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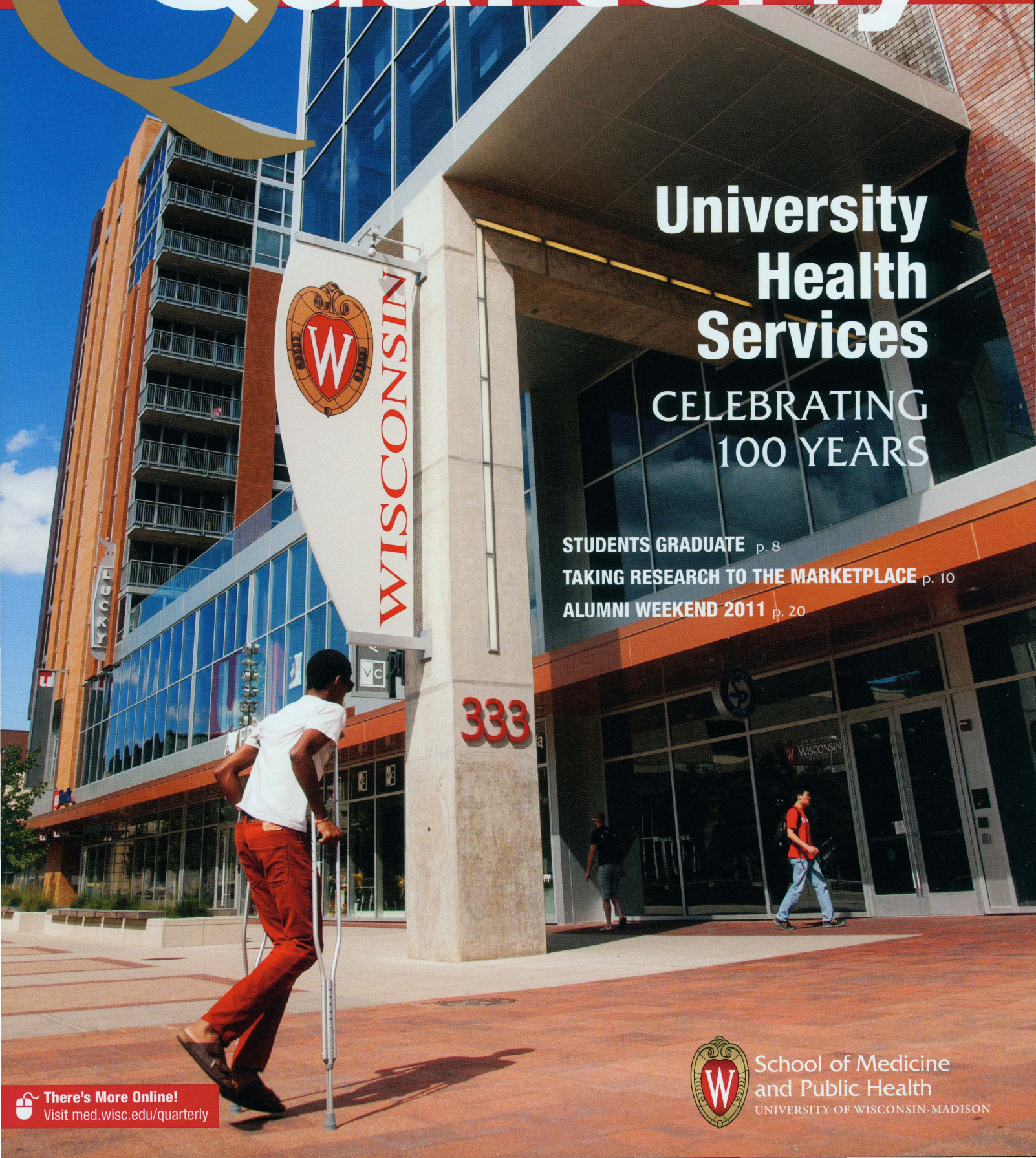
FOR ALUMNI, FRIENDS, FACULTY AND STUDENTS OF THE
UNIVERSITY OF WISCONSIN SCHOOL OF MEDICINE AND PUBLIC HEALTH

Quarterly



University Health Services

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School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON

QUARTERLY

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

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CALENDAR

SEPTEMBER 2011

FRIDAY, SEPTEMBER 16 • MIDDLETON SOCIETY EVENT
Monona Terrace Convention Center

SUNDAY, SEPTEMBER 18 • WHITE COAT CEREMONY
Union South

OCTOBER 2011

OCTOBER 14 – 15 • HOMECOMING WEEKEND
UW versus Indiana Football Game
Reunions for Classes of 1971 '81, '86, '91, 96, '01 and '06

FRIDAY, OCTOBER 14 • FALL WMAA BOARD MEETINGS

NOVEMBER 2011

FRIDAY, NOVEMBER 18 • ALPHA OMEGA ALPHA BANQUET

NOVEMBER 27 – DECEMBER 4 • WMAA/WAA WELLNESS CRUISE

APRIL 2012

APRIL 26 – 28 • ALUMNI WEEKEND
Reunions for Classes of 1947, '52, '57, '62 and '67

FRIDAY, APRIL 27 • SPRING WMAA BOARD MEETING

MAY 2012

MAY 18 • GRADUATION DAY

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON

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QUARTERLY • SUMMER 2011 • VOLUME 13 • NUMBER 3

Summer on Campus (above)

Sailing courtesy of Hoofer's Club—a perfect way to spend a late summer afternoon on Lake Mendota.

ROBERT N. GOLDEN, MD

The summer is winding down and the new academic year at the UW School of Medicine and Public Health (SMPH) is upon us. The recent arrival of our Class of 2015 and the upcoming White Coat Ceremony in September, in which we officially welcome our new medical students into the profession, represent the annual rejuvenation of academic medicine.

What thoughts should we share with our new students? Above all, we should commend them for their wise decision to become physicians, and congratulate them on their success in gaining admission. Competition has become remarkably intense, even as the number of positions has increased at our school and across the country. This year we received nearly 4,000 applications for our available positions, and even though we have continued to expand our class size, the 175 members of the Class of 2015 are among the most impressive cohorts in the 104-year history of our school.

Our new students will soon come to realize how incredibly exciting it is to enter the practice of medicine at this time. We continue to see amazing translations of basic and clinical science into new and more effective ways of diagnosing and treating disease—and more than ever, into the identification and modification of risk factors as we seek to prevent illness.

Our students will learn rapidly that the SMPH is creating a revolutionary, integrated model in which public health and preventive approaches are melded into the traditional medical focus on illness and the individual patient. Increasingly, more medical schools have begun to embrace this integrative model.

Today's students will also quickly become aware of the growing emphasis on quality, safety and interdisciplinary models of care. These factors will have a huge impact on their ability to make a difference in the lives of the people and communities they will serve throughout their clinical careers.

But the Class of 2015 will also be exposed to the very difficult issues and challenges we must confront. We still have health disparities that are inexcusable in any fair-minded society. Physicians should shape the difficult debate regarding the allocation of resources, which will continue to be limited, and should play leadership roles in assuring that the tough decisions facing our society will be based on a commitment to equality and benevolence.

