, cells containing Rac not only glowed, they moved.

PI(3)-K was found to be active in the process by first signaling Rac to move the front of the cell forward and then telling the back side to follow.

Knowing how and where the protein works may help in the development of therapeutic drugs, says Huttenlocher.

Heart Stem Cell Study on AHA's Top Ten List

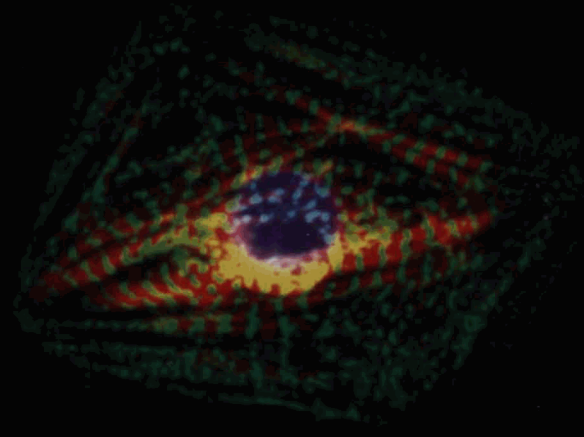
In 2009, a group of cardiovascular researchers at the SMPH proved that functional human heart muscle cells can be produced from genetically reprogrammed skin cells stemming from stem cells.

According to the American Heart Association (AHA), the discovery was one of the ten most important research advances for cardiovascular disease and stroke for the year.

Timothy Kamp, MD, PhD, a professor of medicine, in collaboration with stem cell pioneer James Thomson, PhD, professor of anatomy, led the team that demonstrated that human induced pluripotent stem (iPS) cells could be differentiated into contracting cardiac cells. The team's findings raise the possibility that a patient's own skin cells could someday be used to repair damaged heart tissue.

"It's certainly an honor to have our research recognized by an organization devoted to the same goal we have—keeping patients' hearts healthy," says Kamp. "Much more research is needed before this type of stem cell can be used clinically, but there is significant promise that these cells may provide a powerful new treatment for heart failure and other degenerative diseases of the heart."

The AHA doesn't assign rank to the research advances on its annual list. Other notable advances included studies documenting the effectiveness of controlling calories in maintaining heart health, the effectiveness of oral blood thinners in patients with stroke and atrial fibrillation and the impact of smoke-free legislation on reducing heart attacks.



A heart cell derived from human iPS cells exhibits the classic structural properties of cardiac muscle.

County Health Rankings Go National

by Susan Lampert Smith

They're feeling the Rocky Mountain high in Ouray County, which was ranked the sixteenth healthiest county in Colorado. But McDowell County came in dead last in the state of West Virginia, in part because people there tend to use the emergency room as a primary healthcare provider.

Every county in the United States got a public health checkup in February, thanks to the national launch of the County Health Rankings. Across the country, news reports talked about county officials and community leaders getting together to tackle their communities' public health challenges.

This was exactly the result the SMPH professors who created the national survey had intended.

"It exceeded our expectations on every level, from the amount and kind of interest to the reactions from every corner of the country," says Patrick Remington, MD '81, MPH, associate dean for public health at the SMPH. "It was the first time people could compare the health of their community with communities next door."

The UW Population Health Institute created these snapshots of health in every one of the country's more than 3,000 counties with a grant of nearly $5 million from the Robert Wood Johnson Foundation. The groups released the report at a February 17, 2010, press briefing at Union Station in Washington, DC, and launched a Web site with reports for every county at www.countyhealthrankings.org.

"It exceeded our expectations on every level, from the amount and kind of interest to the reactions from every corner of the country," says Patrick Remington, associate dean for public health at the SMPH.

Remington says the state reports are designed to help public health and community leaders, healthcare systems, policy makers, consumers and others to see how healthy their county is, compare it with others within their state and find ways to improve health locally.

Each county is ranked within its state on how healthy people are and how long they live. They also are ranked on key factors that affect health, such as smoking, obesity, binge drinking, access to primary care providers, high school graduation rates, violent crime rates, air pollution levels, liquor store density, unemployment rates and the number of children living in poverty.

In general, poor and rural counties ranked lower than wealthier suburban counties, but the surveys highlighted different challenges almost every county faces. For example, Livington County, Illinois, ranked low due to higher than average rates of smoking, sexually transmitted diseases and alcohol abuse. On the other hand, pollution showed up as an issue for St. Mary Parish in Louisiana.

