

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

Todd Brown Sarah Ehlenbach

Chris Frazee

John Maniaci

WISCONSIN MEDICAL ALUMNI ASSOCIATION:

EXECUTIVE DIRECTOR

Karen Peterson

EDITORIAL BOARD

Christopher Larson, MD '75, chair Kathryn S. Budzak, MD '69

Maureen Mullins, MD '79

Sandra L. Osborn, MD '70 Patrick Remington, MD '81, MPH

Wade Woelfle, MD '95

EX OFFICIO MEMBERS

Robert N. Golden, MD

Dian Land

Marje Murray

Karen Peterson

BOARD OF DIRECTORS

2009-2010

Kathryn S. Budzak, MD '69

Renee Coulter, MD '79

Philip Farrell, MD, PhD

Stephen Fox, MD '86

Donn Fuhrmann, MD '76

Kay Gruling, MD '88

Charles V. Ihle, MD '65

Susan Isensee, MD '83

Thomas Jackson, MD '67

John Kryger, MD '92

Christopher L. Larson, MD '75

Anne Liebeskind, MD '98 Johan A. Mathison, MD '61

Patrick McBride, MD '80, MPH

Steven Merkow, MD '80 William C. Nietert, MD '78

Sandra L. Osborn, MD '70

Steven Pizer, MD '85

Ann Ruscher, MD '91

Ann Schierl, MD '57

Sally Schlise, MD '76

Wade Woelfle, MD '95

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

FEBRUARY 2010

FRIDAY, FEBRUARY 19 • WMAA WINTER EVENT AT THE WISCONSIN DELLS

WMAA Executive 1 p.m.

Committee Meeting

WMAA Board of Directors Meeting 3 p.m.

6 p.m. Social Hour

Dinner and Program 7 p.m.

APRIL 2010

APRIL 22 - 24 • ALUMNI WEEKEND

Class reunions for classes of 1945, 1950, 1955 and 1960

THURSDAY, APRIL 22

5 p.m. Dean's Reception at the Madison Club

6:30 p.m. **Class Reunions**

FRIDAY, APRIL 23

10 a.m. **Quarterly Editorial Board Meeting**

11:30 a.m. 50th Class Luncheon

WMAA Board of Directors Meeting 2 p.m.

Awards Banquet 6 p.m.

SATURDAY, APRIL 24

9 a.m. **Brunch with Students**

Building Tours

MAY 2010

FRIDAY, MAY 14 • GRADUATION DAY

10 a.m. Recognition Ceremony, Union Theater

7:30 p.m. Graduation Party, Monona Terrace

OCTOBER 2010

OCTOBER 8 - 9 • HOMECOMING WEEKEND

Wisconsin vs. Minnesota Football Game Reunions for Classes of 1965, 1970, 1975, 1980, 1985,

1990, 1995, 2000 and 2005



CONTENTS

OUARTERLY • WINTER 2010 • VOLUME 12 • NUMBER 1



4



Caring for Veterans

Innovative psychiatric care is one of many services provided at the Middleton VA Hospital in Madison.

10



Health & Society

Program leaders ensure that scholars access an abundance of research topics and collaborators.

8



White Coat Ceremony

As they begin their transformation, students hear an inspirational message about the medical profession.

On the Cover

A volunteer veteran demonstrates the virtual reality therapy program that is helping patients at the William S. Middleton Memorial Veterans Hospital deal successfully with post-traumatic stress disorder.

2-3 Leader's Messages

13 Spotlight

16 Alumni Profile Kathleen Carr, MD '97

18 Alumni Noteboook

26 Research Advances

28 Student Life

33 Letters

34 Development News

36 Post Graduate

38 Healer's Journey

40 Larson's Perspective

ROBERT N. GOLDEN, MD



n several occasions recently, I was frustrated to hear friends and colleagues in the community refer to Madison's "three hospitals." In fact, we—the community in general and the School of Medicine and Public Health in particular—are blessed with wonderful partnerships with four truly outstanding hospitals.

While our primary partnership is with UW Hospital and Clinics, we also enjoy excellent academic relationships with two very strong community hospitals: St. Mary's and Meriter. Another very important partner, however, is often under-recognized: the William S. Middleton Memorial Veterans Administration Hospital, one of the nation's top veterans administration hospitals.

A number of our country's leading medical schools benefit in major ways from partnerships with great VA hospitals. (Those partnerships are probably one reason why they are leading medical schools.) These relationships are increasingly important as academic medical centers recognize our country's obligation to address the healthcare

needs of the men and women who have served in our armed forces. Unfortunately, those healthcare needs will grow into the foreseeable future as we anticipate ongoing hostilities overseas.

In addition to their vital role in providing service to the men and women who have served us, VA hospitals also provide wonderful training and academic activities. When I was a medical student, I received outstanding clinical education at academic VA hospitals in both Boston and West Haven, Connecticut. For our UW medical students, and residents as well, the chance to learn while providing clinical care for our nation's former military members is an important and special experience.

The VA has also traditionally supported our research mission, providing laboratory space, opportunities for clinical and translational studies, one of the first electronic health record systems and core support for research career development for many of our outstanding physician scientists.

While many leading medical schools enjoy such relationships, we are so fortunate that our relationship is with one of the nation's most highly recognized VA hospitals. The William S. Middleton Memorial Veterans Administration Hospital has repeatedly received special notice and high marks for clinical performance. In fact, it just earned "Magnet Status" for its nursing excellence and quality patient care.

In addition, it continues to compete successfully with other VA hospitals for federal support to enhance its physical plant. Looking into the near future, we are delighted that new and renovated facilities will allow the Middleton VA faculty, trainees and staff to expand in their clinical and academic missions.

In this issue, we offer a glimpse into some of the highly innovative programs at our VA hospital, especially in the area of psychiatric care. I am sure that as you read the article, you will gain a renewed appreciation for the vital role this facility—especially the people in it—plays in addressing the healthcare needs of our country's veterans, while glistening as a jewel in the SMPH crown.

Finally, I hope you will share my eagerness to offer a polite correction the next time someone refers to the "three" hospitals in Madison, Wisconsin.

Robert N. Golden, MD

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

KAREN PETERSON

reetings, medical alumni. What a fantastic fall semester we experienced! The Wisconsin Medical Alumni Association (WMAA) sponsored many events and programs to connect with medical alumni, students and residents at UW Hospital and Clinics.

Our efforts to engage students are continuing strongly. The WMAA's involvement in student life began during New Student Orientation Week with a popcorn/movie night held in Alumni Hall. Throughout the semester we sponsored the White Coat Ceremony, a Halloween open house and the Alpha Omega Alpha banquet.

In addition, the Medical Student
Association asked to "formalize" its
relationship with the WMAA. The student
participation committee, advisory in nature,
now meets on a regular basis with committee
chair Anne Ruscher, MD '92, and me. The
students are a wealth of information, and
their advice is essential to shaping our
programs to support them.

Homecoming, our largest event of the fall, drew 600 alumni and friends! Given the demolition of Union South, the tailgate party was held for the first time in the Health Sciences Learning Center (HSLC). Several classes celebrated reunions during this weekend. Highlights included a presentation from infectious disease expert Dennis Maki, MD '67. He provided us an update on the very timely topic of H1N1. You will enjoy the reflections on pages 18 through 21.

The WMAA also continues its efforts to connect with University of Wisconsin Hospital and Clinics residents. Tickets to the Wisconsin vs. Michigan game served us well! A record 110 tickets were sold to residents and their guests. WMAA board members joined the residents for a tailgate party prior to the game. And, of course, we all enjoyed the Badger victory that day.

The WMAA staff looks forward to our winter events and the spring semester. Below are some highlights. Please mark your calendars because we would love to see you.

WINTER EVENT

This year we are planning a family-friendly event at no better place than the Wisconsin Dells. We will meet at the Great Wolf Lodge on February 19, 2010. Bring your children and/or grandchildren to enjoy the water park and other amenities at the Great Wolf. WMAA President-elect Donn Furhman, MD '76, will be the guest speaker. His topic, "Physician Wellness," will benefit us all.

ALUMNI WEEKEND/ SPRING REUNIONS

Alumni weekend is early this year, occurring April 23 through 25. The classes of 1945, '50, '55, '60 and '65 will celebrate reunions. You will be hearing from your class representatives soon! We will again partner with the Wisconsin Alumni Association (WAA) to offer "Day on Campus." This year the theme for the day is "Food Summit." Topics include Urban Farming, Food Culture, Access to Food, Global Food Demand, School Lunches and Local Food. Tours of the campus, the HSLC and the American Family Children's Hospital will be offered.

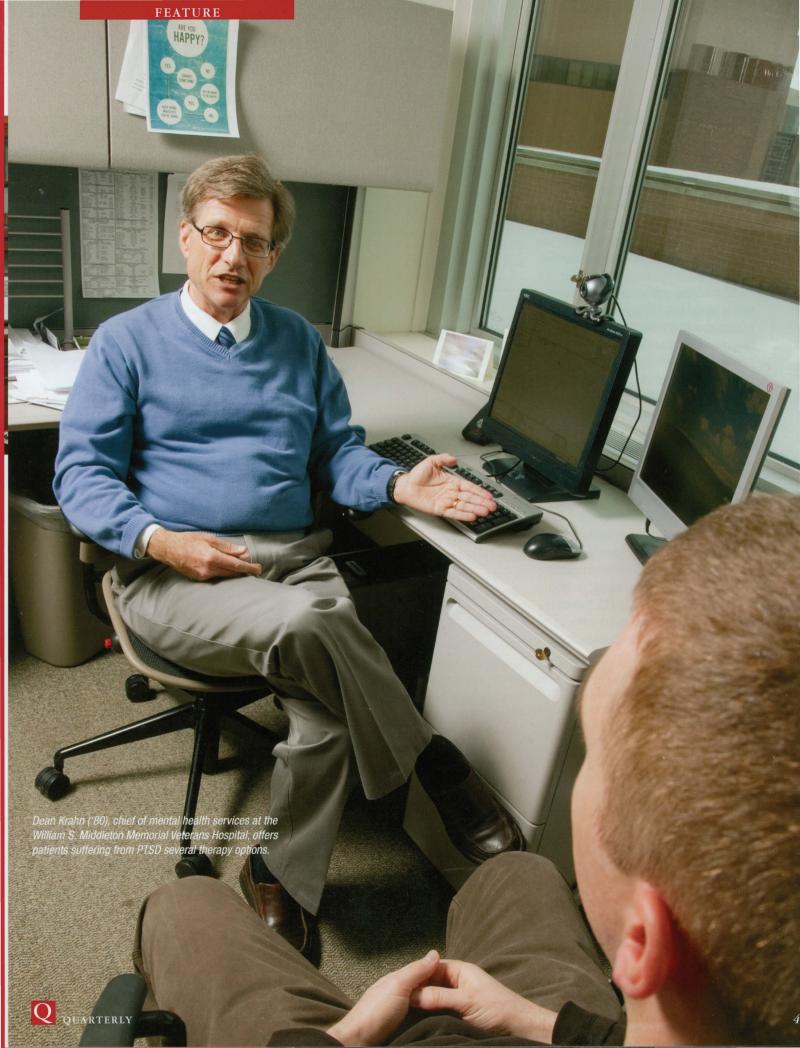
As a reminder, you can visit us online at http://www.med.wisc.edu/alumni to keep up to date on all WMAA happenings. From here you can also update your records, join our association, make nominations for awards and sign up for events.

As always, please feel free to contact me with your ideas. You can reach me at kspeters@wisc.edu, (608) 263-4913 or write to Karen S. Peterson, Assistant Dean for Alumni/External Relations and Director, Wisconsin Medical Alumni Association, 750 Highland Avenue, Madison, WI 53705. I look forward to hearing from you!