Our students should rapidly appreciate that we have a long way to go before we can take full advantage of the explosive growth in the science of genetics and epigenetics. Our capacity to translate new knowledge in these and other important areas into meaningful advancements in clinical practice will require further investment by society at a time when economic resources are in short supply.

Medical school will give our new students a clear understanding of the joys and challenges of medicine. There will be much hard work, but we are here to help. Students will have fantastic opportunities to explore a wide range of endeavors, from research to community service, interspersed with more lighthearted activities such as playing in one of the several student musical groups. I encourage our students to take full advantage of their four years with us.

Speaking of music, several astute readers pointed out the embarrassing error in my last column, in which I attributed "Here Comes the Sun" to Lennon and McCartney. Of course, that classic song was written by the late, great George Harrison. What can I say except: "My Sweet Lord!" I write this mea culpa as my laptop computer gently weeps.

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

KAREN S. PETERSON

Greetings, medical alumni! It's hard to believe that the summer is just about over and the new school year has almost arrived. We ended the last academic year with several exciting events surrounding Alumni Weekend and Graduation, as you will see in this issue.

Classmates in the classes of 1951, '56, '61, '66 and '76 all gathered and reignited old friendships at reunions held during Alumni Weekend. Many alumni also enjoyed the Dean's Reception, the annual Awards Banquet and a brunch with medical students.

Just a few weeks later, the Class of 2011 graduated in style with a recognition ceremony at the Union Theater, followed by the campus commencement ceremony at the Kohl Center. In the evening, the alumni association and the school co-sponsored a celebration for the graduates and their families and friends at the new Union South, a beautiful venue we plan to use often!

To see more pictures of both Graduation and Alumni Weekend, go to our website: med.wisc.edu/87.

As I write this message, the WMAA staff is planning many fall events for alumni, residents and our medical students.

- We will welcome the soon-to-arrive Class of 2015 with a **"Badger Cookout"** during new student orientation week and the **White Coat Ceremony** on September 18.
- The **Middleton Society**, the honorary society comprised of the school's largest donors and closest friends, will be honored on September 16. It will be an evening of gratitude, and members will have the opportunity to interact with many outstanding medical students. In addition, preventive cardiologist Dr. James Stein will enlighten us with a talk on the latest strategies for preventing heart disease. This will be an event that Middleton Society members won't want to miss.
- **Homecoming Weekend**, October 14-15, will be filled with excitement. The Classes of 1981, '86, '91, '96, '01 and '06 will return to celebrate their reunions. In addition to hosting a tailgate party before the UW-Indiana football game, the WMAA will make football tickets available to all WMAA members and class reunion attendees. For information, go to the WMAA website.

The WMAA has embarked on a new strategic planning process. In order to make our strategic plan successful, we need your assistance. We want your input on how we can best meet the needs of all of our constituents—alumni, residents and students. What do you think the WMAA should focus on? Please share your ideas by sending me an e-mail at kspeters@wisc.edu. I will be sure to share your ideas with our strategic planning committee.

And lastly, a top priority of the WMAA is to raise funds to support scholarships that reduce medical student debt. Typically, our students graduate with an average debt of $145,000, which can be very difficult to overcome. We continue to encourage alumni to support the WMAA's Great People Scholarship program. While funds last, the UW Foundation *and* the WMAA will each match every $1 donated with $.50. There is no better return on your investment!

If you haven't already, please consider making a gift to this program. You can do it online at med.wisc.edu/92 and click on "make a gift." Or you can mail your gift to University of Wisconsin Foundation, UW Bank Lockbox, PO Box 78807, Milwaukee, WI 53278-0807.

As always, please feel free to contact me with your ideas, questions and concerns. You can e-mail me at kspeters@.wisc.edu, phone (608) 263-4913 or write Karen S. Peterson, 750 Highland Avenue, Madison, WI 53705. I look forward to hearing from you!

Karen S. Peterson
Executive Director
Wisconsin Medical Alumni Association
Assistant Dean for Alumni/External Relations
School of Medicine and Public Health

Cornelius House on State Street was the first student clinic, with additional student infirmaries soon to follow. The student health department also served as the medical school's first clinical medicine department for many years.

UW-MADISON ARCHIVES

BY SHARYN ALDEN

University Health Services

NATIONALLY RECOGNIZED AS A COLLEGE HEALTH MODEL, UHS MARKS 100 YEARS OF VISION AND VITALITY

It was a time when a quart of milk cost 3 cents, a gallon of gas set you back 7 cents, and college graduates started out earning about $750 a year.

February 1910 was a time when the University of Wisconsin-Madison stepped across the threshold of the young millennium and boldly developed a student health department, one of the first in the country.

Why have a student health department?

"Students have unique needs when they live and work together in a large closed community like the UW-Madison campus, so it is imperative that a safe and healthy environment is maintained," says Sarah Van Orman, MD, MMM, executive director of University Health Services (UHS) since 2008.

What's more, college is a pivotal time in the lives of young people developing into adults, when they are in the process of figuring out how to live on their own.

"It's a time when those of us working in student health can make a difference in students' lives now and influence their future lives," says Van Orman, a clinical assistant professor of internal medicine and of pediatrics at the UW School of Medicine and Public Health (SMPH).

Crafting a university clinical health department and curriculum adjunct to the medical school was a multifaceted endeavor that was not simply a dry exercise of necessity in the early 20th century; rather it was a radical fresh expression of the campus' values, traditions and innovations. That's why the history of UHS is one of not only significant growth and development, but also contributions to the university environment and its success.

Over the past 100 years, UHS has been lauded for being a college health model that emphasizes prevention, public health and environmental health. It is a teaching site for medical students, residents, nursing students and other health professions students. UHS medical staff participate in national research.

UW-Madison students today have many of the same health concerns as students a century ago, but what's very different now is that, thanks to a myriad of technological advances, they have access to a wide range of resources and services geared to a diverse, multicultural population.

Over the decades, UHS has evolved to become a major health education resource. Simply by "pointing and clicking" on their computers, students can get reliable information on drug and alcohol use; mental health issues such as depression, anxiety and suicide; violence; exercise; nutrition and women's health, including reproductive healthcare.

In terms of comprehensive patient care, UHS offers primary care, counseling, psychiatric services, immunization, sexual health, women's health, physical therapy, athletic training, occupational medication and travel health.

–Continued on next page

COMMUNICABLE DISEASES– *THEN AND NOW*

One ongoing challenge at University Health Services (UHS) is to prevent outbreaks of communicable diseases—the very origin of the department a century ago when typhoid fever was a deadly threat.

In residential settings where large populations of students live in close proximity, a disease can quickly take flight and potentially impact the entire community.

Over the years, UHS has led the campus response to not only typhoid, but also smallpox, the 1918 influenza epidemic, diphtheria, swine flu, measles, mumps and norovirus.

"Our campus must have a well-functioning public health apparatus to prevent disease outbreaks where possible and respond to them when necessary," says UHS executive director Sarah Van Orman, MD, MMM. "In many cases, we can mitigate the spread of disease by early identification and interventions, such as widespread influenza vaccination."