Reaction from Jefferson County, Oregon, ranked the least healthy county in that state, was typical.

"We are in a position to use this information for the betterment of Jefferson County," County Public Health Department Director Tom Machala told the local newspaper. "It doesn't feel good to be the last-ranked county."

Other studies have ranked states on health factors, but this is the first time researchers have examined the multiple factors that affect health in each county in all 50 states. The report generated more than 6,000 media stories in publications ranging from the *Washington Post* and *USA Today* to the *Argus Leader* in Sioux Falls, South Dakota, to the *Fresno Bee*.

"We worked for six months to carefully craft our message," Remington says. "This is the same experience we've had in Wisconsin over the last seven years."

Remington and David Kindig, MD, PhD, emeritus professor of population health sciences, launched the Wisconsin version of the county health rankings in 2003. Other key members of their team are Bridget Booske, PhD, MHSA, the team's scientific director who designed the surveys, and Julie Willems Van Dijk, RN, PhD, the community engagement leader and a former county public health director in Wausau, Wisconsin.

The institute will produce county health rankings for all 50 states in 2011 and 2012 as part of the Robert Wood Johnson grant. After that, who knows?

"We're in discussions with the foundation and others such as the Centers for Disease Control and Prevention about the long-term future of the project," Remington says.

Visit med.wisc.edu/26530 to see a video.

THE STORY OF

Lily's Fund

by Anne Morgan Giroux

One in 100 Americans has epilepsy. One of them is my daughter—a beautiful blue-eyed teenager named Lily.

Like every new mom, I anxiously awaited her first steps as a toddler. Like every toddler, Lily took her share of spills. Often, she would just drop to the ground with no apparent cause for her misstep ... like a marionette whose strings had been cut. But she quickly got up and went on her way.

Eventually, my mother's intuition kicked in and drove us to seek answers to the multiple falls. After many blood tests, MRIs, EEGs and no small amount of anxiety, we found ourselves traveling down an unexpected path—living with a condition called epilepsy.

Over the years, Lily has failed several medications. A vagus nerve stimulator, surgically implanted into her chest, proved futile. And a rigid high-fat, almost-no-carb seizure-controlling diet did nothing.

But today, the right medication cocktail seems to be working. Lily, now 15, has not had a seizure that we know about for three years. I hesitate to brag about it, though. The memories of days when we witnessed dozens of seizures per minute remain painfully vivid.

Lily, opposite in lei and grass skirt, looks on as guests at the 2010 luau enjoy themselves and also raise $40,000. From left, Robert Golden and Sarah Carlsson; Colleen Penwell, Anne Giroux and Sabrina Frey; and Avtar Roopra. Opposite bottom, Grace and Lily gear up for softball.

THE START OF LILY'S FUND

Lily and millions of others who live with epilepsy deserve more. They need new diagnostic tools, improved seizure-controlling medications and better surgical options. They need a cure. They deserve hope.

One day in 2006, a glimmer of hope showed up in our local newspaper—in an inconspicuous story on a study in *Nature Neuroscience* about a possible epilepsy treatment. We had seen similar stories about new breakthroughs in faraway laboratories, but this one came from an SMPH lab one mile from our home.

Two of the lead researchers, Avtar Roopra, MD, professor of neurology, and Thomas Sutula, MD, PhD, chair of neurology, met with us for coffee. With great passion, and a few scientific words we could not possibly understand, they described their work and the exciting research being done right here at the medical school.

That was the genesis of Lily's Fund for Epilepsy Research. Working with the UW Foundation, we made a personal investment in this life-changing work, establishing a fund to "celebrate and support" epilepsy research at UW-Madison.

What began as a private gift became a public groundswell. When others heard about the fund, they felt empowered to share their personal stories. "My aunt has epilepsy." "My mother died of epilepsy." "My brother suffered from epilepsy." I knew how many people were touched by epilepsy, but I didn't realize how many of those people were so close to me and my family. They are all around us, coping silently with a health condition that has been relegated to the shadows for too long.

Epilepsy affects more people than multiple sclerosis, cerebral palsy, muscular dystrophy and Parkinson's disease combined. However, research dollars spent on epilepsy pale in comparison.