Karen Peterson

Wisconsin Medical Alumni Association Executive Director





INNOVATIVE PSYCHIATRIC AND OTHER CARE FOR

Veterans

earing a visor that projects a lifelike scene before his eyes, the veteran patient finds himself in a Humvee with other soldiers, approaching a village on the edge of a desert. A therapist at a nearby computer keys in additional audio and visual cues—a shout coming from a rooftop, local people in an open-air market—to re-create as realistically as possible the tense scene the veteran has previously described. The veteran hears a loud blast through the headset he is wearing and feels the reverberations from the explosion in the platform beneath him. His heart races; he begins to sweat; he starts to talk.

By "reliving" disturbing experiences using multisensory virtual reality equipment in this way, patients at the William S. Middleton Memorial Veterans Hospital in Madison, Wisconsin, are learning to deal successfully with their post-traumatic stress syndrome (PTSD).

The therapy helps them engage emotionally with distressing memories instead of trying to push them away, says

Dean Krahn, MD '80, MS, chief of mental health services at the hospital.

"From a safe place and with the help of a therapist, patients can begin to experientially and psychosomatically process their feelings about the trauma they experienced," says Krahn, a professor of psychiatry at the University of Wisconsin School of Medicine and Public Health (SMPH).

It's the first step in dissipating and controlling feelings that have led to the patients' current PTSD-related problems, which can include anger, jumpiness, sleeplessness, alienation, headaches, nightmares, avoidance, guilt, detachment, depression, substance abuse and thoughts of suicide.

The virtual reality program, which younger Iraq War veterans often prefer over other treatments, is one of several therapy options Krahn and his team of psychiatrists, psychologists and social workers offer their patients. The Madison VA hospital is an early adopter nationally of this latest PTSD treatment.

The psychiatric services are among the many that put the hospital at the cutting edge, says Alan Bridges, MD, chief of staff at the VA hospital since 2005.

"We're the only lung transplant center in the network of 153 VA hospitals, and one of only four heart transplant programs nationally," says Bridges. "We also recently received designation as an epilepsy center of excellence, one of only a handful in the VA system."

The Geriatric Research, Education and Clinical Center (GRECC) is a research cornerstone at the hospital.

"Ours is one of the best funded and most productive GRECCs in the country," says Bridges, an SMPH professor of medicine.

Since the average age of patients receiving services at the Middleton VA is 64, the work under way in the GRECC is particularly relevant. Researchers there are studying Alzheimer's disease, swallowing disorders, osteoporosis and calorie restriction as it relates to aging and disease.

—Continued on next page



In almost all research and clinical areas, the VA hospital is highly integrated with the SMPH and UW Health.

"About 600 UW Health physicians are credentialed at the VA," says Bridges. "We couldn't maintain such a high level of performance without our collaborations with UW physicians. We've piggybacked on several of UW's top programs."

In fact, the relationship goes both ways, with each partner giving and taking. In the realm of research funding, for example, the VA gives substantially.

"The VA funding line is at the 25 percent level, while the National Institutes of Health's is about 10 percent to 15 percent," says Bridges. "Dozens of SMPH doctors have begun their research programs with VA Merit Review grants."

In terms of facilities, VA administrators recently committed to a comprehensive, decade-long upgrading that will make Madison one of the better-equipped veterans hospitals in the country. Projects include the rebuilding of intensive care units, expanded operating rooms, construction of a short stay center for rehabilitation patients and the creation of a small, four-bed hospice unit on the adjacent grounds.

"High-quality subspecialty care is lacking in many places within the VA network, so we are positioning ourselves to be at the forefront in the future, with new facilities and equipment," says Bridges. "We couldn't do this without our partnerships with SMPH doctors, who clearly will benefit from the improvements."

The hospital serves as a major clinical training ground for SMPH students and UW Hospital and Clinics residents and fellows.

Most SMPH medical students spend time in the VA before they graduate. Some clerkships send students for a day or two while others, such as psychiatry and surgery, schedule several weeks in the VA. As many as 100 residents from 30 specialties excluding pediatrics and obstetrics also train in the hospital each year, and fellows in nearly all specialties rotate through the hospital in a typical year.

Although the VA hospital is right next door and physically linked to UW Hospital and Clinics, in some ways it offers trainees a very different look at clinical practice. While many private hospitals are just beginning to implement electronic medical records (EMR), for instance, the VA's EMR system has been in use for more than a decade. With a few

keystrokes, physicians can access patient notes and reports compiled at Middleton as well as other hospitals across the network from the last several years.

Extensive performance measurement designed to ensure quality and safety in all operations is an additional key feature at the VA. As detailed and comprehensive as assessments made sporadically by the Joint Commission on Hospital Accreditation, the VA report cards grade hospitals on between 150 and 175 measures each year.

The hospital also offers exposure to a rich patient pool. The Madison VA follows approximately 35,000 veterans, some 15,000 of whom come for specialty care each year. About 20,000 receive primary care within the main hospital and the four satellite clinics that have been established over the years to provide better access for—and compliance from—veterans living outside Madison.

"Vietnam veterans represent our largest group of patients today," says Bridges, noting that these veterans are beginning to experience the typical medical problems associated with aging. "We also see many younger vets who have just been released from active duty."

Physician, Veteran, Leader

With strong connections to the military, WILLIAM S. MIDDLETON, MD, dean of the University of Wisconsin School of Medicine and Public Health from 1935 to 1955, was an advocate for veterans his entire professional life.

A medical officer in World War I, he remained in the U.S. Army Reserves and served as an advisor to the Office of the Veterans Bureau from 1922 to 1942. At the beginning of World War II, he was called to active duty as chief consultant in medicine for the European Theater of Operations. He cared for many top American and British officers.

In 1955, Dwight D.
Eisenhower appointed
Middleton chief medical officer
of the Veterans Administration,
then a network of 172
hospitals and more than
105,000 patients.

Middleton expanded research significantly at VA hospitals and continued to

advance university educational programs in VA hospitals. He improved veterans' access to rehabilitation, cardiovascular and mental health care.

At the end of two four-year terms, Middleton received personal thanks from President John F. Kennedy.

In 1976, one year after Middleton's death, President Gerald Ford designated the VA hospital in Madison as the William S. Middleton Memorial Veterans Hospital.



Middleton was widely honored for his contributions to the American and British militaries.

A whopping 30 percent of the recently returned soldiers have mental health problems, says Krahn, with about 17 percent suffering from PTSD and 15 percent diagnosed with depression. These problems are often accompanied by alcohol and drug abuse, family difficulties and suicide risk.

To handle the growing need, Krahn's team has expanded by more than 50 percent in the last three years.

Frequent cycling between military and civilian life takes an emotional toll, he says.

"Today's soldiers are often gone every other year for five years," Krahn explains. "It's an amazing sacrifice, but it's not good for families or relationships, no matter who you are."

In order to identify and treat these patients as quickly as possible, the VA has incorporated mental health services into all its primary care clinics.

"We do PTSD, alcohol abuse and depresson assessments with almost every patient who gets primary care for any reason," says Krahn, who also is director of the mental health service line for the Great Lakes network of seven VA hospitals and 33 clinics in five states.

A psychiatrist and social worker are on hand at each site, or available via telemedicine links, ready to talk with any patient needing psychiatric care, and able to suggest an array of services.

"By not having to enter a door that essentially says 'shrink,' patients can avoid any stigma associated with mental health problems," Krahn says.

If a serious psychiatric issue arises that can't be handled at a primary care clinic, specialists at the Madison VA are always available via video link or in person. And since primary care clinicians are now covering most of the generic mental health issues, specialists are freer to focus on patients with more serious concerns.

Another strategy for getting patients the mental healthcare they need is providing same-day evaluation of those who call for an appointment, a policy Krahn instituted some five years ago.



Administrators recently committed to a comprehensive, decade-long upgrading that will make the Madison VA one of the better-equipped veterans hospitals in the country.

"Many younger vets want desperately not to have the problems they're having, but they find it very difficult to call to make an appointment," Krahn says, "Once they finally call, we don't want to lose them by making them wait."

For patients presenting with PTSD, the treatment options range from virtual reality. an extension of prolonged exposure therapy, to cognitive processing to new medication combinations that help block nightmares. Experts on Krahn's team are involved in research in all of these areas, as well as studies on the effectiveness of telepsychiatry and systems of care delivery.

Following up with all patients is standard operating procedure in the VA environment. Outcomes measures of PTSD patients, for example, are taken several times during treatment and three and six months after.

"The VA will probably be the caregiver for these patients for the rest of their lives," says Krahn, "so we plan to stay connected."

Patients with addiction problems also have access to a large VA treatment program, which in recent years has grown to include vocational and housing services. The VA has partnered with social service and housing providers in Madison, Beloit and Janesville, Wisconsin.

"Without community support, many of our efforts to meet the needs of the whole patient would be lost," says Krahn, who reinforced his public health perspective through training

in the SMPH Department of Population Health Sciences administrative medicine program.

Focusing on homelessness has recently become a priority. The VA's relationship with local housing provider Porchlight expanded last fall with the opening of a 24-unit, single-room transitional facility for homeless veterans. Residents, many of whom have mental health problems, will have easy access to VA services.

"This is part of a five-year federal government plan to reduce and eventually completely eliminate homelessness," says Krahn, who spoke at the dedication.

But the goal is more than simply overcoming PTSD, depression, addiction or homelessness, says Krahn.

"We want to get people all the way to 'well,' not just better," he says. "We want people to experience purpose, meaning and joy again."

With help, veterans, perhaps more than most people, should be able to achieve that, Krahn says.

"On the last day of boot camp, every veteran knew what it was like to be an efficient, fit person who could function at a fairly high level," he says. "A lot of psychologists and psychiatrists deal with patients who never were like that. But VA staff—and patients—know there's a relatively healthy person inside there somewhere. That's who we're always working to find."



White Coat Ceremony

BEGINNING A TRANSFORMATION

(() It is appropriate to stop and reflect, as you are poised at the beginning of your own unprecedented journey," said Cynthia Hag, MD, as she addressed the eager new students assembled before her.

It was a Sunday afternoon in October, when leaders of the University of Wisconsin School of Medicine and Public Health (SMPH) welcomed the Class of 2013 in the traditional White Coat Ceremony. The newest members of the Gold Humanism Society, seated onstage, were also recognized at the event.

Hag, a professor of family medicine at the SMPH and director of the Center on Global Health, delivered an inspirational talk on the challenges, joys and privileges of being a physician. Her message to the students included the following:

Remember that you are your own best tool; take time to care for yourselves and your loved ones. These moments will never come again. Savor each day and every encounter. Although your work will require sacrifice and discipline, don't forget to let go and enjoy the journey. If you deny your own needs and your own humanity, you will risk not being able to



honor the needs and humanity of your patients.

Learn as much as you can, but don't lose yourself in the process.

While you have access to tremendous scientific information and technology, this knowledge is useless until it is carefully applied to each individual patient and context. You cannot apply your knowledge unless patients accept and trust you enough to invite you into their world.

The art and magic of medicine lies within the doctor-patient relationship. This is when you employ empathic curiosity

to ask the right questions, to listen carefully to what is said and what is not said, and to apply your knowledge and skills to the care of the patient.

If you can combine your scientific knowledge with a special touch, a stance of "unconditional positive regard," humility and compassion, then you will become great physicians. Although much of what we know will change, the need for physicians as healers will remain constant.