UHS helped the campus community gird for H1N1 in 2009 with a massive program that included surveillance, support for self-identification and personal hygiene, and accurate flu messages to reduce fear. The effort was successful—not one student died or needed to be hospitalized.

Communicable food-borne illnesses are addressed in a similarly integrated way.

"Our medical providers are ready to test and treat students, our epidemiology and community health staff investigate sources of the outbreaks, our communications department prepares and disseminates accurate health information, and our environmental health staff inspect and license university food service establishments," Van Orman says.

VISION TRANSLATES TO REALITY

The idea for student healthcare was originally explored by 19th-century UW-Madison visionaries who were interested in addressing fundamental health concerns facing the new campus. In 1899, UW president Charles Kendall Adams paved the way for limited healthcare for the women of Chadbourne Hall when a new facility was established for that purpose.

But it took a student health tragedy in 1908 to move the idea forward.

That fall, typhoid fever struck campus. Students were living in a vulnerable situation that invited communicable disease—congested dormitories in unhygienic situations with no access to centralized campus healthcare. Forty-nine students died and several others became seriously ill.

What happened next was inevitable, given the concern that students' parents had about their children. So Charles R. Bardeen, MD, then dean of the medical school, was charged with creating a department that would serve as an infirmary for sick students as well as a training site for medical students. At the time, Bardeen was exploring expanding the medical school from a two-year to a four-year program that would include clinical training in addition to a basic science curriculum.

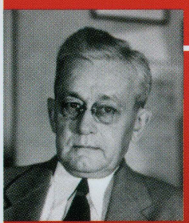
It took two more years—until 1910, when Joseph Spragg Evans, MD, arrived on campus—to make the plan a reality. When Evans became the first UHS director, the campus population was 3,500. He and two assistants treated 837 patients during the first semester that UHS was an active clinic. When not treating sick students, Evans, following Bardeen's lead, espoused a medical philosophy of physical hygiene for the student community.

Still, UHS caused a stir. Some Madison physicians felt it represented unfair competition. Others accused it of being contract or socialized medicine. Eventually the hubbub died down and the community

HIGHLIGHTS OF 100 YEARS

1910

University health department opens in Cornelius House, serving also as first clinical medicine department



Joseph Spragg Evans, MD, becomes first director and Department of Clinical Medicine chair

LATE 1940s

Counseling Services established

1936

Dean William S. Middleton, MD, advocates for establishment of neuropsychiatric services

LATE 1950s

UHS moves from Medical School to report to UW Hospital

1962

Peter Eichman MD, appointed UHS director, is instrumental in expanding UHS's role on campus

realized that the new on-campus health program might outlast the arguments.

Cornelius House on State Street served as the first student clinic, with additional infirmaries soon to follow. The department maintained its dual student health-clinical medicine purpose until 1925, when the school became a four-year institution and the Department of Medicine was created.

Looking back, it was a very different world when UHS charted a new medical era on campus. A lot has changed in a century —in healthcare, on campus and at UHS.

INTEGRATED APPROACH

A patient visiting UHS today benefits from an integrative approach to healthcare. In addition to clinical services, the broad program includes prevention, public health, wellness services and mental health counseling.

The provider staff includes 13 physicians, 14 registered nurses, 11 psychologists, eight licensed counselors and social workers, eight nurse practitioners and three physician assistants. They serve a population of 42,000 students and 16,000 faculty members, with about 25,000 students making 85,000 visits per year.

Several units—epidemiology, community health, environmental health, communications and, most recently, occupational medicine—contribute importantly to UHS's mission of promoting, protecting and restoring health.

UHS is an independent entity on campus, but more than many other student health services in the country, it shares professional staffs and programs with the SMPH.

"We have strong relations with the SMPH and UW Hospital, primarily through training programs," says Van Orman. "And we have several SMPH alumni working with us."

Van Orman was drawn to Wisconsin from the University of Chicago, where she served as the director of student health services, because she wanted to work for a public university with a large patient population. With national visibility as the vice president of the American College Health Association, she recently was quoted in a *New York Times* story on student health.

ADDRESSING GROWING NEEDS

In the past three years, UHS has experienced an upswing in demand for services. It may be due in part to its fairly new location. In 2009, the department moved to the just-built Student Services Tower at 333 East Campus Mall between Johnson Street and University Avenue, an easily accessible central campus area.

The demand for services is also related to a growing undergraduate population. Many of these young students do not have health insurance and if they do, they may have large deductibles that strain their budgets, making them inclined to seek UHS's mostly free health services.

Delivering top-quality healthcare to a "city within a city" is an ongoing challenge. UHS continues to fine-tune outreach methods to connect with this large population. Social media outlets including Facebook and Twitter are used, and three years ago, UHS started communicating with students through secure online messaging.

The health of the student population at UW-Madison is determined by many

–Continued on page 39

1968
1552 University Avenue becomes home to UHS

Staph food poisoning makes 600 students ill, leading to creation of Environmental Health unit

1969
Blue Bus Clinic established to provide free care for STDs and drug use, eventually becomes part of UHS

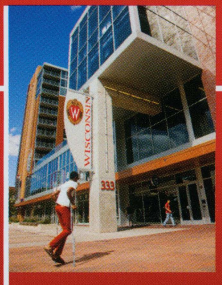
1989
First alcohol and other drug abuse coordinator becomes part of UHS

1993
UHS moves from being under UW Hospital to reporting to UW administration

Wisconsin Clearinghouse for Prevention Resources becomes part of UHS

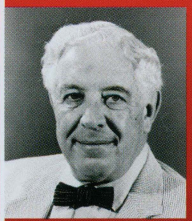
2001
Director Kathleen Poi, RN, distinguished professor of nursing, expands the role of college health nursing

2008
Sarah Van Orman, MD, appointed director



2009
UHS opens at 333 East Campus Mall

1968-92
Longtime director J.D. Kabler, MD, is credited with UHS's becoming an independent organization and expanding many program areas



UW-MADISON ARCHIVES

Students Graduate

WITH A CLEAR EYE ON THEIR CHOSEN FIELDS

With graduation behind them, the members of the Class of 2011 have begun their residencies in places as near as UW Hospital and Clinics and as far as the University of California, San Francisco. The new residents are immersed in programs ranging from internal medicine to radiation oncology.

During their four years at the School of Medicine and Public Health (SMPH), the students explored an array of options as they thought about their future clinical practices. With their ideas crystallized, they are now on their way to becoming experts in their chosen fields.

Two of the graduates—Clay Dean, MD, and Nathan Vakharia, MD—knew from the start that they wanted to practice medicine in a rural setting. They were members of the inaugural class of the Wisconsin Academy for Rural Medicine (WARM), a program designed to increase the number of physicians in rural, underserved areas of the state. Vakharia is doing an SMPH family medicine residency at Baraboo, Wisconsin, while Dean is doing a general surgery residency through Central Iowa Health System.

The TRIUMPH (Training in Urban Medicine and Public Health) program addresses a similar need in urban areas of the state. Graduates Anne Getzin, MD, and Kjersti Knox, MD, both of whom participated in TRIUMPH, are doing family medicine residencies at St. Luke's Medical Center in Milwaukee.