LILY'S LUAU

With strong encouragement from a circle of friends, we put Lily's Fund—and epilepsy—squarely in the public spotlight. In January 2009, "Lily's Luau" was held at the UW Memorial Union, raising money and awareness. Neurologists, scientists, business leaders, family members and friends came together in their grass skirts and Hawaiian shirts for a common purpose.

Shortly after the first luau, we received an email from Bruce Hermann, MD, an SMPH neuropsychologist.

"I have been in academics for 30 years and have never seen an event like Lily's Luau," he wrote. "We deeply appreciate all you are doing to help us in the fight against epilepsy."

Two guests at the first luau were Colleen and David Penwell, who were invited by mutual friends. Their 11-year-old daughter, Grace, was diagnosed with a severe form of epilepsy when she was two. After multiple medications, combinations of medications and brain surgery, Grace continues to suffer from tonic-clonic seizures on a weekly basis.

Like us, the Penwells needed hope that a new discovery was somewhere around the corner.

"Epilepsy affects my everyday life. I need to know that there's someone right here, right down the street, who is devoted to epilepsy research—someone whose job it is to crack the code," says Colleen.

In January 2010, with the help of the Penwells, we transformed the Memorial Union into a tropical paradise once again. A sold-out crowd of 450 raised $40,000 for epilepsy research at UW, giving hope to people living with the disease.

FUND A FELLOW

At the second luau, we announced our new goal for Lily's Fund: funding a new research fellowship at the SMPH. A "Lily's Fund Fellow" will work exclusively on epilepsy research and can help the university leverage outside funding, position the school as a leader in epilepsy research, attract new talent into the neurology field and keep the momentum going.

SMPH Dean Robert Golden says, "Lily's Fund is very focused, very effective with a grassroots feel to it. You know that every penny raised is immediately going to be put to good use. We are now on the threshold of a major series of breakthroughs, so the timing is perfect to roll up our sleeves and become rededicated to an enhanced effort to tackle epilepsy."

Visit lilysfund.org to learn more.

Neurology Residency

FIRM FOOTING FOR PAIN MANAGEMENT

by Dian Land

From the moment she began her first clinical rotation at the start of her third year as a medical student at the SMPH, Kathryn (Katie) Nixdorf, MD '06, knew she would specialize in neurology.

Nixdorf can't say for sure if it was because she loved the neurology so much or because she finally had the opportunity to work in the hospital, but that rotation sealed the deal for her, she says.

"I was given a good deal of autonomy and responsibility," she recalls, looking back to medical school as the end of her UW-Madison neurology residency and the beginning of a pain management fellowship in Portland, Oregon, draw near.

But it was more than that.

"Neurology makes you think a lot," she says. "A thorough neurologic history can give you 80 percent to 90 percent of your diagnoses, and the physical examinations are extremely detailed."

As a Med 4, Nixdorf took an additional neurology elective as well as an elective in pain and began to think seriously about the subspecialty of pain management. She had first become exposed to the complex field as a college student, when she worked in a private pain clinic in her hometown of Eau Claire, Wisconsin, during the summers.

Also during medical school, Nixdorf met Miroslav Backonja, MD, an SMPH neurologist who heads the UW Hospital and Clinics pain clinic and conducts research on pain.

"Dr. Backonja became my mentor and I worked with him on research on treatments for peripheral neuropathy," she says, adding that that experience strengthened her interest in pain management even more.

Nixdorf knew she first needed a firm footing in neurology. When it came time to choose a residency, she elected to stay in Madison, even though she already had eight years of education at UW under her belt (she was a medical scholar as an undergraduate, which gave her provisional entrance into UW medical school).

On the fourth-year neurology consult, Nixdorf has seen cases ranging from "routine" stroke and dementia to complex problems such as autoimmune encephalitis, heatstroke and progressive multifocal leukoencephalopathy.

"People say you should try to get away, for a different perspective, but I decided to stay because the neurology residency here is very good, I like the people in it and I love Madison," she says. "I'm extremely happy about my decision."

The four-year program consists of five combined inpatient-outpatient services in epilepsy, neuromuscular diseases, pediatric neurology, stroke and general neurology. Residents spend several weeks in each service over three years.

"Much of the time we saw stroke and general neurology patients at UW Hospital and Clinics and the Middleton VA Hospital," says Nixdorf. "With the large referral base at the hospitals, we see a lot of critically ill patients."