Health & Society

PRESTIGIOUS PROGRAM PROMOTES
RICH RESEARCH, WELL-CONNECTED SCHOLARS

restige and resources come along with the Robert Wood Johnson (RWJ) Foundation's Health & Society Scholars Program. But the people involved say those things are not the most important benefits.

Yes, since the University of Wisconsin School of Medicine and Public Health was designated a site for the national program in 2002, it has brought in approximately \$1.5 million a year to support the post-doctoral scholars and boost population health research on campus and beyond.

And certainly, it is great to be among an elite group of institutions—including Harvard, Columbia, Michigan and the University of California-San Francisco—selected by the RWJ Foundation to host the program when it began in 2002. This program follows older RWJ human capital programs, such as those sponsoring clinical scholars and health policy scholars.

But the program's most important legacy may be the rich research it has spawned to advance interdisciplinary population health thinking: from a critical look at Wisconsin's health insurance for poor people to global positioning-enabled inhalers that are helping health departments create real-time maps of asthma outbreaks to a better understanding of the social and family roots of obesity.

Michelle Frisco, PhD, for example, was part of the first cohort of scholars that arrived on campus in fall 2003, and is now an assistant professor at Pennsylvania State University. She says her two years in Madison helped her launch a whole new research agenda—a multidisciplinary look at obesity. While in the program, she created partnerships with other researchers that are paying off today in the form of fruitful research alliances.

After two years in RWJ, Frisco started as a young Penn State professor with a National Institutes of Health grant in hand and connections to several research partners, including two RWJ scholars and a Wisconsin professor, Gary Sandefur, PhD, dean of Letters and Sciences. Frisco says the program changed her research direction,

pushing her toward population health and interdisciplinary research.

"Honestly, it was the two years of my career that most shaped who I am as a researcher and an academic," Frisco says. "It shaped my trajectory and my whole idea about what research should be."

Each January, a cross-section of a UW-Madison faculty interview about 16 applicants who have made it through multiple rounds to the finalist pool. Because the applicants come from backgrounds as diverse as anthropology, psychoneuroendocrinology and political science, some 90 professors have been assembled to help select the best candidates.

"We've been gratified to find that so many of our campus colleagues we didn't know before have interests in population health," says John Mullahy, PhD, SMPH professor of population health sciences. "We've developed a network that ranges from the School of Business to the Institute



LINDSEY LEININGER has spent part of her two years in Madison at the Wisconsin Division of Health Services, where she serves as an adviser on Badger Care and Badger Care Plus, the state's Medicaid policies that extend health insurance to the previously uninsured. She has helped brief the state's head of Medicaid, and is collaborating on an assessment of the Badger Care programs with Department of Population Health Sciences faculty. A current scholar, Leininger earned a PhD in public policy studies from the University of Chicago.



DAVID VAN SICKLE, a scholar from 2006 to 2009, is pursuing novel approaches to tracking and treating asthma. He has developed a GPS-enhanced asthma inhaler that can provide real-time data about asthma outbreaks through a Web-based disease tracking program. Van Sickle recently received a grant from the Centers for Disease Control and Prevention to assist that project. He also is working on a low-cost spirometer for use in developing countries. He holds a PhD in medical anthropology from the University of Arizona.



TIFFANY GREEN, who was a scholar in the 2007-2009 cohort, studied the relationships between pediatric asthma and obesity in children. Green, who is now doing post-doctoral work in the UW Center for Women's Health Research, is studying the differences in premature death among blacks, mixed-race blacks and whites during the post-Reconstruction Era in North Carolina. She is a health economist who completed her PhD in economics from the University of North Carolina at Chapel Hill in 2007.

for Research on Poverty to the School of Medicine and Public Health."

Mullahy co-directs UW's RWJ scholars program along with David Kindig, MD, PhD, professor emeritus of population health sciences, and Stephanie Robert, PhD, professor of social work.

You can see the network in action every Monday afternoon, in a conference room on the seventh floor of the WARF building overlooking Lake Mendota. Each week, the six RWJ scholars—three in their first year of the program, three in their second—interact with experts from campus and beyond to enrich their research. Topics of discussion have ranged from caregiver stress to healthcare reform to how to work with elected officials.

On a recent Monday this winter, for instance, Al Gunther, PhD, and Bret Shaw, PhD, of UW's Department of Life Sciences Communications, presented their research on communicating about science, and how indirect messages can affect health behavior.

Scholars at the table included Lindsey Leininger, PhD, a health policy researcher specializing in the uninsured; Katie Dickinson, PhD, an environmental economist studying social networks; Carmen Mandic, ScD, who studies the impact of caregiving on caregivers; Vivian Santiago, PhD, a mental health researcher studying pain; Beth McManus, ScD, who studies the social policies that affect children with disabilities and Christopher McKelvey, PhD, an economist who is studying the timing

of adolescent growth in determining adult health outcomes such as obesity and diabetes

Kindig says the seminars are designed to give "a broad understanding of population health issues."

"We have a breathtaking range of expertise at this table each week," Kindig says. "It creates an amazingly rich discussion. It's been fun for us because we get to meet all these people, and help create connections between them."

Mullahy says the seminars, and the entire program, are designed to create dialog about population health between people from very different backgrounds.

"We get biomolecular chemists to understand how anthropologists talk, and

-Continued on page 32



FIRST TWO CENTENNIAL SCHOLARS NAMED





ayle B. DeLancey, PhD (top left), and Heather M. Johnson, MD, have been named the first two Centennial Scholars at the SMPH.

The Centennial Scholars
Program was created to develop
faculty whose diversity enhances
the quality of education and
research at the school, according
to Patricia Kokotailo, MD, MPH,
associate dean for faculty
development and faculty affairs
at the SMPH.

"These two individuals, who are clearly committed to careers in academic medicine, will serve as visible and available role models for students and trainees, especially those from

under-represented minority backgrounds," says Kokotailo.

DeLancey is an assistant professor in the SMPH
Department of Medical History and Bioethics. She earned her PhD and MSc at the University of Manchester in the United Kingdom. Her current main project is a book manuscript that explores how African Americans viewed and experienced smallpox vaccination in the 19th and early 20th centuries and smallpox inoculation in the 18th century.

Johnson, who is now finishing a fellowship in clinical cardiovascular medicine, will become an assistant professor of medicine in the UW Cardiovascular Medicine
Division next July. Her research
and clinical interests are
in preventive cardiology.
Throughout her fellowship
training she has focused on
the non-invasive assessment
of subclinical atherosclerosis.
She is currently investigating
predictors of atherosclerosis
and atherosclerosis progression
among smokers.

"It is exciting to have two extremely well-qualified women as our inaugural Centennial Scholars," says Kokotailo. "Their work will be of major importance to improving the health of our increasingly diverse population in Wisconsin."

\$9 MILLION STOP-SMOKING GRANT AWARDED

he University of Wisconsin Center for Tobacco
Research and Intervention
(UW-CTRI) was recently awarded a highly competitive \$9 million grant from the National Cancer Institute to discover the best ways to help people successfully stop smoking. UW-CTRI is a nationally recognized research center, housed within the SMPH.

"We know most smokers want to quit, but so many struggle with this addiction," says Michael Fiore, MD, UW-CTRI director. "This study is designed to meet smokers where they are in terms of their willingness to try quitting. The

goal is to create the greatest likelihood for smokers to successfully overcome tobacco addiction."

Beginning in spring 2010, researchers will recruit 2,300 smokers who will participate in the study for a full year. Participants will be recruited from clinics across south-central and southeastern Wisconsin that use electronic medical records. The study will provide both quit-coaching and nicotine medications.

UW-CTRI has received two previous large, long-term federal grants to study smoking treatments.

"I am pleased **UW-CTRI** can continue to build on its excellent record of accomplishments," says Robert N. Golden, MD, SMPH dean. "It is a testament to the exemplary reputation the center has accumulated in its 18-year history. The grant will improve public health in Wisconsin, nationally and across the globe since tobacco use is the leading cause of preventable death, regardless of

geographic and socio-economic boundaries."

For more information, visit www.ctri.wisc.edu.



SUTULA WINS TOP EPILEPSY AWARD



homas Sutula, MD, has been named the recipient of the William G. Lennox Award for 2009 for pioneering research into mechanisms underlying seizure activity in the brain.

Sutula, Detling professor and chair of neurology at the SMPH, received the lifetime achievement award during the December annual meeting of the American Epilepsy Society (AES) in Boston.

The award recognizes Sutula for his contributions to brain research that have attracted international attention. His work showed that repeated seizures modify hippocampal neurons and circuitry and increase seizure susceptibility, leading to eventual spontaneous seizures.

His research has also shown that neuronal loss induced

by brief repeated seizures is accompanied by progressive permanent memory loss, and that the development of memory dysfunction is tightly correlated with the number of seizures.

Sutula is also co-discoverer of the anticonvulant properties of 2-deoxy-D-glucose, a chemical compound used for many years as an imaging agent. The substance, known as 2DG, is beginning the second stage of clinical trials to see if it can mimic the effects of a no-sugar or ketogenic diet in preventing seizures in epilepsy patients. In another study, Sutula is

assessing 2DG's protective effect against traumatic brain injury and subsequent development of epilepsy in an animal model.

Sutula is co-founder and chief technical officer of NeuroGenomeX, Inc., a company that patented 2DG for its use against epilepsy in collaboration with the Wisconsin Alumni Research Foundation.

The Lennox Award is given annually to a senior AES member who has a record of lifetime contributions and accomplishments related to epilepsy.

NETWORK TO FOCUS ON ACCESS AND QUALITY

ith the help of a \$5.2 million federal stimulus-program grant, the SMPH is developing a program to focus on disparities in heart and lung disease in Wisconsin, two of the most significant causes of death and disability both in the state

The grant will help the school establish the Network for Health Equality in Wisconsin to identify how changes within Wisconsin's economic, political and social landscape contribute to major differences in health among state residents. The network will

healthcare and shifts in local economies.

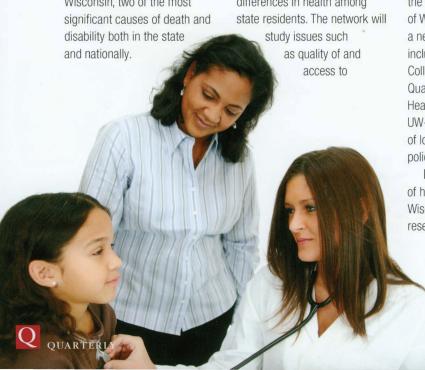
It will also monitor how policy changes, such as smoking bans, can impact health status.

The new grant will expand the school's Survey of the Health of Wisconsin (SHOW) and build a network of collaborators including the Wisconsin Collaborative for Health Care Quality, the Wisconsin County Health Rankings and the UW-Madison's compendium of local health programs and policies.

Each entity collects measures of health and healthcare within Wisconsin; the newly formed research network will enable more comprehensive exploration of health determinants and disparities within communities.

The program will also expand partnerships with the Marshfield Clinic, the Center for Urban Population Health in Milwaukee and UW's Institute for Clinical and Translational Research.

This innovative program is funded by a grant from the National Heart, Lung and Blood Institute. Each year the National Institutes of Health invests more than \$25 billion in health research, which is performed mainly at universities throughout the country; the majority are highly competitive grants.



FIORE HONORED FOR HEALTH ADVOCACY



ichael Fiore, MD, a professor of medicine at the SMPH and founder and director of the University of Wisconsin Center for Tobacco Research and Intervention. was selected as one of two national physicians for the 2009 Physician Advocacy Merit Award from the Institute of Medicine as a Profession.