"A core mission of the SMPH is to address the healthcare needs of Wisconsin and beyond, and these programs do just that," says Christopher Stillwell, MA, director of career advising services at the school. "Both WARM and TRIUMPH are exceeding beyond our expectations."

Clockwise from top: Bennett Vogelman assists Melissa Taavola with her hood; the graduation party features good music and dancing; Mamadou Sanogo and Adrian Tabares pose for pictures; Anuoluwapo Elegbede celebrates with family; Shanna Paul's son Cassius gets a kiss.

PHOTOS BY TODD BROWN

There's More Online!
For a map of residency destinations, go to med.wisc.edu/30887.
For more pictures, go to: med.wisc/87.

Jessica Antosiewicz removes vials of frozen human embryonic stem cells from storage in the SMPH laboratory of James Thomson in 2005. The research led to the creation of Cellular Dynamics International, a successful start-up company.

JEFF MILLER, UNIVERSITY COMMUNICATIONS

BY DIAN LAND

Culture of Commercialization

RESEARCHERS ARE ENCOURAGED TO MOVE THEIR IDEAS AND DISCOVERIES TO THE MARKETPLACE

When cardiologist Craig January, MD, PhD, came to the University of Wisconsin School of Medicine and Public Health (SMPH) from the University of Chicago 16 years ago, he was surprised to hear some of his new colleagues talk about creating start-up companies to commercialize ideas and discoveries resulting from their research.

"Such things were not typically discussed at Chicago," says January, now an SMPH professor of medicine and co-director of the Inherited Arrhythmias Clinic at UW Hospital and Clinics. "I found the culture here to be different—more supportive of translational research and technology transfer."

So a few years later, January was not that surprised when stem cell pioneer James Thomson, PhD, professor of anatomy at the SMPH and director of regenerative biology at the Morgridge Institute for Research, invited him and SMPH cardiologist Timothy Kamp, MD, PhD, professor of medicine, to explore the idea of joining in a company that would use stem cells to make human heart cells that could be used in testing new drugs.

Thomson had accomplished his groundbreaking feat of isolating and growing human embryonic stem cells in culture and was on his way to deriving stem cells from skin cells. Kamp was working on growing heart cells from embryonic stem cells and January had long been involved in research on lethal cardiac reactions to new drugs. Stem cells could be used as tools in drug testing and other scientific endeavors much sooner than they could be used for therapeutic purposes, Thomson reasoned, and heart cells were critically needed.

The idea of creating a company appealed to them all.

"A company would make our discoveries much more accessible, and we wanted to help shape the way they were commercialized," says Thomson.

So together with blood researcher Igor Sluvkin, MD, PhD, SMPH associate professor of pathology and laboratory medicine, the investigators created Cellular Dynamics International (CDI). And the company's trajectory in the past seven years has placed it, by all measures thus far, in the "success story" category.

For one, pharmaceutical companies and others are eagerly buying CDI's first product, iCell® Cardiomyocytes, which have the metabolic and electrophysiological properties of pure heart cells, can be grown by the billions and are easily frozen for transport. The company has recently broadened its mission and expects to be offering other kinds of stem-cell-derived products—including nerve and liver cells—soon.

MOVING INTELLECTUAL PROPERTY to the marketplace is an important and logical extension of medical research at UW-Madison, says Robert N. Golden, MD, dean of the SMPH.

"Everything we do as a medical school, whether it's patient care, education or research, ultimately aims to elevate the health of individuals and populations," Golden says. "Research is important, but it's even

more important when it touches the lives of people by having a positive impact on their health and the health of their communities."

The SMPH has devoted many strategic resources to translational research programs, which aim to quickly move discoveries from the laboratory bench to the clinic bedside, and even further, the community curbside.

The Institute for Clinical and Translational Research (ICTR) is the most visible example.

"Commercialization is yet another aspect of our translational research mission," Golden says. "If the National Institutes of Health renews our ICTR grant this fall, as we expect it will, the institute will engage in commercialization of research products even more than in the past."

THE ENGINE THAT HAS FACILITATED much of UW-Madison's transfer of technology for more than 85 years has been the Wisconsin Alumni Research Foundation (WARF).

"WARF is a huge incentive, stimulating faculty, staff and even students to bring their inventions to market," says Golden, who came to Wisconsin from the University of North Carolina, which also is known for a culture of research commercialization. "WARF was the prototype, and in my opinion, remains the very best when it comes to transforming the intellectual property of university faculty into commercial products."

Historically, the bulk of WARF's efforts have been in patenting the discoveries of researchers and licensing their technologies to leading companies in Wisconsin, the United States and worldwide. Indeed, UW faculty members hold more scientific patents than those at any other public university in the country.

One high-profile patent is digital subtraction angiography (DSA), which Charles Mistretta, PhD, SMPH professor of medical physics, created more than two decades ago. DSA, an imaging technique that increases the contrast between blood vessels and surrounding bones and soft tissue, is used in almost every radiology department in the country today. As a result, the DSA patent is one of the largest income earners of all patents issued by WARF.

And that money rewards inventors and comes back to UW-Madison. After distributing investors' royalty shares, WARF gifts the licensing earnings from its patented technologies to the university, typically contributing some $50 million annually to fund additional UW research.

LICENSED TECHNOLOGY may also become the basis of a start-up company, at times the most effective way of taking research to a level where its impact can be greatest and return on investment largest.

At least 304 start-up companies have been created by UW-Madison faculty, staff and students through 2010, according to the INSITE Entrepreneurship Census coordinated by UW's Anne Miner, PhD, distinguished professor of management and human resources. (To see the list, go to bus.wisc.edu/insite-census/.)

Approximately 30 of the firms have had links to the SMPH.

"Creating a start-up is not an easy thing to do," says Allen Dines, assistant director of the UW-Madison Office of Corporate Relations and formerly of University-Industry Relations.

Three main ingredients are required to get a start-up off the ground, he says. First, of course, there's the technology.

"You need the scientific capability to do something novel," he says. "Second, you need management talent, somebody who knows how to put the pieces together to get a company going. And faculty don't necessarily know how to do that. Finally, you must have the capital."

CDI has been extremely successful in setting up its management team and attracting capital, Dines says. The process began with private donations but quickly accelerated through multiple rounds of funding, to a point where today the company is very well capitalized.

Stratatech, which commercializes unique skin substitute products, is also a growing start-up with great potential. The company had its stunning origins in the laboratory of Lynn Allen-Hoffmann, PhD, professor of pathology and laboratory medicine at the SMPH. In 1996 she and her research team were studying the life span of keratinocytes, the most common form of cells found in the epidermis, or outer layer of skin. To the scientists' amazement, they found that unlike all other cell lines they had studied, one grew continuously in culture, never stopping.

"The extraordinary value of this cell line is that it can grow into distinct stratified layers of tissue with the physical strength and biological characteristics of intact human skin," says Allen-Hoffmann.

She founded Stratatech in 2000, envisioning a portfolio of products that could be used for treating severe burns, wounds, diabetic ulcers and skin cancers. With steady growth, the company has hit numerous key milestones.

StrataGraft®, the company's skin subsitute for severe burns, has advanced into

The Wisconsin Alumni Research Foundation (left) is the engine that has facilitated much of UW-Madison's technology transfer for more than 85 years.

human clinical trials, with an intitial safety study completed and a second trial to begin later this year.