It's the bread and butter of the training.

"By the time we're done, we have skills in reading electroencephalograms and performing basic electromyelograms, which are some of the most common procedures we do in neurology," she says. "We also have a strong foundation in neuroradiology."

Nixdorf chose electives in movement disorders, neurologic critical care and neuroradiology, where she learned about MRIs and other imaging procedures. Residents also participate in "continuity clinics" at the VA and UW Hospital, following patients over the course of their training and becoming closely involved in their care.

Nicholas Stanek, MD '88, director of the UW neurology program, was one of Nixdorf's advisors for one of these clinics.

Now in her fourth year, Nixdorf has participated on neuro consults for four months, seeing patients on other services who have neurological issues.

"We have seen some very interesting cases on this busy service," says Nixdorf.

Cases range from the "routine"—stroke, dementia, altered mental status and tremor—to very complex, such as autoimmune encephalitis, heatstroke and atypical infections like progressive multifocal leukoencephalopathy.

The rest of her final year, Nixdorf has concentrated on the pain consult service, working with a team that includes nationally respected nurse practitioners specializing in pain management. A team approach—combining the perspectives of medicine, nursing, physical therapy and psychology—is typically the most effective in dealing with pain patients, she says.

The patients are unique, adds Nixdorf, often presenting with a history of frustration, stress and anxiety relating to their hard-to-treat pain problems.

"As much as possible, we want to start fresh with pain patients," she says. "In the pain clinic, we're asked to come up with at least two diagnoses. After completing that detailed neurologic exam and history, we can arrive at amazing findings."

Neuroscience Care U

"In the pain clinic, we're asked to come up with at least two diagnoses for each patient," says Nixdorf. "After completing that detailed neurological exam and history, we can arrive at amazing findings."

Miroslav Backonja (left) was a mentor to Nixdorf during medical school and Nicholas Stanek ('88) was an advisor on a neurology "continuity clinic."

The team usually suggests a multi-modal treatment plan that may include physical therapy, relaxation techniques or perhaps hypnosis or massage in addition to medications.

"It's important to know what the patient's main goal is," she says. "It may range from going back to work to simply lifting their grandchildren."

Nixdorf's goal now is to see where her yearlong fellowship at Oregon Health Sciences University in Portland will take her.

"I'm finally ready to try somewhere other than Wisconsin, if only temporarily," she says.

But the active SMPH alumna will likely stay in touch with the Wisconsin Medical Alumni Association (WMAA). She has been involved as a student leader and now serves as the WMAA's representative for the Class of 2006. She also participates in the WMAA's annual Operation Education program, in which physicians tell medical students about their specialties.

Nixdorf also worked as a group leader for the new clinically based neuroscience course for the second-year medical student class. Students ranked her well—indeed, they recognized her skills with an award for being a top resident teacher.

Where will she end up practicing?

"I see myself ultimately practicing somewhere in Wisconsin or Minneapolis," she says. "But you never know."

WRITTEN IN THE STARS Continued from page 19

Eight years later, with training in the Harvard Business School Advanced Management Program under his belt, Murray was appointed medical director of Kaiser Permanente of Southern California. One of the largest and oldest health maintenance organizations (HMOs) in the country, Kaiser Permanente combined health plans, hospitals and medical groups in a highly complex relationship.

Murray's job entailed overseeing 50 medical offices and about 50,000 employees.

During his 12-year tenure as medical director, he helped usher in the use of nurse practitioners, evidence-based medicine and electronic medical records—well in advance of most of the rest of the country.

"I think one of my major contributions to Kaiser Permanente was to formalize the business administrative structure of the organization," he says. "I thought more about those kinds of things than the things doctors are generally most interested in—which is patient care."

Another key accomplishment had to do with quality assurance for HMOs.

"I worked with the medical director of the Harvard Community Health Plan and the CEO of Henry Ford Hospital System in Detroit to create the National Committee for Quality Assurance, a Washington, DC-based accrediting agency related to quality issues in HMOs," he says.

Gabriele ZuRhein, Murray's mentor during medical school, accompanied him at graduation in 1960. He made sure to visit her when he returned to campus for his class's 50th reunion this spring.

Murray stayed with Kaiser Permanente until his retirement in 1993, and then served in a national leadership role in the organization's Atlanta offices for an additional two years.