Fiore is a nationally recognized expert in the treatment of tobacco use and dependence. He served as chair of the panels that produced the 1996 and 2000 editions of the U.S. Public Health Service

(PHS) Clinical Practice Guideline on treating tobacco use and dependence. He also chaired the panel that prepared an update to the guideline released in 2008. The PHS quideline is considered the national gold standard for healthcare providers.

Fiore is clinically active and widely published in the field of tobacco cessation. He has provided policy leadership to the U.S. surgeon general and chaired a U.S. Department of Health and Human Services subcomittee that developed a national tobacco action plan.

Founded in 2003, the Institute of Medicine as a Profession is a not-for-profit organization dedicated to making professionalism a major force in medicine.

The award ceremony took place in November in Washington, D.C.

"GO BIG READ" ENGAGES THE COMMUNITY



niversity of Wisconsin-Madison Chancellor Biddy Martin and campus leaders have fostered significant enthusiasm—including participation among the health sciences community—through a common reading program this academic year.

"Go Big Read" centers around critical review of journalist Michael Pollan's In Defense of Food: An Eater's Manifesto. Chosen through an extensive review process, Pollan's book examines the modern American food landscape where the deceptively simple question of

what to eat has been muddled by numerous, often conflicting claims of food producers, marketers and nutrition experts.

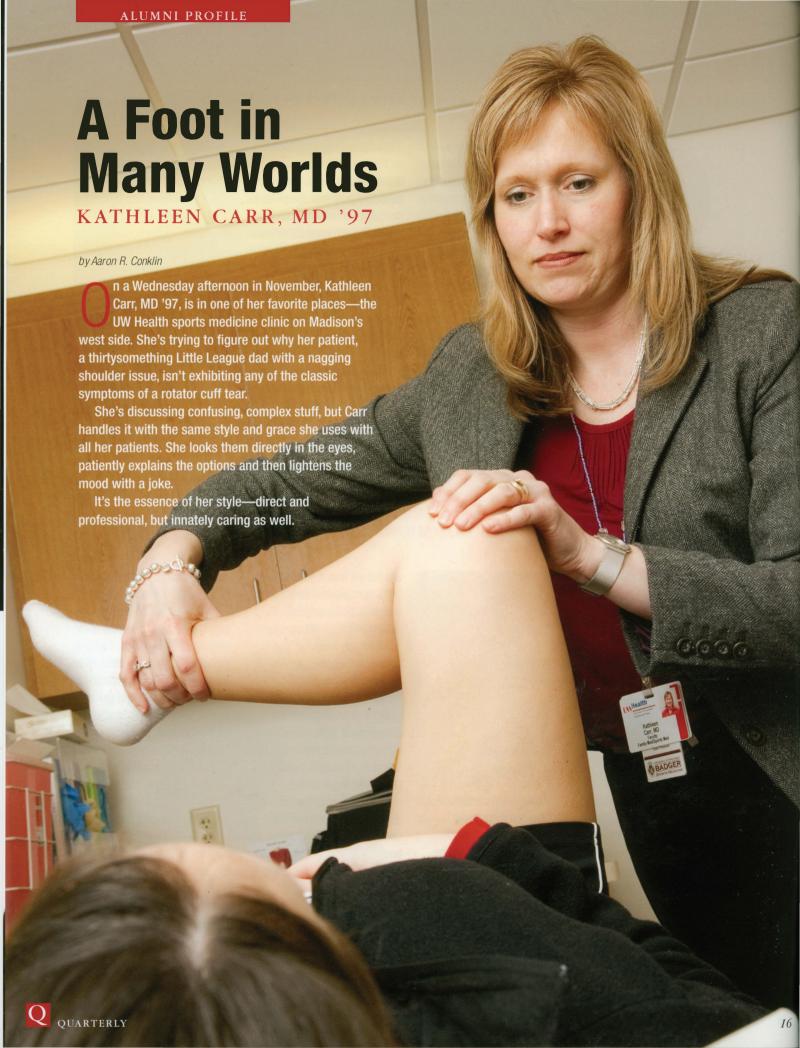
As Martin explains: "The book project is an opportunity for education and exchange, not for advocacy of a particular view. I believe promoting rigorous discussion of ideas, including those that are controversial, is one of a university's particular gifts to the larger society."

A free public presentation by the author at the UW Kohl Center; traditional and online book review groups; blogs; expert panel discussions; and quest lectures have delved into the myriad perspectives associated with our food choices, as well as current and historical factors affecting those choices.

An exhibit titled "It's Good for You: 100 Years of the Art and Science of Eating" is on display in Ebling Library's Historical Reading Room through March 2010. Artifacts illustrate the history of the food pyramid and Victory Gardens, the confusion inherent in diet advice, the "voice of authority" in cookbooks and nutrition literature, the marketing of food products and the evolution of hospital diets.

For details, including a calendar of events continuing through May, visit http://www. gobigread.wisc.edu.





At 38. Carr brings that approach to each of the four separate medical worlds in which she plants her feet: In family medicine, where her patients appreciate that she's a mother of two (Mark, 6, and Megan, 3) who gets the craziness of modern kid sports culture. In sports medicine, where her patients appreciate the fact that she's the team physician for the Badger women's basketball, soccer and tennis teams and men's rowing and tennis teams. In education, where she's part of the group that's working to shape curriculum for the next generation of UW primary care residents. And in research, where she's studying the long-term physical and psychological impact of sports injuries on female athletes.

Carr was born and raised in Madison, and, aside from a residency stint at the University of Michigan, has spent most of her life and career here. To some degree, we can thank former UW-Madison Chancellor Donna Shalala for that.

"She was walking her dog and ran into my dad while he was jogging one day," recalls Carr. "When he mentioned that I was struggling to decide where to go to college, she sent me a personal letter and a UW T-shirt."

Carr signed on, even though her high school boyfriend, Adam, who would later become her husband, headed to Mankato State University. After two years, he transferred to Wisconsin to complete his education degree.

Carr attended UW through the SMPH's Medical Scholars Program, which provided her conditional admission to medical school.

With an undergraduate degree in exercise physiology firmly in hand, she always assumed she'd have to become an orthopedic surgeon.

And then, in the spring of her first year at medical school, she attended a brown bag session hosted by Doug Hoffman, MD, a Madison-based family and sports medicine physician who was working at the time for the large group practice Physicians Plus. As she listened to him discuss his career, she could feel the light go on in her head.

"It was a totally jaw-dropping moment for me," she recalls. "I didn't realize that you could combine family medicine and sports medicine."

Hoffman would become Carr's first mentor, taking her on as a summer "extern" in 1994. She shadowed him and collaborated with him on her first major research project, a study exploring the referral patterns of physicians dealing with patients with musculoskeletal problems. In 1996, Carr became the first medical student to present research findings to the American Society for Sports Medicine.

Those findings would inform and fuel the rest of her career. Essentially, she discovered that family medicine doctors are often too quick to refer joint, back and muscle problems to sports medicine specialists. As a result, sports medicine doctors get sidetracked into treating many patients whose care should be managed by a primary care physician.

"Frankly, our medical training in the area of musculoskeletal medicine is severely lacking," argues Carr. "Family medicine physicians should be able to manage conditions like osteoarthritis. If we're graduating students from medical schools and residencies without that level of expertise, that's a problem."

Carr is outspoken on this issue, although, in general, she studiously tries to avoid the spotlight. But she can't avoid being a role model—or earning the accolades of her colleagues.

"Kathleen is extremely professional and an excellent listener," says David Bernhardt, MD '89, one of several UW sports medicine physicians who lobbied hard to add Carr to the staff. "She looks at the whole picture, not just, 'Does this injury affect the patient's ability to play sports?' but the impact both on and off the field."

Rather than just lament any shortcomings in medical school and residency training, Carr has worked her way into a position that gives her a unique opportunity to do something about it. Not only is she the co-director of the UW Sports Medicine Fellowship Program—the same one from



Following graduation from medical school, Carr (center) completed her internship and residency at Michigan before beginning a sports medicine fellowship at UW.

which she herself graduated—but she's also the associate director of the UW Family Medicine Residency Program in Madison. It's in the latter role that she'll have the chance to work on reshaping the curriculum to expand the depth and breadth of musculoskeletal training.

While education currently tops the list of priorities in Carr's professional universe, she hasn't let the research part of her universe go, either. She's the co-author of a study set to publish in 2010 that looks at the long-term health outcomes—including psychological and emotional effects—experienced by female athletes who suffer knee injuries.

"As physicians and surgeons, we're often able to bring these women physically back to where they were before they were injured, and yet experience is showing us that their quality of life never returns to that same level after their operation," she says. "Clearly that's an indication that we're not meeting all our patients' needs, and we may need to expand our approach."

For a physician who has spent her career tackling the big picture of many worlds, there's nobody better positioned to expand it than Carr.



Homecoming

RECORD TURNOUT

OCTOBER 16-17, 2009



Anne Shierl ('57) stands by as Richard Anderson ('47) displays the original copy of "On Wisconsin" he recently donated to the school.

A record-breaking crowd gathers in the Health Sciences Learning Center atrium (left) for the tailgate. Above, members of the Medical Student Assocation (front row: Anita Mantha, Nikki Burish, Carly Kuehn, Jason Chiang; back row: Sean Polster, Nick Coorough, Kyle Pauly, Annie Stitgen, Joel Wood, Bob Zemple and Travis Schmidt) have fun at the Homecoming dinner.

by Dian Land

ttendance records seem to have been broken all around at Homecoming 2009, with medical alumni from all points of the state and country gathering in Madison on October 16 and 17 to mingle and reconnect at several events sponsored by the Wisconsin Medical Alumni Association

"It was great to see so many alumni at our dinner on Friday evening at the Concourse Hotel, our first event of the weekend," says Karen Peterson, executive director of the WMAA. "It was a large, happy crowd."

Infectious disease expert Dennis Maki, MD '67, was a big draw, as always. The keynote speaker talked about the epidemiology of the H1 N1 epidemic, and encouraged all clinicians to get themselves and their patients vaccinated.

On a lighter note, Richard Anderson, MD, of the Class of 1947, made public his recent gift to the SMPH. It wasn't an Audubon print this time—he's given the school a remarkable collection of signed bird drawings. The newest gift is a copy of the

original score of the UW-Madison fight song, "On, Wisconsin," which celebrated its 100th anniversary in 2009. The score will hang in the mentor room on the second floor of Health Sciences Learning Center (HSLC).

The classes of 1974, '84, '94, '99 and '04 also celebrated reunions at the Friday evening get-together, while two others—the Classes of '69 and '89-elected to have their celebrations alone on the next day.

Earlier on Friday, the WMAA board of directors held their fall meeting.

SMPH dean Robert N. Golden, MD, described the "Great People" fund-raising



campaign that is so important in helping students address their student loans (see related story on page 34). WMAA president John Kryger, MD '92, urged all board members to spread the word about the program, which is a top priority at the school.

The next morning, a perfect sunny fall Saturday, some of the earlybirds chose to take in the popular Farmer's Market on Capitol Square while many others headed over to the HSLC for an early tailgate party preceding the Wisconsin versus lowa football game.

"It was the biggest tailgate we've ever had in our atrium," says Peterson.

The Kehoe family may have broken an attendance record as well. Four SMPH alumni and soon-to-be alums across two generations of Kehoes, plus additional family members, were on hand for the festivities.

Proud father Michael Kehoe, MD '74, is a radiologist at St. Luke's Hospital in Milwaukee. Ryan Kehoe, MD '01, is an orthopedic surgeon in West Allis, Wisconsin, while his sister, Meghan Kehoe, MD '05, is an anesthesiologist in Janesville.

Rosemary Kehoe, Michael's wife, and daughter Katie, a grad of UW law school, were also in attendance as were several spouses and kids.