The company is also developing genetically enhanced tissues that produce elevated levels of antimicrobial factors leading to better natural wound healing. Published research on one of the tissues highlighted its ablity to suppress the level of a common multi-drug-resistant bacterium, eliciting an editorial by independent surgeons hailing it as a potential "paradigm shift in the management of skin pathologies."

Stratatech has also made strong additions to its management team and has commercialized a human skin model for in vitro toxicity testing.

OTHER SUCCESSFUL START-UPS with links to the SMPH have gone on to be publicly traded or acquired by large, well-established firms, bringing significant earnings to shareholders.

"Industry has shown an increased interest in acquiring products after they have been proven through successful development by a start-up," Dines says. "This also decreases the market for straight licensing of products."

The Swiss company Roche acquired the start-ups NimbleGen and Mirus over the past four years, giving the world-class company a presence in Madison. NimbleGen, created by medical genetics professor Frederick Blattner, PhD, and others, produces research tools that help scientists study gene expression and identify DNA aberrations. Mirus, created by Jon Wolff, MD, former SMPH professor of genetics and pediatrics, and others, focuses on a unique RNA and DNA delivery system that has the potential for treating diseases such as Duchenne's muscular dystrophy.

In other major deals:

- *Third Wave Technologies*, which James Dahlberg, PhD, professor of biomolecular chemistry, helped create in 1993, is now part of Hologic, Inc., a Massachusetts-based women's health firm. Third Wave's tests for human papilloma virus and cystic fibrosis using its gene amplification technology meshed well with Hologic's products.
- *Cellectar*, which develops therapies to detect, treat and monitor a wide variety of human cancers, merged with Novelos Therapeutics, Inc. Cellectar founder Jamey Weichert, PhD, an SMPH professor of radiology, will continue his research on Cellectar's lead drug candidate, which recently received FDA clearance to enter clinical trials.
- *TomoTherapy*, a firm with deep roots in the SMPH, thanks to Thomas "Rock" Mackie, PhD, professor of medical physics and human oncology, has been acquired by Accuray of Sunnyvale, California. TomoTherapy's widely praised radiation therapy system features three-dimensional imaging integrated with the spiral delivery of small beams of radiation that provides exceptional accuracy.

SMPH SCIENTISTS DO NOT have to go far to find help deciding at an early stage whether their intellectual property has potential for commercialization. Several programs offer support. Some include:

The Medical Innovation Office is a collaboration of the Graduate School, the College of Engineering, the SMPH and the Morgridge Institute for Research that is partially funded through a Wallace H. Coulter Foundation grant. The office promotes the development of promising medical devices and diagnostic technologies involving collaborations between UW clinicians and biomedical engineers.

The WARF Accelerator Program focuses on identifying high-potential assets at an early stage, offering consultation with real-world business experts to evaluate opportunities for innovation and providing critically timed funding for selected projects.

The First Look Investor Forum, sponsored by the Office of Corporate Relations, brings together investors and researchers before companies are formed or funding is needed. The goal is to build relationships at an early stage, giving

–Continued on page 39

DIFFERENT TWIST ON COMMERCIALIZATION

Wisconsin Innovation Institute (Wi2) is the newest entity designed to move discoveries to commercialization and practical use for human health. Rather than concentrating on supporting the discovery process, which can be risky and expensive, it will concentrate on the next step—developing new discoveries that exhibit great promise.

"Wi2 will select discoveries from sources such as the private sector, WARF and faculty research programs that have been judged by our scientific advisory board to possess potential as innovative first-in-class therapeutics," explains Richard Moss, PhD, senior associate dean for basic science, biotechnology and graduate studies at the SMPH.

Four to six discoveries, or "assets," will be identified each year to be folded into a new or existing company, where targeted development will occur, Moss explains.

"This could be improving a small molecule drug through chemistry or conducting clinical testing or animal toxicity testing on a strong lead compound," he says.

Wi2 will broaden the school's mission of translating research results.

"It will also give SMPH faculty and staff an opportunity to become engaged in developing new discoveries to which they otherwise would not have access," Moss says.

FRIEDL NEW CHAIR OF PATHOLOGY AND LABORATORY MEDICINE

Andreas Friedl, MD, has been appointed chair of the SMPH Department of Pathology and Laboratory Medicine. He is a professor in the department and director of surgical pathology at UW Hospital and Clinics.

A faculty member since 1997, Friedl assumed the department's top leadership position July 1. He succeeds Michael Hart, MD, who served in the position for 16 years.

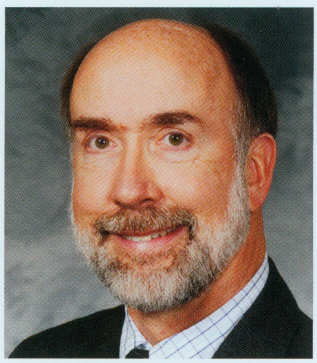
Friedl leads an active basic-research program focused on the cellular "microenvironment" that allows tumors, particularly breast tumors, to grow. He also directs a clinically oriented research effort to develop techniques for measuring the effects of anti-cancer agents on tissue samples. He is a member of the Tumor Microenvironment Group at the UW Carbone Cancer Center.

Friedl earned both MD and Dr. med. (magna cum laude) degrees from Friedrich-Alexander University in Erlangen-Nuremberg, West Germany, then came to UW-Madison for a research fellowship.

He completed an internship in gynecology and obstetrics at the University of Hamburg, then returned again to UW for a residency in anatomic and clinical pathology, serving as chief resident for one year. From 1993 to 1995, he completed a research fellowship in pathology.

Friedl has been given the American Cancer Society (ACS) Physician's Research Training Award and was named an ACS Research Scholar. He has served on National Institutes of Health research grant review committees and is on the editorial board of the *Journal of Neuropathology and Experimental Neurology.*

CROUSE WINS AAFP HIGHEST EDUCATION HONOR



Byron Crouse, MD, associate dean for rural and community health at the SMPH, will receive the 2011 Thomas W. Johnson Award of the American Academy of Family Physicians (AAFP) at the association's annual scientific assembly in September.

The award is the highest honor presented by the AAFP for individual contributions to family-medicine education.

Crouse has provided creative and effective strategies for the school as it responds to the needs of the state, particularly in rural areas that do not have enough physicians.

In a letter announcing the award, AAFP president Roland Goertz, MD, commended Crouse for his work in "developing unique programs to support students seeking careers in rural family medicine."

"Your most recent project, the Wisconsin Academy for Rural Medicine (WARM), is only one of the many legacies you have left to benefit the family physicians of the future," added Goertz.

A focus within the MD program at the SMPH, WARM gives medical students the opportunity to work in communities where there are shortages of medical professionals and facilities. Earlier this year, the SMPH graduated its first two students in the program.

Crouse graduated from the Mayo Medical School in 1977, completed his residency at the Duluth Family Practice Residency Program and subsequently practiced family medicine.

He joined the SMPH faculty in 2001. He is a professor of family medicine and a physician at UW Health Belleville.