BACK TO THE STARS

Post-retirement, Murray returned to his love of astronomy. He even seriously contemplated pursuing a PhD in astrophysics at the University of Arizona. Instead, the Murrays decided to move to Big Bear Lake, where they have breathtaking views of the western skies.

"It's interesting how things guide you down a path in life," says Murray. "If I hadn't been in the military or raised my hand and said I could type, I might not have become a doctor or medical director."

And if he hadn't received a telescope as an eight-year-old, he might not be illuminating the minds of budding astronomy fans in California today.

It's all written in the stars, or so they say.

BUILDING BIOTECHNOLOGY Continued from page 13

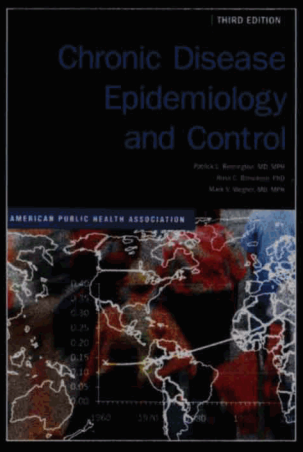
"WIMR will provide the environment and infrastructure to accelerate the pace of discovery and will also support the process of translating discoveries to full application in clinical, community and commercial settings," he says. "WIMR will showcase the quality, applicability and impact of research being done in the SMPH."

For Bufford, her education and experiences confirm that such a vision is not only exciting, but necessary, to fully develop the interface between biotechnology, healthcare organizations and both patient and population health.

"The biotechnology sector has done a good job of translating scientific findings to real-world applications. As these principles are adopted by academic medical centers and other nonprofit research organizations, scientific discoveries will move more rapidly from the bench to bedside to curbside, where they can have an impact on human health," she says.

At the SMPH, where untangling mysteries and solving puzzles propels science forward in what seems like an instant, all of the pieces appear to be coming together.

A Public Health Analysis of Chronic Diseases



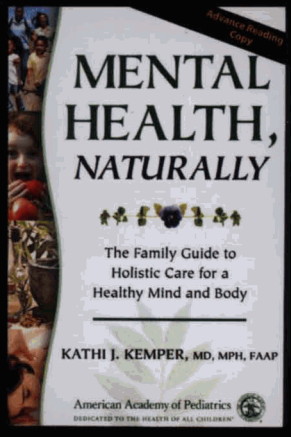
Chronic diseases are the leading cause of death and disability in the United States; they also account for a very large portion of the country's healthcare costs.

The third edition of *Chronic Disease Epidemiology and Control*, edited by Patrick Remington, MD '81, MPH, and colleagues, describes ways to analyze the problem.

Published recently by the American Public Health Association, the book contains chapters on the leading chronic diseases—nutrition, obesity, diabetes and cardiovascular disease. Many were written by Remington's colleagues at the SMPH. In each chapter, the authors identify causes, consequences, groups at highest risk and effective methods of prevention.

Remington, a professor of population health sciences at the SMPH, is also the associate dean for public health. His co-editors are Ross Brownson, PhD, of Washington University, and Mark V. Wegner, MD '99, MPH, of the Wisconsin Division of Public Health.

A Holistic Guide to Children's Mental, Physical Well-being



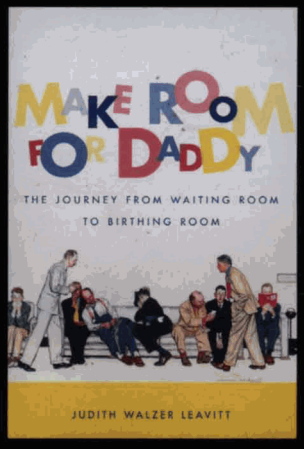
The American Academy of Pediatrics has published a new guide for parents seeking natural treatments to obtain optimal mental and physical health for their children. Written by Kathi J. Kemper, MD (PG), MPH, the book is called *Mental Health, Naturally*.

The book provides a comprehensive overview of mental health disorders, outlines specific strategies for improving mental health issues and offers detailed approaches for children suffering from problems such as attention-deficit hyperactivity disorder, anxiety, stress and substance abuse.

Covering fundamental techniques to combat mental health problems—such as maintaining proper nutrition, rest and exercise–Kemper also details practices and methods such as acupuncture, homeopathy, massage, and chiropractic and osteopathic therapies.