Patrick Kehoe, a medical student who will graduate this spring, says he wouldn't have missed it for the world.

"We try to get to homecoming every year," Patrick says.

He's planning a career in dermatology, he hopes at UW, although he and his wife, Heather, will need to consider two future practices. She is a large-animal veterinarian (a UW-Madison vet school grad, of course)



who currently works out of Reedsburg, Wisconsin. The total Kehoe clan at the tailgate numbered 11.

Since his father was celebrating his 35th reunion, Patrick got a chance to meet several of his dad's classmates.

"I had heard a lot about many of them over the years," he says.

The Kehoes and all the others headed over to Camp Randall Stadium for the 11 a.m. kickoff. And though Wisconsin's 20-10 loss was painful for many, it didn't detract that much from the overall fun.

Following the game, members of the Class of 1989 looked forward to a dinner at the Memorial Union, while the Class of 1969 took a Betty Lou cruise on Lake Mendota to celebrate their 40th reunion.

"It was the third or fourth time we've taken a boat cruise for our class reunion," says George Page, MD '69. "It's always so enjoyable, we keep going back."

Page, a retired reconstructive and general surgeon, returns to Madison often for class reunions. He and his wife, Melody, spend their summers in Minocqua, Wisconsin, and winters in Cottonwood, Arizona.

Page was happy, as always, to see Kathe Budzak, MD '69, whom he stays in touch with regularly. He also enjoyed catching up with Wally Burgdorf, MD '69, who lives in Germany, and Thep Himathongkam, MD '69, who flew in from Thailand. On the boat, he visited with Bob Kaupie, MD '69.

Being on the water was ideal for socializing, Page says.

"It's a great chance to have one-on-one conversations with old friends—and with other people you may never have met," says Page.

Remions



1969

Front row, left to right: Paul Jenkins, Marshall Segal, George Page, Mary Beth Metcalf, Kathe Budzak and Mary Kaye Favaro. Middle row: Bob Kaupie, Dave Kasuboski, Dan Hathaway, Barry Usow and Chuck Cooley. Back row: Carl Olson, Marv Napgezek, Tom Gasser, Wally Burgdorf, Roy Olson and Dick "Rocky" Marchiando.



1984

Front row, right to left: Kathy Cox Kruk, Jorge Duchicela Santacruz, Steve O'Marro, Mary Braza, Wendy Hanneman and Doug Atkins. Middle row: Michael Kruk, Dan Fruechte, Mark Fenlon, Mike Meyer and John Brusky. Back row: Bill Buchta, Matt Doering, Jake Andres, Jim Berman and Karl Noll.



1974

Front row, left to right: Dean Schraufnagel, Jeffrey Field, Milton McMillen and Nancy Homburg. Back row: Doug Devan, Robert Lowe and Robert Goisman.



1989

Front row, left to right: Jim Shropshire, Rose Turba, Andrew Pankow, Sonya Bosser-Schroeder, Tim Jahn and Beth Ciurlik. Back row: Renee Cockrell, Felix Ankel, Kelly Clark, Steve Lipscomb, Dan Gutenberger, John Haeberlin and Mike Garren.



Front row, left to right: Walter Howard, Sabina Singh, Nikhil Wagle, David Oh and Michael Roskos. Back row: Lynda Siewert, Jennifer Norden, Douglas Schulz, Chris Laufer, Leah Danner and Sonja Kim.



Front row, left to right: Andrew Wagner, Nina Kinnunen and Nancy Erickson. Back row: Mark Norton, Ken Kleist and Kevin Keele.



Front row: Peter Falk. Middle row, left to right: Christina Hook, Julie Gerig, Emily Mason and Suzanne Falkenberry. Back row: Cathy Skagen, Greg Griepentrop, Karolyn Davidson and Steve Randall.

CLASS NOTES compiled by Barbara Lukes

CLASS OF 1946

Texas Tech University recently established the Sherman Phillip Vinograd, MD. Aerospace Exploration Archival Collection in their Special Collection Library. Vinograd served the National Aeronautics and Space Administration for 18 years as chief of medical science and technology and director of biomedical research. He chaired the group charged with defining the research and life-support requirements for a manned orbiting research laboratory. He was responsible for establishing the In-flight Medical Experiments Program in preparation for Apollo manned space flights. Vinograd

CLASS OF

has been a steadfast friend of

Texas Tech University.



Sandra Osborn now serves on the editorial committee of the Journal of Medical Licensure and Discipline, a publication of the Federation of State Medical Boards of the United States (FSMB). The FSMB is the coordinating organization for all state licensing boards.

CLASS OF 1974

Robert Hill works about 75 percent time in family practice, and twice a year travels to Africa to work in clinics. His hobbies include fly-fishing and bible study fellowship.

Lud Kroner is a helicopter ski owner/quide in Jackson, Wyoming. He also likes biggame hunting and golf.

David Minkoff is the owner of Lifeworks Wellness Center and Bodyhealth Inc., in Clearwater, Florida. He has completed 35 Ironman triathlons, plays the classical guitar and likes historical novels.

Earl Nepple and his wife, Linda, like sailing their 30-foot Sabre sailboat all over the Great Lakes, and bareboat sailing in New Zealand, Australia and the Sea of Cortez.

CLASS OF 1984

In 2006, after 17 years in a multi-specialty group, Ann West started her own practice in Montgomery, Illinois, at Trinity Women's Health Care. She has gone to Honduras four times on medical mission trips.

Tami Rice and her husband. Robert, adopted a boy from Haiti and recently welcomed two exchange students, also from Haiti. In addition, they have four children of their own.

Linnea Smith spends half her time at her Amazon clinic in Peru and the other half in Wisconsin, working occasional ER shifts. She is still riding the same Kawasaki she had in medical school.

Jack Taylor and his wife, Julia Welch, recently climbed Mt. Kilimanjaro near Kenya. He is still doing research at the National Institutes of Health, mostly on breast and prostate cancer.

CLASS OF 1989

Dana Bernstein Lustbader recently became chief of palliative medicine in Great Neck, New York. She opened a state-of-the-art 10-bed palliative care unit that provides care to patients facing life-limiting illnesses.

CLASS OF 1994

Chris Koutures was the team physician for the USA Volleyball National Team at the 2008 Beijing Olympics.

Stephen Lo is a pediatrician in Madison who works with schools to promote healthy diets and exercise.

Jim Locke and his family live in Houston, where he works as a flight surgeon at the Johnson Space Center, caring for National Aeronautics and Space Administration (NASA) astronauts and flight crew. He gets to go to launches and landings and also flies NASA jets.

CLASS OF 2008

Brandon Pfefferkorn

recently was presented the Jav S. Drotman Memorial Award. The award recognizes a young professional who has demonstrated potential by challenging traditional public health policy or practice in a creative and positive way. While studying for his MPH at the SMPH, Pfefferkorn was actively involved in efforts to lessen industry influence in medical education locally and nationally. He has also worked tirelessly to promote humanitarian drug licensing in Thailand and other countries. He is currently a family medicine resident at Swedish Medical Center-Cherry Hill Program in Seattle.



William Bishop (above) recently went on a medical relief trip to Guatemala to work with the Quiche Indians. While there, he climbed the active volcano, Mt. Pacaya. He was also awarded a grant to attend the fifth annual Indo-U.S. Emergency Medicine Summit in India as a delegate and guest lecturer.

IN MEMORIAM

Clifton Brooks, Sr., MD '46 May 2009 Norman, Oklahoma

James C. (Jim) Dearth, MD '74 April 5, 2009 Chocowinity, North Carolina

Gerald Derus, MD '52 September 23, 2009 Dana Point, California

Jack Edson, MD '57 May 2009 Strum, Wisconsin

Bernard C. Korbitz, MD '60 October 29, 2009 Omaha, Nebraska

Harold Machigashira, MD '69 April 2, 2009 Kailua, Hawaii

William Nielsen, MD '45 March 2009 West Bend, Wisconsin

Eugene Sullivan, MD '53 September 19, 2004 Portland, Oregon

Mary Tasker, MD '56 October 2, 2009 Sacramento, California

Robert Zipser, MD '72 July 19, 2009 Claremont, California

Eugene Zwisler, MD '53 March 23, 2004 Mukwonago, Wisconsin

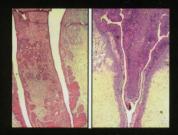


I Know You

Or do 1? If you think you can identify this SMPH alumnus, send your best guess to quarterly@med.wisc.edu. The person whose correct answer arrives first will win a small gift from the medical alumni association. We'll announce the winner in the next issue of Quarterly. And we'll tell you a little about our mystery alum.

One hint: For several years, his life was particularly busy during the winter months.

Drugs Eliminate Cervical Cancer in Mice



MPH researchers have eliminated cervical cancer in mice with two FDA-approved drugs currently used to treat breast cancer and osteoporosis. The drugs—fulvestrant and raloxifene—keep estrogen from working in cells.

Published in the *Proceedings* of the National Academy of Sciences, the findings from the laboratory of Paul F. Lambert, PhD, offer hope for the 500,000 women who are diagnosed with cervical cancer each year.

Lambert and his team at the McArdle Laboratory for Cancer Research use transgenic mice they developed 20 years ago to study cervical cancer. The rodents carry a human papillomavirus (HPV) known to be strongly associated with cervical cancer. Virtually all cervical cancers in women test

positive for HPV, but not every woman who becomes infected with HPV gets cervical cancer.

Lambert and colleague
Sang-Hyuk Chung, PhD,
thought estrogen—to which
the cervix and other female
reproductive organs respond
strongly—might explain why.
So they zeroed in on estrogen
receptor alpha, which mediates
estrogen function in cells.

Knowing that the drugs block estrogen's ability to bind with this receptor, the scientists tested them on the HPV-positive mice with cervical

cancer (example seen in image at left). After one month, 11 of 13 mice treated with one of the drugs lost all signs of cancer (image at right) and the seven mice treated with the other drug lost all signs of the disease.

The researchers are now conducting tests to see if the drugs are as effective in treating cervical cancer in human cells as they are in the mice. The laboratory studies could be followed quickly with phase-two or phase-three clinical trials.

Red Blood Cell Gene Picture Completed



complete picture of all the genes that are involved in the formation of red blood cells is now available, thanks to the work of SMPH researchers and their collaborators. The new

picture shows how the genes work with the two key proteins that are essential for red blood cell development—GATA-1 and GATA-2.

The findings, reported in *Molecular Cell*, should have implications for understanding leukemia and several kinds of anemia associated with aging, infection and genetic mutations.

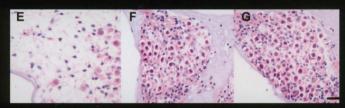
For red blood cells to develop, thousands of genes must work together, says senior author Emery Bresnick, PhD, professor of pharmacology and medicine. GATA factors create the network and keep it running smoothly by turning the genes on and off at the right time. If something goes wrong anywhere or at any time in this genetic network, the results can be disastrous.

From earlier studies, scientists have known some of the genes that are involved in this network, but now Bresnick and his collaborators have completed the picture using a living cell.

The researchers identified the 4,061 genes that interact with GATA-1. The new collection includes genes that turn other genes on and off, signal molecules, structural building blocks of red blood cells and genes that are closely linked to the genesis and/or progression of human leukemias.

The scientists also showed the precise DNA sequence in each gene where GATA factors dock, information that suggests how the genes and factors work together. A total of 5,749 sites—more than one on some individual genes—were identified.

Study Clarifies Hearing Loss in Aging



esearchers have identified a gene that is essential to age-related hearing loss, which affects about 40 percent of people over 65 in the United States. The problem occurs when sensory hair cells and neurons in the inner ear—cells that convert vibrations into nerve impulses the brain then deciphers—begin to die.