FORMER DHS SECRETARY TO LEAD UW POPULATION HEALTH INSTITUTE

Karen Timberlake, JD, former secretary of the Wisconsin Department of Health Services (DHS), has been named director of the Population Health Institute at UW-Madison.

"During Karen's tenure as secretary, she led a number of innovative efforts to improve the health status of all the people of Wisconsin, earning a reputation as a bright and well-respected leader with a rich knowledge of both medical care and public health issues," says Robert N. Golden, MD, dean of the SMPH. "I am delighted to have her join our faculty and lead the efforts of the Population Health Institute."

Currently the director of the Partnership for Healthcare Payment Reform, Timberlake served as DHS secretary from 2008 through 2010. As secretary, she led the development of the state's health plan, Healthiest Wisconsin 2020, and oversaw the design of the statewide electronic health information exchange.

Under her leadership, DHS tackled public health issues ranging from expanding farm-to-school programs to reduce childhood obesity, to improving birth outcomes for at-risk mothers in urban areas and expanding screening for alcohol and drug abuse.

The UW Population Health Institute creates and communicates public health and health policy research and analysis.

Working with public health and health policy practitioners in Wisconsin and nationally, it strives to advance public health and health policy decisions that improve the health of the people of Wisconsin. Every year, the institute produces the County Health Rankings, which ranks the health status indicators of every county in the country.

Timberlake, who earned a law degree from Harvard University, will begin work at the university on October 1 and will join the population health sciences faculty.

PATZ TO HEAD NEW GLOBAL HEALTH INSTITUTE

Jonathan Patz, MD, professor of population health sciences, has been chosen to head the new UW-Madison Global Health Institute. The institute represents a merger of the Center for Global Health and the Global Health Initiative.

The Center for Global Health was established in 2005 by Cynthia Haq, MD, professor of family medicine and population health sciences, to address strong student interest when there were few organized global health programs at UW-Madison. The Global Health Initiative was created with a goal of fostering research relevant to global health that included investigators outside typical health-focused departments.

"UW-Madison, with its many prestigious schools grouped on one campus, is uniquely positioned to grapple with today's pressing global health challenges," Patz says. "I hope to engage people in related fields across the humanities and the biological, social and physical sciences to pursue root causes underlying the shortcomings of our world's health."

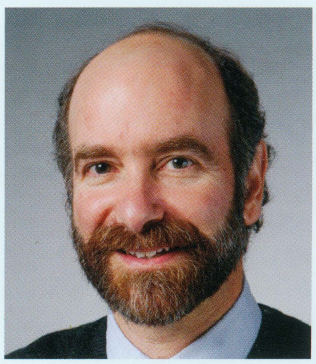
Too many global health interventions are narrowly focused, adds Patz.

"As we try to solve one problem, we inadvertently can create two or three more," he explains. "The best way forward is through engagement among a diversity of perspectives."

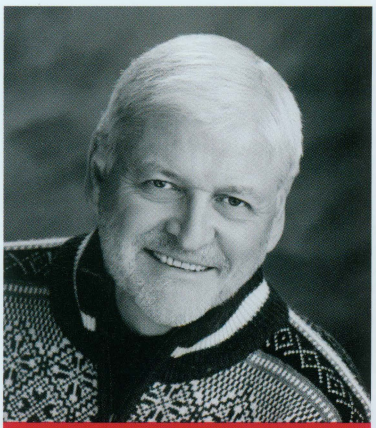
University leaders recognized Patz's natural inclination for integrating research from disparate fields.

Also holding an appointment in the Nelson Institute for Environmental Studies, he has led UW-Madison's International Environmental Affairs and Security Cluster, the Nelson Institute's Certificate on Humans and the Global Environment, and the Investigators' Council of the Center for Sustainability and the Global Environment.

He shared the 2007 Nobel Peace Prize and won the 2006 Zayed International Prize for the Environment for his work on health links to climate and land use change.



DEAN'S TEACHING AWARDS



NORMAN JENSEN

JAMES KECK

GRETCHEN SCHWARZE

BRUCE SLAUGHENHOUPT

Four SMPH faculty members recently were named recipients of the Dean's Teaching Awards. Recipients are selected by a committee of faculty who have previously been honored for excellence in teaching. Criteria include: excellence in teaching technology, evaluation methods and administrative efforts; extraordinary dedication to student education; demonstrated high level of teaching effectiveness and innovation in education.

NORMAN JENSEN, MD '65, MS

A long and distinguished career has earned SMPH emeritus professor Jensen the respect of his peers and the appreciation of many students since he began teaching here in 1970. But longevity alone does not account for his impact on the curriculum in an ever-evolving profession. He is an enthusiastic adopter and teacher of new technology-driven diagnostic concepts, such as evidence-based medicine.

For his teaching of history taking, physical examination and oral presentation skills in all four semesters of the Patient, Doctor and Society (PDS) course, students consistently rate him as outstanding in all aspects of evaluation.

Jensen also serves as a preceptor in the Generalist Partners Program, which pairs year-one students with community primary care clinicians to give them real-world experience.

JAMES KECK, PHD

Professor of biomolecular chemistry, Keck is rated a top educator in one of the school's highest-rated first-year courses—biomolecular chemistry.

Keck makes the language and concepts of a challenging subject accessible and relevant to a wide range of students, whether he is mentoring Madison West high schoolers in the national SMART (Students Modeling a Research Topic) program, revising sections of the SMPH course materials to increase their clinical relevance or empowering the higher reaches of graduate training. He is director and principal investigator on the campus Molecular Biosciences Training Grant, which supports 34 graduate students.

His teaching philosophy stresses integrating fundamental concepts; getting, keeping and increasing student interest in the subject; using a variety of teaching tools and techniques; and conveying an infectious enjoyment of his chosen study.

GRETCHEN SCHWARZE, MD, MPP

Since joining the SMPH in 2005, assistant professor of vascular surgery Schwarze has carved a unique niche. Her multiple teaching roles address some of the most challenging questions of public health policy and doctor-patient relations. She brings scholarship and empathy to difficult topics, including informed consent, advance directives, end-of-life care and conflict of interest.

Schwarze is director of the clinical ethics curriculum, a frequent lecturer in all levels of the PDS program, and leader of the Unanticipated Outcomes Core Day for third-year students. She is also a key organizer of the school's annual Bioethics Symposium.

She is supported by a Greenwall Faculty Scholars Award, which allows her to fill many educational roles concurrently with her surgery practice and research.

BRUCE SLAUGHENHOUPT, MD

In his practice, associate professor Slaughenhoupt specializes in perinatal and pediatric urology, but since his appointment to the SMPH faculty in 2005, he has also specialized in leading, updating and improving the urology curriculum for a spectrum of students.

Slaughenhoupt teaches in three semesters of the PDS course and is the director of the male genito-urinary curriculum. He is a mentor, Year-End Physician Skills Assessment station developer and assessor and the urology education director. For the elective urology clerkship, he created a comprehensive student handbook and initiated the use of online videos. He has fundamentally reorganized the clerkship.

His outcome evaluation of the new clerkship compared to the traditional version of the clerkship has been the basis of research he presented at the annual American Urology Association meeting.