Kemper is the Caryl J. Guth chair for holistic and integrative medicine at the Wake Forest University School of Medicine. She is a 1986 alumna of the UW pediatric residency training program.

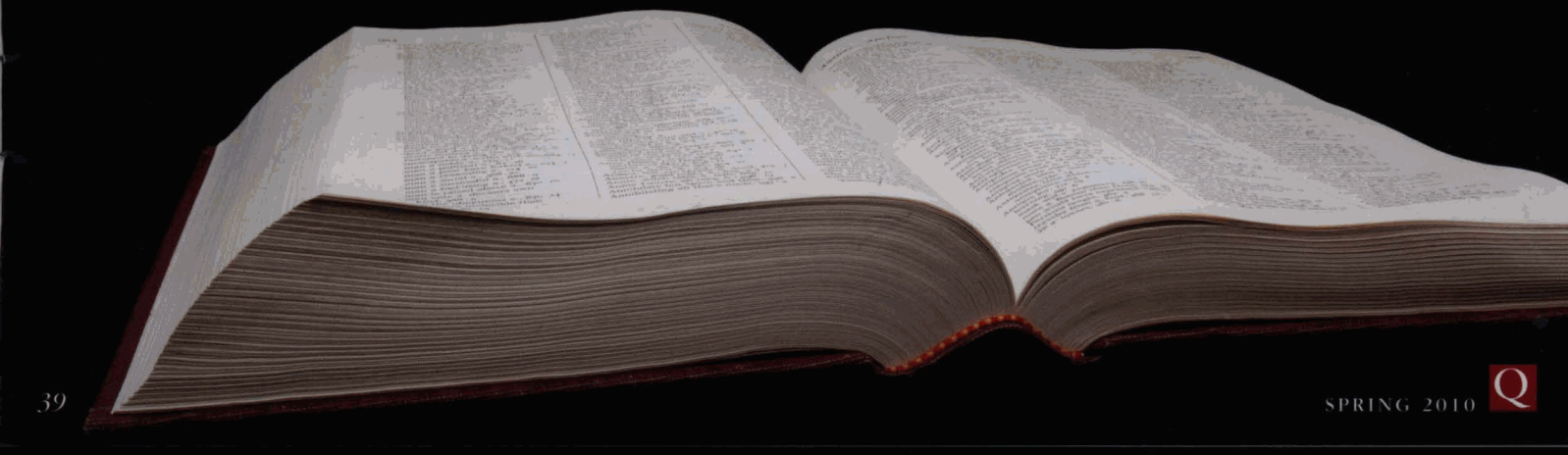
How Men Found Their Way To the Birthing Room



Researching her second book on childbirth from a woman's perspective, Judith Leavitt, PhD, professor of medical history and bioethics at the SMPH, stumbled upon archived journals in which men described their feelings as they anticipated the birth of a child from hospital waiting rooms. As a result, Leavitt switched her focus and wrote *Make Room for Daddy: The Journey from Waiting Room to Birthing Room*.

Using fathers' accounts from the journals and other sources, she describes the changing role of expectant fathers from the 1940s to the 1980s, showing how men moved first from the hospital waiting room to the labor room, and then on to delivery and birthing rooms. Leavitt also charts medical inequalities, the impact of race and class and the evolution of hospital policies.

Published by University of North Carolina Press, the book came out last Father's Day.



THE MEDICAL ALUMNI ASSOCIATION: CORNERSTONE OF PRIDE AT THE SMPH

Jon Katzenbach, in his book *Why Pride Matters More Than Money,* describes the process of building pride in an organization, and the benefits derived from success. The concept of "pride building" was foreign to me, but after reading this author's ideas about the qualities that successful organizations share, it was obvious that pride is a common thread among them.

Katzenbach explains that it is not always clear whether this pride among constituents originates from the strength of the organization they support or whether "pride building" is required as an essential step in the organization's success. In any case, there is no question that our proud medical alumni membership is an important part of the success of the SMPH.

At this year's Winter Event WMAA board of directors meeting, Medical Student Association (MSA) president Bob Zemple reminded alumni of their important role in helping make the school's Health Sciences Learning Center a reality. When the idea of consolidating basic science and clinical teaching on the west campus was being conceived, alumni showed a willingness to step forward during a critical time. They showed support and helped raise funds. On behalf of the MSA, Bob suggested that these efforts be personalized with the naming of seats in Alumni Hall for donors, past and present. This would be a way to both demonstrate pride in our medical school and further engage our alumni.