The new study, led by
Tomas Prolla, PhD, professor
of medical genetics, and
published in the *Proceedings*of the National Academy of
Sciences, shows that in mice,
the damage starts with free
radicals, key suspects in many
aspects of aging. They trigger
apoptosis, or programmed cell
death, by which damaged cells
"commit suicide."

Prolla and post-doctoral researcher Shinichi Someya, PhD, found that the suicide program was operating in hair cells and neurons, and that the program relied on activity in a suicide gene called bak, which is required for the development of age-related hearing loss.

The new results hint that the oxidative stress caused by free radicals and the resulting hearing loss may be preventable. Someya and Prolla found that two oral antioxidants—alpha lipoic acid and coenzyme Q10—protected

the cells from apoptosis (mice fed the antioxidants, F and G in image, lost only a few neurons while controls, E, lost many).

Programmed cell death occurs in mitochondria, which process energy for the cell. When mitochondria receive signals indicating the cell is damaged, they break up and begin the process of apoptosis.

Confirming the importance of mitochondria in hearing loss, both of the antioxidants are known to make mitochondria less responsive to oxidative stress.

Boomers Hear Better Than Their Parents Did

espite dire predictions about listening to loud music, members of the rock 'n' roll generation are aging with much better hearing than their parents had when they were the same age.

In the first study of the hearing of 5,275 adults born between 1902 and 1962, SMPH researchers showed that baby boomers are holding on to good hearing longer than their parents did.

The study, appearing recently in the *American Journal* of *Epidemiology*, showed hearing impairment rates

were 31 percent lower in baby boomers across all age groups.

The data came from the Epidemiology of Hearing Loss Study, which has been tracking hearing loss in volunteers from the community of Beaver Dam, Wisconsin, since 1993. Starting in 2005, researchers began testing the hearing of their adult children.

"Contrary to what our parents thought, we didn't lose our hearing from listening to transistor radios in the 60s, boomboxes in the 80s or iPods in the last decade," says Karen Cruickshanks, PhD, professor of population health sciences and ophthalmology and visual sciences.

One reason, she says, is that hearing loss from one-time exposures such as music at a loud concert tends to be temporary. Other factors could include stricter rules about workplace noise exposure, and fewer members of the younger generation working in noisy workplaces.

Reduced smoking rates in younger generations should also result in less chronic cardiovascular disease, which can cause hearing loss.



And, because infection and inflammation are associated with hearing loss, better healthcare and the widespread use of antibiotics may also be part of the explanation.



by Mike Klawitter

hen you experience Kyle Pauly's vibrant personality and see her infectious smile, you would never know the medical hardships she's experienced in her 24 years of life.

The second-year student at the SMPH had to undergo surgery when she was only seven months old for pulmonary

stenosis, the abnormal development of the fetal heart during pregnancy.

"I was a blue baby and real thin when I was little," says Pauly.

As a 9-year-old, Pauly also was diagnosed with scoliosis. She would need three separate operations over the next 11 years to correct the problem.

"I had a lot of back pain that wasn't normal for a 9-year-old," she says. "I was

diagnosed with a 45-degree curve in my spine."

Despite all that, Pauly felt like a normal kid, growing up in her hometown of Manitowoc, Wisconsin.

"I really didn't know anything was different until I was in my teens," she says. "I had two healthy siblings and wasn't treated any differently by my parents." She played high school tennis and made it to the state tournament with her sister as her doubles partner. She also participated in track and field.

But once in a while, she would faint.

"I passed out during a couple of tennis matches, or if I'd run with the track team, every now and then, I'd faint," she says. "I was always checked out by a cardiologist and no one thought anything of it. I just thought I was out of shape."

Yet, Pauly's most serious medical challenge occurred while she was an 18-year-old freshman at UW-Madison. She was enjoying her first Badger football game, when she suddenly fainted in the stands at Camp Randall Stadium.

"It was pretty scary and I didn't know what was going on," she says. "I was just standing there, watching the game when I fainted."

Shortly after receiving medical attention, Pauly passed out two more times: once in her dorm room and the second time in a chemistry lab.

"The fainting spell in the chemistry lab was a bad one," she says. "Again, I was just standing and listening to the instructor when I passed out with no warnings or other complications."

Pauly entered the hospital and was told to wear a heart monitor for five weeks. After that, a cardiologist read the results and told her she needed a heart operation to replace a defective valve.

"The doctor put me on beta-blockers and told me someone should stay awake with me because there was the chance I might fall asleep and not wake up," she says. "I went right to calculus class after that because I didn't know what to do. Fifteen minutes into it, I said to myself, 'What am I doing here?' I left class and called my parents, who were on vacation in Mexico."

With parents and siblings standing by for support, Pauly underwent an operation to have a valve from a cadaver installed in her heart. She was hospitalized for five days.

"It was incredibly scary, but the full effects of it didn't hit me until afterwards," she says. "I just didn't allow myself to be frightened or to even imagine all of the



Pauly organized and served as captain of a medical student team that participated in the American Heart Association's 2009 Heart Walk last fall. The team raised more than \$2,720.

things that could go wrong or how serious a situation it was. Those thoughts didn't happen until after the surgery was over and I was back at school."

That next semester was pretty rough, recalls Pauly.

"I returned with bandages still on drainage tube sites, and I was on pain medications. It was weird dealing with that while attending class and socializing as a freshman," she says. "That was probably the point in my life where my heart actually affected me the most."

Today, she still sees her cardiologist and takes pain medication for her back. But she feels lucky to be alive and looks forward to fulfilling her goals of becoming a doctor.

"I see it as something I had to go through," she says. "I really didn't have a choice. I wouldn't call it bravery. I just wanted to keep living. My biggest deal now is waiting on the phone for insurance companies and juggling doctor's appointments with my class schedule."

Pauly's heart surgery prompted her to captain the American Heart Association's 2009 Heart Walk team for second-year medical students. Through her leadership, the team raised more than \$2,720.

"Classmates on my team thought we would be lucky to raise \$500 because everyone was so busy," she says. "It was

really humbling that we could raise so much."

She also serves as a class president for the second-year students and has helped with other functions, including last year's holiday food drive.

"That was fun, because Dean of Students Dr. Pat McBride said we could shave his head if we reached our goals," she says. "And we did."

Pauly and her boyfriend, Joel, have also formed a group called FACE AIDS, which has raised several hundred dollars for a free clinic in Rwanda to care for HIV/AIDS patients.

Overall, Pauly believes her experiences as a patient will be beneficial when she starts her medical practice.

"At 18 years old, I know what it feels like to have heart failure, I know what waking up from anesthesia feels like, what it's like to live with chronic pain and how amazing it feels to recover from some of those things," she says.

Pauly doesn't take much for granted.

"I remember after the heart surgery how much it was celebrated when I could walk down my driveway. When I could run a mile again, I felt on top of the world," she says. "I can't learn things like that from books. I got free schooling into the world of the patient, and that's a pretty nice deal."

The Dean's Cup returns







he SMPH brought the Dean's Cup home from the UW-Madison law school for the first time in four years. We overcame exams, weather, scheduling and, of course, the law students to finally bring the cup back.

Just a bit of history about the competition. The first UW Dean's Cup occurred in fall 1995. The medical school dominated in the contest the first few years, but the early 2000s proved the law school to be competitive. Recently, the law school has won every competition between 2006 and 2008.

This year, however, was a bit different. Scores were close at the beginning, with the medical and law schools trading events in the early going. But everything changed during the second week, when the med school went on a streak of nine straight victories. The final score had us winning 284.5 points to 198.5 points.

Points were awarded based on a combination of participation and performances during events, which ranged from sports such as flag football and soccer to more cognitive activities such as chess and trivia to everything in between, such as euchre and baking.

Even more important than the individual events were the Dean's Cup charitable contributions. All told, we raised more than \$2,500 for charities, with the medical students donating to the American Family Children's Hospital and the law students donating to Legal Action of Wisconsin. Also, 92 medical and law students donated blood to the Red Cross.

We thank the Wisconsin medical and law alumni associations for everything they contributed to making this another successful Dean's Cup.

Left: John Awowale evades contact in flag football. Below: A mitt has many uses.



Above: Med 1 Adam Page dips for the ball.



Left: Baking was a new event in the competition this year. Below: Ashley Balts, wife of Med 2 Josh, makes a run for it.



STUDENTS ELECTED TO ALPHA OMEGA ALPHA

wenty-five SMPH medical students were recently inducted into Alpha Omega Alpha (AOA), the national medical honor society. The students and their families were honored with a reception and dinner in the Heath Sciences Learning Center atrium, with music provided by pianist Jeff Seybold, a second-year medical student.

Following the banquet, guest speaker Carol Diamond, MD, associate professor of pediatrics at the SMPH and director of the pediatrics Hematology/Oncology Fellowship Program, addressed the group. The title of her talk was "Rewards and Responsibilities: What Lies Ahead."

AOA's stated goal is "to recognize and perpetuate excellence in the medical profession." It aims to "promote scholarship and research in medical schools, encourage the high standard of character and conduct among medical students and graduates, and recognize high attainment in medical science, practice and related fields."



The 2009 inductees include (front row): Micaela O'Neil, Jennifer Stephani, Meghan Furlong, Megan Schott, Cassie Schmit and Sarah Tevis; (middle row) Lyndsey Runaas, Jacqueline Ziehr, Joseph Hansen, Erik Fossum, Bimal Vyas, Eric Yanke, Joseph Schreiber and Lisa Shen; (back row) Brian Hilgeman, Michael Kehoe, Bryan Pooler, Joel Adler, Sean Kuehn and Andrew Pugely. Not shown: Stephen Almasi, Jennifer Barr, Evan Warner and Shaun Yang.

CONTINUED FROM PAGE 12

then we introduce them to economists," Mullahy says.

Not only does the Health & Society Scholars program support scholars in residence, it also provides generous funding to grow population health research and teaching on the UW-Madison campus and beyond, in the spirit of the Wisconsin Idea.

Examples of recent interdisciplinary projects supported by these funds include a partnership between

the university and Madison Dane County Public Health to investigate why the black-white infant mortality gap has been eliminated in Dane County, and a working group that gathers UW researchers interested in improving health in partnership with Madison low-income neighborhoods.

"We're excited to seed population health research not only within the university, but also by bringing together the university with community partners to improve population health," says Robert.

The program also provides grants to incorporate a population health perspective into both courses and dissertation projects in other departments and schools.

"Healthy city metrics" were added to one soil science class, for example, and one dissertation project included funding for research on indoor air pollution in China.

And each spring, dissertating students, their advisors and

faculty funded by course development grants gather for a symposium featuring their work.

"The symposium is in the spirit of going beyond the six scholars to have an impact on the campus and the whole state of Wisconsin," Kindig says.

DEAR DR. JENSEN,

In the Fall 2009 Quarterly, you are extensively quoted in the article "One Click at a Time." You give an example of denial of antibiotic therapy for a 17-month-old child for otitis media. The evidence-based medicine justification for the denial is that "most children recover (clear up) on their own."

I graduated from the same school as you, in 1964. We were taught not to risk possible complications in the few who might not "clear up" easily for the sake of the many who well might. The purpose of antibiotics was to prevent the problems in the unfortunate few with early, easier, more successful and less expensive treatment. Your researches seem to fly in the face of these precepts.

If I had a 17-month-old child with otitis media, I would not want my child treated with "watchful waiting." My mother, Mary Duffy (1912-2002), had a strep infection in 1920, from which she developed bilateral hip osteomyelitis that required 52 anesthetics for operations which maimed her. I was delivered Caesarian in 1933. Early antibiotics could have saved her from all this and would have cost the majority who were not so afflicted by the ravages of the disease only a trifle in comparison to the enormous personal and financial expense for the one with complications.