DEAN'S RESEARCH MENTORSHIP AWARDS

Two SMPH faulty members were honored recently with a Dean's Award for Excellence in Medical Student Research Mentorship. The awards recognize individuals who devote exemplary effort to encouraging and developing medical student researchers outside of the classroom.

BERMANS ISKANDAR

HERBERT CHEN

BERMANS ISKANDAR, MD

A professor of neurological surgery and director of pediatric neurosurgery at American Family Children's Hospital, Iskandar is a triple threat role model: clinician, teacher and researcher. His laboratory has been instrumental in hypothesizing and proving a significant role for folic acid in regeneration and repair of the adult central nervous system after injury.

Over the past 11 years, Iskandar's lab has been a magnet for medical students interested in the neurosciences. He has developed some of the finest young students, mentoring more than 50 high school, undergraduate and medical students through an array of programs. Their productivity has been outstanding, resulting in some 36 papers, presentations or publications, and 12 awards, including the UW Hilldale Research Fellowship, Shapiro Excellence in Student Research Award and the American Academy of Neurological Surgeons Medical Student Research Fellowship.

The continuum of Iskandar's mentorship extends to the resident level as well. Two of his mentees have won prestigious Neurosurgery Research and Education Foundation Fellowship grants, and his residents were the recipients of four of the 10 awards given nationally to residents for best pediatric neurosurgery research between 2002 and 2006.

HERBERT CHEN, MD

As professor of surgery and recently named chief of the Division of General Surgery, Chen has demonstrated prolific mentorship talents that have benefited the research and clinical education of countless medical students.

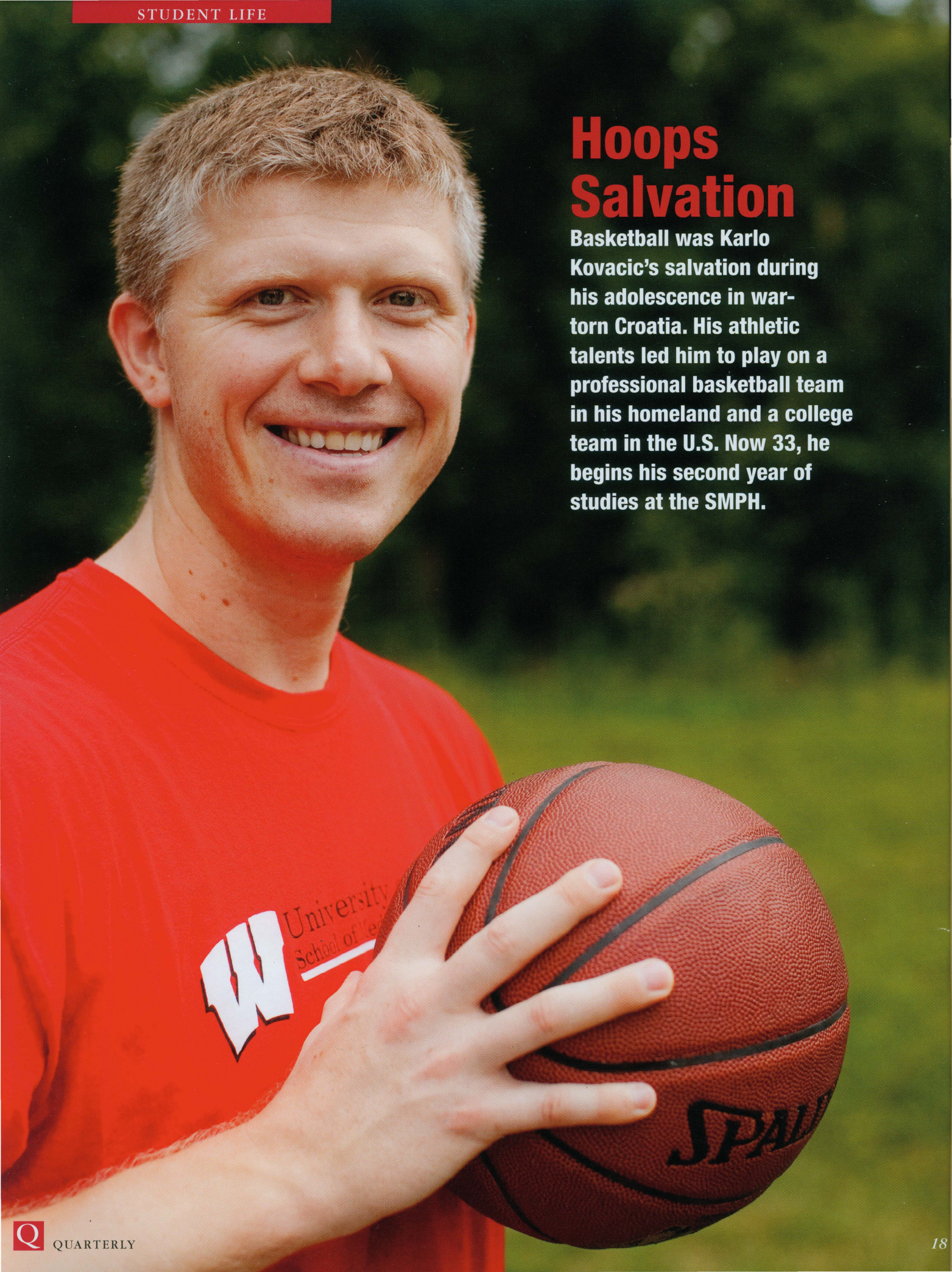
Over the last 10 years, he has served as a mentor for 30 undergraduates, 32 medical students, four Howard Hughes Medical Institute Student Fellowship recipients pursuing yearlong research training, and four medical students pursuing Research Honors at the SMPH.

He is program director of a National Institutes of Health-funded training grant to support medical student research training experiences in the Department of Surgery. He is a two-time invited Shapiro Lecturer and since 2009 has served as director and committee chair of medical student research, playing a pivotal role in securing additional funds for student research and establishing the new ICTR-Shapiro Student Research Fellowship.

For their research productivity studying the development, progression and treatment of endocrine tumors, Chen's mentees have received the highest awards and recognition available to medical students at both local and national meetings, and boast an impressive record of presentations and publications. Not surprisingly, Chen's summer research positions are filled up to eight months in advance.

Mentors are critical to the school's student research activities. Students get involved in a variety of research projects in basic and clinical sciences, health services, public health and global health under the guidance of faculty from SMPH departments, centers and institutes. The programs are designed to encourage the development of research skills and competencies. About half of all the students in the MD program participate in summer research between their first and second years.

Student researchers receive a stipend, and some receive matching funds from a variety of sources. The ICTR-Shapiro Medical Student Research Fellowship, which provides a one-year funded research experience, is the newest support opportunity.



Hoops Salvation

Basketball was Karlo Kovacic's salvation during his adolescence in war-torn Croatia. His athletic talents led him to play on a professional basketball team in his homeland and a college team in the U.S. Now 33, he begins his second year of studies at the SMPH.

by Mike Klawitter

Karlo Kovacic was a teenager in 1991 when violence began in Croatia and other Yugoslavian republics that declared their independence from the country's socialist regime. The war would continue for six years.