Also at the Winter Event, Marje Murray of UW Foundation announced the exciting news that the WMAA has received a generous donation of $1.5 million for student scholarships from the estate of one of our alumni. This too is an important reminder of the level of commitment our proud and grateful alumni share. Though not all of us routinely attend alumni events, many choose instead to make their support known through monetary contributions.

When I attend alumni events or medical school-sponsored activities or join faculty or students on campus or around the state, I reflect on everything we share as graduates or residency alumni of the SMPH. We are a part of a world-class university that impacts so many people through research and patient care. I think that many of us choose to support the university because of the visible success of the institution we are part of. Some of us choose to be supportive through events and social gatherings sponsored by the WMAA, some by saluting the honorees at the awards banquets and Annual Max Fox Preceptor Award Dinner, while others less visibly support the efforts of our alma mater through letters of encouragement, e-mails and class notes. This recent unexpected, unsolicited gift to the WMAA is a quiet, yet very strong reminder to us all of the unspoken or uncelebrated gratitude of many of our colleagues that may have gone unexpressed in other venues.

While most of our events are about the collective fun of being together and talking about our shared experiences in training, the bond that keeps us close is our pride in our medical school.

Katzenbach does make the point that people support organizations with strong leadership, vision and a mission that they can be passionate about—something they can connect with. Our board members play a key role in the success of the association, its mission and vision to support the medical school. The WMAA looks to its board to clarify those values. We have a new long-range plan, a new committee structure, and we can thank dedicated directors who volunteer their time to assure strong footings for an organization in which participation is both appealing and fun.

Christopher Larson, MD '75
Quarterly *Editorial Board Chair*

Inbox

SUBJECT: STAFF CHANGES AT THE WMAA

Barb Lukes and Bonnie Howard will no longer be greeting people at WMAA events or in the office because they've both retired. But Joyce Jeardeau, the newest addition to the WMAA staff, has stepped in to fill their shoes. Read about the changes at: http://www.med.wisc.edu/27029

SUBJECT: RESEARCH DIGEST ONLINE

Would you like to see the moving cells described in Research Advances (pages 31) in this issue of Quarterly? You can see that and much more in the latest issue of Research Digest, our online newsletter on recent research developments at the SMPH. Go to http://www.uwhealth.org/27085.

SUBJECT: RURAL MEDICINE SERIES

The *Wisconsin State Journal* is running a series on the shortage of physicians in rural Wisconsin. One part shone a spotlight on the SMPH's Wisconsin Academy for Rural Medicine. Read the story and watch a video at http://host.madison.com/news/video/vmix_2ebaef7a-39e2-11df-92c1-001cc4c002e0.html

SUBJECT: VIDEOS OF AUTHORS

Author Rebecca Skloot was at the SMPH recently, speaking to a standing-room-only crowd that wanted to hear about her best-selling book, *The Immortal Life of Henrietta Lacks*. The talk was part of a series called Authors@HSLC. All of the presentations have been recorded on video for the public to view. Go to http://videos.med.wisc.edu/authors/.

SUBJECT: REMEMBERING OLD FRIENDS AND COLLEAGUES

Sheldon Wagner, MD '57, and Timm Zimmermann, MD '63, recently passed away. Friends such as Ted Fox, MD '57, a classmate of Wagner's, and Robert Seward, MD '66, who knew Zimmermann well, reminisce about the losses. To read their thoughts, go to: http://www.med.wisc.edu/27034.

We Want to **Hear From You**

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

Have you moved? Please send us your new address.

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

OR www.med.wisc.edu/alumni/share-your-news/874
OR quarterly@med.wisc.edu

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

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

MS-245330-10

University of Wisconsin
SCHOOL OF MEDICINE
AND PUBLIC HEALTH

As dusk arrives, Chris Paskus of C & N Photography captures the seven-floor Wisconsin Institutes for Medical Research (WIMR) and the curving wall of the Health Sciences Learning Center. The buildings, together with UW Hospital and Clinics in the background, house the bulk of the school's vibrant research, education, training and administrative programs. *Photo courtesy of Zimmerman Architectural Studios, WIMR architect.*