Is this the new look of medicine? Are we to deny antibiotics and risk terrible consequences for a few so that the many shall be allowed to "clear up on their own"?

Elucidate me, please, as I am desperate to develop a little faith.

John L. Duffy, MD '64 November 13, 2009

DEAR DR. DUFFY,

Thanks for writing. It's good to know the Quarterly is read. I hope you are well.

It's amazing to me how many things have changed since we were in medical school.

Regarding the use of antibiotics, I'd prefer to think of it not as denial but medical advice with close observation for an outcome that would warrant antibiotics. We're doing something similar with sinusitis in adults.

You need not fear a general denial of antibiotics. We use them as much as or more than ever with clinical trials increasingly guiding our use. The example in the article was used only to illustrate how students are using clinical trial research to help them with their clinical decisions, so-called evidence-based medicine.

Students like it more than experienced physicians.

Since the 1960s, much evidence warns us of the harm from overuse of antibiotics; a fear has developed that our grandchildren or great-grandchildren may get infections that are not curable because of antibiotic resistance.

And since the 60s, we are seeing a lot more clinical trial research, critically examining traditional medical practices. The research on ear infections in kids is accurately stated in the article. Your objection to the practice illustrates how controversial it is. The standard of practice has not yet changed and I believe most physicians are still using antibiotics for typical otitis media. It often takes several years before sound research evidence is incorporated into a new standard of practice.

Thanks again and best wishes,

Norm Jensen, MD '65 November 13, 2009



"GREAT PEOPLE"

HELPING MEDICAL STUDENTS
HELP THEMSELVES





JOE LAZAR, MED 3

JEFFREY ROSENGARTEN, MD '86

by Chris DuPre

aybe it just comes with the territory. The impulse to care for others, that is.

For Jeffrey Rosengarten, MD '86, and his family, providing for coming generations of students is just part of the caring equation.

For third-year medical student and scholarship recipient Joe Lazar and his peers, philanthropy matters, especially with the pressure of clinical rotations and the specter of debt following graduation.

Rosengarten, the president and founder of Global Medical Imaging (GMI), and his wife, Marcia, of Northbrook, Illinois, have established the Rosengarten Family Great People Scholarship. Their fund will benefit SMPH medical students as well as UW-Madison undergraduates.

"I firmly believe that over the course of your life there are certain people and institutions that do good things for you, and it is then your moral obligation to return the favor in whatever way you can," Rosengarten says. "Wisconsin decided to take a chance on me, and it laid the foundation for my life and career."

Robert N. Golden, MD, SMPH dean, praised the Rosengartens' gift.

"The Great People Scholarship Program is extremely important to our school," he says. "We are committed to educating future physicians who will serve where the need is greatest. Unfortunately, many of our students take on very high levels of debt, which can make it difficult for them to pursue their original intentions. The Rosengarten family gift, coupled with the Great People Scholarship Program, will help our medical students pursue their dreams of public service."

WORKING HIS WAY UP

Rosengarten spent his boyhood in the Milwaukee area.

"I tell my children, 'My biggest advantage while growing up was being financially disadvantaged,'" he says. "I quickly learned the value of hard work."

He attended UW-Milwaukee for six semesters while working full-time, but wasn't sure about a future career.

In young adulthood, two close friends died, with one being murdered.

"Those tragedies taught me how fragile and precious life could be," Rosengarten says.

He looked up his advisor for the first time in his college career.

"I told him that I wanted to be a physician," he recalls, "but he said I would never be a physician, because of my grades."

Undeterred, Rosengarten transferred to UW-Madison, applied himself and did very well. He didn't have much financial help as an undergraduate and was on the wait list at the medical school before finally being accepted.

"I took out loans and worked my first and second years in medical school as an applicator for a siding and roofing company and as a pharmacy technician," he says. "I had a lot of support from my family emotionally, but not financially."

During his third-year clinical rotations. Rosengarten fell in love with each specialty one by one. When he finally ventured into radiology, he found that he was participating in "the best cases from all the disciplines."

He completed his residency in diagnostic radiology at Chicago's Michael Reese Hospital, followed by a fellowship in magnetic resonance imaging (MRI) at the Medical College of Wisconsin. He went on to be assistant, then associate, then professor of radiology at Michael Reese Hospital and Medical Center, serving as director of MRI and body imaging from 1991 to 2000.

At the start of 2001, Rosengarten left Michael Reese to form GMI and Gurnee Radiology Centers in Lake County, Illinois, eventually expanding to many imaging centers in multiple states. GMI also currently provides radiology professional services to Lake Forest Hospital's imaging enterprise, consisting of nine locations.

"If you provide the highest quality care, the best service and work 10 to 13 hours a day, you increase your chances of being successful," he says.

The Rosengarten family is deeply connected to UW-Madison; eldest son Zach is a senior at the university, daughter Mikala is a freshman and high school junior Joshua has his eyes set on being a Badger.

STUDENTS WHO CARE

Third-year SMPH medical student Joe Lazar started his life in Slovakia. His parents had always wanted to come to the United States. Following the fall of the Berlin Wall. his father received a fellowship opportunity at the National Institutes of Health. The rest of the family visited soon, and his mother fell in love with the U.S., eventually receiving a work visa for employment at Uniformed Services University.

The family moved from the Washington, D.C., area to Brookfield, Wisconsin, where Lazar completed his senior year of high school. He became a U.S. citizen a few years ago. After earning an undergraduate degree at UW-Madison, he says, "I loved it so much I decided to stick around another four years."

Now going through his clinical rotations, Lazar is finding that his experience mirrors Rosengarten's.

"The problem I'm having is that I've loved them all. I'm still trying to wrap my head around what I'm trying to do," he says. "In the third year. I think most of us say, 'This is why I decided to study medicine.' We get to see patients, and every day is something new."

Lazar is sincerely grateful for the scholarship that has eased some of his financial strain.

"Medical school is an expensive endeavor," he says, adding that the SMPH tuition is reasonable compared with many schools of the same high caliber.

An American Association of Medical Colleges study found that 80 percent of medical students graduating in 2008 had more than \$100,000 in student loans. The median was close to \$160,000.

"Scholarships are essential for a lot of us so we aren't completely overwhelmed," Lazar says. "I'm fortunate I didn't have a lot of debt from my undergraduate studies. The scholarships make it a lot easier to live day to day, that's for sure."

Lazar says he's aware of the gifts that donors made to create his scholarship, and he's happy to hear of the Rosengarten Family Great People Scholarship.

"It's most important to be grateful and give thanks to these enormously generous people," he says. "I also think the donors would be proud of the people who are receiving these awards. My classmates are incredible people. The same generosity that allows our alumni to make these wonderful gifts is evident in our class, too. As a student body and as individuals, we have provided some remarkable service to the community and made gifts of our own."

Rosengarten emphasizes that scholarships are a way to help people help themselves.

"I know there are many worthy students who need financial aid. One of the best ways to help people is to give them the opportunity to improve themselves and their place in life." he says. "When it comes to charitable giving, my preference is for programs that allow people personal and emotional growth. Then I would hope they might find themselves in a position and of a mind that they too can give back when the time is right."

Great People Scholarship Program

The Great People Scholarship Program is under way across the UW-Madison campus to support students who eventually will lead our society with new ideas and technology. For the SMPH, this means supporting talented medical students by helping them reduce their education debts. Student scholarships are a top priority for the school.

A special feature of the program is that every dollar donated will be matched by the UW Foundation. This is an opportunity to invest in quality and excellence at the SMPH today—and to double the impact of each gift for generations to come.

To make a gift, visit www.uwfoundation.com, or mail to P.O. Box 8860, Madison, WI 53708.

Residents Relax at

ssic Tailgate and Big-Ten Game





Left: Chris Morelli prevails in a classic sibling rivalry against his Wolverine brother.

by Kelsey Davison

he life of a medical resident can hardly be called carefree: most work long hours with difficult schedules. leaving little time for leisure. Thanks to certain organizations, however, University of Wisconsin Hospital and Clinics (UWHC) residents were able to enjoy some muchneeded fun and excitement one Saturday last fall.

With all the stress of hospital life, it came as a welcomed break when the residents were given the opportunity to attend a classic Wisconsin tailgate and Big-Ten football game.

In hopes of strengthening relationships with UWHC residents, the Wisconsin Medical Alumni Association (WMAA) hosted the third annual "Resident Tailgate." UWHC residents were offered a ticket to

the Wisconsin versus Michigan game, and treated to a pre-game meal. This event, like others hosted by the WMAA, was a chance for residents to mingle and network.

The tailgate, held in the Health Sciences Learning Center on November 14, 2009, was offered to all UWHC residents as a chance to get together outside of the hospital. But not every resident was able to break out of their routine: some showed up in scrubs instead of game day attire.

"It's been a while since I've gone out like this," said internal medicine resident Ryan Cassaday, MD. His friends agreed as they gathered around overflowing plates of breakfast and tailgate fare: Wisconsin Union catering provided fresh cinnamon rolls, scrambled eggs, potatoes and sausage, along with mouthwatering Wisconsin bratwursts.

Cassaday added, "This type of event is really appealing ... it's nice to get to hang out outside of the hospital."

Benjamin Feldman, MD, a resident in otolaryngology; Kendra Hain, MD, from radiology; Jeff Larson, MD, from plastic surgery; Kyle Benner, MD, from psychiatry; Luke Perry, MD, from anesthesiology and Andrew Russ, MD, from surgery were among those who attended.

Some of them took the opportunity to spend the day visiting family. Christopher Morelli, MD, a resident in physical medicine and rehabilitation, invited his brother to the tailgate. Originally from Detroit, the brothers engaged in a classic sibling rivalry, with one cheering for Wisconsin and the other rooting for Michigan.

"It's great that they provided tickets to the game for us, and these are great seats," Morelli said.



Above: John Kryger ('92) delivers a rousing welcome. Right: UWHC residents (from left) Marissa and Brian Simard, Kendra and Seth Hain, Nate Zelinski and Laura Knauf have a chance to get together outside the hospital.



Above: Good eats catered by the Wisconsin Union are also a big draw.

Chris Fletcher, MD, an internal medicine resident and "rabid" Wisconsin fan, jumped at the opportunity to attend a Badger football game.

"This is my fourth game since I've been here, but this is a big game, so I'm grateful for the good hookup," Fletcher said.

In addition to catering to UWHC residents, the tailgate was also offered to SMPH students. Med 1 Carly Kuehn likes to attend such WMAA events to "stay connected to the hospital and get to know the residents."

But more importantly, Kuehn attends events to have fun.

"Events like this are a great release for students," confessed Kuehn.

These sentiments were echoed by WMAA president John Kryger, MD '92 After giving a rousing welcome to the tailgate, Kryger remarked that he hoped it would give the residents a chance to

mingle and network, as well as make them feel more connected to the WMAA.

Kryger also commented that no matter how busy a doctor is, "Anyone can appreciate sticking it to the Wolverines."

The broad appeal of the Michigan game helped bring the diverse group of residents together. With over 100 attendees, this event was "truly successful this year," said Karen Peterson.

As the WMAA executive director. Peterson was able to reserve a block of tickets to the game specifically for the residents, adding to the large attendance. This was a big feat, as Big-10 tickets are usually hard to come by.

"I believe the Michigan game ticket served us well this year," Peterson said.

After the residents and guests had their fill, it was time to depart for the game. The event ended with a Wisconsin win over

Michigan, 45-24, proving that the WMAA really can provide a memorable experience.

As Fletcher said, "The alumni association and hospital really do a good job taking care of the residents."

The WMAA also featured residents in its annual "Operation Education" physicians fair on January 13, 2010. During this event, medical students had the opportunity to meet SMPH alumni and UWHC residents from different specialties as they explored potential areas of interest for their future practices.

The alumni association will also co-sponsor the residents' "Winter Blues Ball," which will be held at Monona Terrace on February 13, 2010.

1812 Overture

by Walton Schalick III, MD, PhD

usical harmonies are a key to the human body. The beating of the pulse, the gurgling of the belly, the clicking of joints, all have rhythms, intonation and resonance. But that harmony extends outside of the body as well.

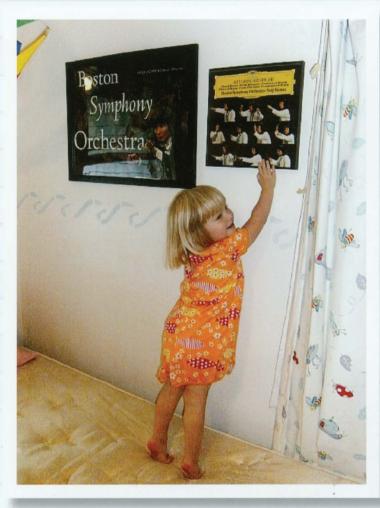
"Dah-dah-dah BOOM! BOOM! BOOM!"

Tchaikovsky meant his overture in E flat major, Opus 49, the "1812 Overture," to commemorate the Muscovite defense against Napoleon's invasion. For my family, it commemorates the surgical defense of our then two-year-old daughter's heart and her recuperation—a link between external and internal harmonies.

Zara, now a bit over three years old, was born with a condition called a partial AV canal defect. Most human hearts have four chambers: two smaller chambers, the atria, separated by a membranous wall, and two ventricles, separated by a muscular wall. The two pairs of chambers are then separated by two atrio-ventricular valves. Zara had holes in both walls and her valves were fused.

In the short-term, this meant that her heart was very leaky and inefficient; she burned up lots of calories to do the same things that a typical heart does with much less energy. This meant that she was awake a great deal, especially at night, eating to keep up with her needs. Over the long haul, the defect could cause Zara's early demise.

We learned of the condition when my wife had an ultrasound early in her pregnancy. The only option for Zara



Zara still communes with her muse, Maestro Seiji Ozawa, conductor of the Boston Symphony Orchestra. His music helped her heal.

was open-heart surgery—crack her chest, put her on a bypass-like system, stop her heart, open it up, make the repair, close the heart, restart it, take her off bypass and close up. The ultrasound result was the beginning of two and a half years of anxious waiting for her to get big enough to endure the procedure.

In the meantime, while growing slowly, Zara developed intellectually

like other children. We are fond of classical music, so she heard a lot of it. The 1812 Overture, "Boom!" as the eleven-month-old began to call it, became a staple.

Because she liked it, I began to show Zara YouTube videos of various orchestras playing the 1812. Her favorite was Maestro Seiji Ozawa conducting the Boston Symphony Orchestra at Tanglewood

("tanglewoods" became her name for tangles of Christmas tree lights). She would imitate the maestro's conducting and then dance to the multi-tempoed music, learning to identify all of the symphonic instruments by their entry cues.

"Seiji" rapidly acquired mythic proportions in our family, outstripping Big Bird, Santa and even Bucky Badger, On her second Christmas, Zara received a conductor's baton and a photo-biography of Seiji. She was so excited she stuck both hands in her mouth and drooled with delight. To this day, she likes to build Boston Symphony Hall with her blocks and calls our car "the Seiji car."

When it came time to prepare for the surgery, we copied the Boston Symphony YouTube video and then played it over and over (and over) again during her hospital stay and home recovery. Zara pulled Seiji and the music over her like a protective blanket. The music resonated with her own struggling heartbeat, and the sight of Seiji brought another friend into the hospital room. My wife and I have no doubt whatsoever that her recovery was accelerated, simplified and made more enjoyable by that music.

The power of music did not surprise me. As a pediatric rehabilitation physician, I'm a strong proponent of music therapy, using it to treat a wide spectrum of conditions, if only to ameliorate their effects or to improve function. Children with cerebral palsy, for example, do notably better in their physical, speechlanguage and occupational therapy when they are linked with music. The

Central Wisconsin Center in Madison. a remarkable institution for children and adults with developmental disabilities, makes ample use of music therapy.

As an historian and medievalist. Lalso know that music has been tightly linked with medicine from antiquity through the Middle Ages. Peter of Abano, a fourteenth-century wunderkind Italian physician, arqued that the body created monocords, polycords and a veritable symphony itself. Medicine's job was to find resonance with the internal music and help it along.

To this day, hearing the cannons fire in the 1812 reminds us of the beat of a heart—Zara's—and its continued defense of her life. It also encourages us to find a resonance inside with the world outside.



Schalick is a faculty member in the SMPH Departments of Medical History & Bioethics, Orthopedics & Rehabilitation and Pediatrics. Affiliated with the UW-Madison Waisman Center. he sees patients at UW Hospital and Clinics and American Family Children's Hospital. He and three-year-old Zara rowed together last summer.

Geeking Gubmissions

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

Our guidelines are as follows:

Manuscripts, subject to editing, can be no longer than 1,200 words. Photos must be high resolution. Subject matter should relate to any aspect of working or studying at the SMPH or in the medical field generally.

Send submissions to:

Quarterly

Health Sciences Learning Center, Room 4293 School of Medicine and Public Health Madison, WI 53705

Or e-mail quarterly@med.wisc.edu

NO GRADES, NO SWEAT?

hen I first learned of the school's plan to launch a pass-fail grading system for first-year students in 2008, my reaction was mixed. Would the system promote mastery of the basic science material? How would the change affect class attendance? Could performance be measured in ways that would allow students to compete successfully for highly sought-after residency positions? How would we measure progress—that is, success or failure—in this new approach to teaching?

It's too early to answer all these questions, but initial indications are that this is a good change.

More than 30 medical schools have now moved away from the standard five-interval grading system—A through F—to a closely supervised two-level, pass-fail system for one or more years of their teaching curriculum. Though this is not a new concept, the SMPH looked carefully at the advantages and possible setbacks that such a change could bring.

Patrick McBride, MD '80, MPH, professor of medicine and family medicine and associate dean of students, explained the recommendations of a grading subcommittee chaired by Laura Zakowski, MD '90, and Paul Bertics, PhD. The committee realized that the strengths of moving to a pass-fail system include promoting student acquisition of knowledge as a building block, rather than the acquisition of knowledge for the purposes of test performance and grading.

Under the new system, students are told of their general performance on exams and are given remedial support if they fall into the lower half of the class. The 2010 national board examinations will become the first opportunity for a side-by-side comparison of students' basic science knowledge acquisition under the two systems.

The UW students I've talked to feel that the pass-fail system is accomplishing good things. According to Robert Zemple, Med 2 and Medical Student Association president, the change has brought his class together as a group. He feels that while his class may be "phenomenal" in its own right, it is his impression—and the faculty's—that as a result of the curriculum change, bonding among classmates has occurred and cooperation has replaced competition in the classroom.

Robert feels that without a doubt, his classmates, after spearheading the initial year of pass-fail assessments last year, are closer and more caring about each other than are their Med 3 and 4 counterparts.

Carly Kuehn agrees that bonding among her first-year student colleagues is good, but she is concerned that the jump to a five-level grading system in the second year may be abrupt and difficult for some.

A recent pilot study published by the Mayo Clinic compared 2005 and 2006 first-year classes in several categories, hoping to answer questions pertaining to mood, anxiety, performance and cooperation. Their hypothesis was that the grading system fosters a competitive environment that promotes anxiety and peer competition rather than collaborative learning.

"Letter grades represent massive extrinsic rewards, which by their nature tend to transform intrinsically motivated learners into extrinsically motivated learners, precisely the opposite of currently espoused medical education principles," the authors report. These concerns raise the issue of whether the pass-fail grading system has quantifiable benefits compared with a five-level grading system.

From the Mayo study, which relied on student self-reports, school leaders perceived a decrease in student anxiety, class competitiveness and grade anxiety, as well as an increase in student collaboration. There is a hope that these powerful early effects will result in durable changes carrying over into subsequent years.

At the SMPH, class attendance, which for some might be considered optional in



this environment, actually improved, says Dr. McBride. Though there may be surmountable drawbacks in ranking students as they attempt to secure their chosen specialty training, it is hoped that the positive impact of the two-level pass-fail system in the first year will endure and contribute to an ongoing culture of collegiality and cooperation—one that will serve our students and their future patients well.

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



SUBJECT: WEB SITE WINNERS

Our Web master's hard work has been paying off. Not only is the SMPH's new site much easier to navigate than before and full of fresh content, it has been recognized with many awards. To learn more, go to: http://www.med.wisc.edu/26239.

SUBJECT: OUR NEW LOOK

Quarterly has gone through a re-do, which you should have noticed when this issue arrived. Over the next few issues, we'll be introducing new content as well. We want to know what you think. Drop us a note at quarterly@med.wisc.edu.

SUBJECT: ALUMNI SPEAK OUT

We've added a page to our Web site, called Alumni Speak Out, where graduates of the school can share their views on a variety of medical topics. If you've got something reasonable to say, submit your thoughts to http://www.med.wisc.edu/26243.

SUBJECT: FOLLOW US ON TWITTER AND FACEBOOK

Twitter and FaceBook aren't just for kids. They're easy, informative and fun! If you want to give it a try, just sign up at twitter.com/uwsmph and/or facebook.com/uwsmph.

SUBJECT: RESEARCH DIGEST ONLINE

Research Digest is an online newsletter describing recent research happenings at the SMPH. It supplements Research Advances published in *Quarterly*. To see the latest Research Digest, or to subscribe, go to: http://www.uwhealth.org/26027.



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

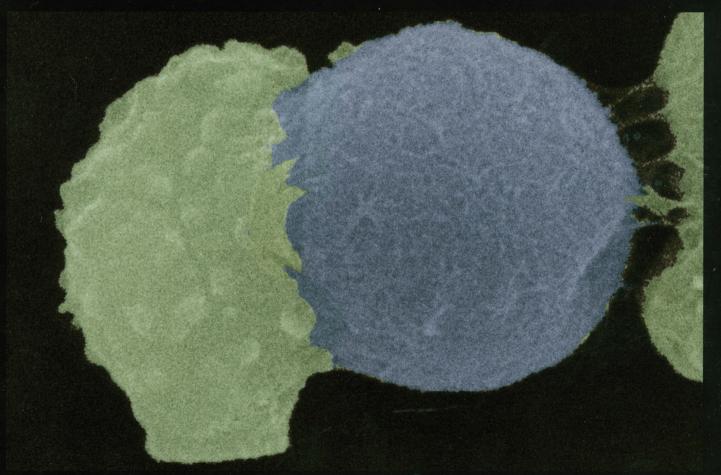
OR www.med.wisc.edu/alumni/share-your-news/874 OR quarterly@med.wisc.edu

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-23941-09





From spores to yeast. A pseudo-colored scanning electron micrograph from the SMPH laboratory of Christina M. Hull, PhD, shows the first high-resolution image of a germinating *Cryptococcus neoformans* spore (green cell) as it develops into a yeast (purple cell). Hull and her team recently succeeded in purifying spores of the meningitis-causing *Cryptococcus* fungus for the first tme. The researchers suspect that spores are infectious particles in human disease. Image courtesy of Michael R. Botts, a graduate student in the Hull lab.