"During the evening news, my mom would cover my face if they showed pictures of massacres," he says. "There was a lot of talk about peace treaties, but no one really cared because they didn't mean anything. It was either the war was going to stop or not. When it didn't, we learned to live with it."

As gunfire ricocheted throughout many Croatian neighborhoods, Kovacic used basketball to forget about the civil unrest. But balancing sports and high school studies was a difficult task.

"I had to take 14 or 15 courses throughout the year, including Latin, German, English, physics, computer science, geography, logic and philosophy," he says. "If you failed one class, you had to repeat the whole year."

The ongoing war was a continuing distraction when it came to his schooling, says Kovacic.

"When there is a war going on, you lose a sense of purpose in going to school. It seemed like school wasn't going to get you anywhere," he says. "One thing I found purpose in was basketball. It seemed to be the easiest way to get anywhere, and in time, that proved to be true."

By age 16, he was playing professional basketball while attending Croatian high school. Luckily, his coach in Croatia knew the coach at Lane Community College in Eugene, Oregon, who was interested in recruiting Kovacic. He played one year as a walk-on before moving on to Modesto Junior College in California the following year.

Kovacic's heroics on the basketball court caught the attention of San Diego State University coaches, who added him to their squad for his final two years as an undergraduate. He played for head coach Steve Fisher, who won the NCAA basketball tournament at Michigan in 1989.

"It was fun," Kavacic says. "We played at the United Center in Chicago before 24,000 people. We played Duke at Durham (North Carolina). All of those experiences are never going to go away."

Kovacic eventually graduated college at age 24 with a degree in applied mathematics and economics. At San Diego State, he also met his wife, Katja, a native of Finland, who was taking pre-med courses. They married in 2004.

"She was pushing this nonsense on me about going into pre-med and into medical school, but I thought it all sounded crazy," he says. "I was not interested."

Kovacic says his disdain for a medical career came from Croatia's method of educating doctors.

"My perception was skewed toward the Croatian way, where you go through five or six years of school and never have patient interaction," he says. "It was purely science oriented."

Yet Kovacic's opinion changed after Katja began medical school, attending two years at Dartmouth University in Hanover, New Hampshire, for her classroom work, followed by two years at Brown University in Providence, Rhode Island, where she did her clinical rotations.

During those years, Kovacic was employed as an actuary for an insurance company in Worcester, Massachusetts. He was not very happy with his career path.

"While Katja was going through her rotations, she shared a number of stories about the rewards of practicing medicine and dealing with patients," he says. "It totally rubbed off on me. I gained some valuable experience working as an actuary, but I could not see myself doing that work for the rest of my life."

By this time, Kovacic was 30 years old. In order to get into medical school, he enrolled at Providence College to take some needed science courses. His wife was serving her residency at Brown and became friends with two other residents, Greg Rachu, MD, and Zobeida Diaz, MD, both 2008 graduates of the SMPH.

"I told them I really wanted to change careers and apply to medical school," he says. "I also wanted to go to a school that welcomed older, nontraditional students, and they encouraged me to go to Wisconsin."

Kovacic says his first year at the SMPH has been beyond his expectations—he has loved every minute of it. He became actively involved in MEDiC, a student-run clinic for underserved residents in the Madison area.

"There are opportunities here that many medical schools in the nation don't have for first-year students," he says. "You receive hands-on interaction with patients right from the get-go. This is why I came to medical school: for the patient interaction and so I could make an impact on people's lives."

Kovacic says the hardest part of his first year was not having his family around, but they will all be together soon, when he starts his second year. Katja recently began a pediatric fellowship at Children's Hospital of Wisconsin in Milwaukee. Their three-year-old daughter, Maya, lived with Katja in Providence during Kovacic's fall semester before she moved to Madison in the spring to be with her dad. Kovacic's parents were also in Madison to help out.

"We really believe that Wisconsin is an ideal place for raising a family," he adds.

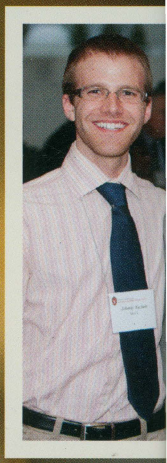
Kovacic says he looks forward to the challenges he will face during his second year of medical school.

"I will study my butt off," he says. "The second year of medical school is academically the most intense year, so I will not have a lot of free time. The idea is to work very hard and enjoy the ride. After all, this is why I'm here."

When Kovacic is not studying, he still likes to play basketball against his younger classmates.

"I actually participate in two leagues," he says. "I have a lot of fun, because I'm the older guy who's not that good, but still knows the ins and outs of the game."

Alumni Weekend 2011

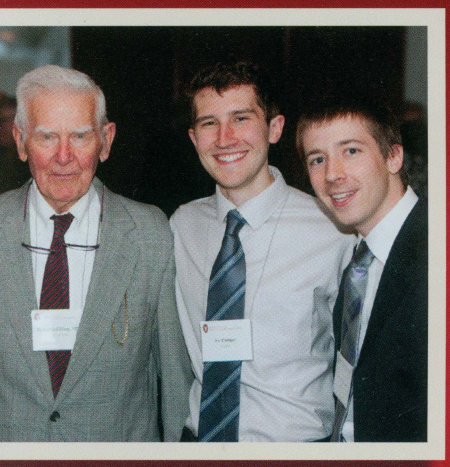


by Dian Land

Longtime class representative Nathan Hilrich, MD '51, was no longer around to encourage his classmates to make donations to their medical school and alumni association, as he had done for so many years. So Herman Tuchman, MD '51, agreed to take up the charge. The memory of his friend and classmate Hilrich, who died last December, was fresh in his mind.

And, true to form, the Class of 1951 came through—once again winning the Brown Derby Award for the class with the highest percentage of participation in fund-raising for the year.

The Brown Derby awards, also given to the class with the most donors and the class that gives the



Clockwise from left: Herman Tuchman (right) shares a laugh with Alfred Herlitzka; Robert Schilling poses with medical student leaders Johnny Tackett, Joe Ebinger and Nick Coorough; Mary Pratt is thrilled to see classmate Donald Nowinski; award recipient Ancil Philip scans the program; Donald Schuster helps his Class of '51 celebrate.

TODD BROWN, MEDIA SOLUTIONS (6)

largest amount, were among the highlights of Alumni Weekend 2011, which took place April 28 to 30. The three days also featured the Dean's Reception, the Awards Banquet, a brunch with medical students, the Board of Directors meeting, the Class of 1961's 50th Reunion Luncheon and reunions for four other classes.

Seven members of the Class of 1951 were on hand to celebrate their 60th class reunion.

"Originally our class numbered 74, but now we are probably 32," says Tuchman. The classmates gathered for a nice dinner on Thursday evening. Donald Schuster, MD '51, accepted the Brown Derby at the next day's luncheon.

Twelve people from the Class of 1956 attended their 55th reunion, drawn by a special tour of the Allen Gardens on campus.

"This was a unique gathering organized by Dr. Diane Bohlman, which people seemed to enjoy very much," says Karen Peterson, executive director of the Wisconsin Medical Alumni Association (WMAA).

The biggest celebration was for the Class of 1961.

"Class representative Dr. Ken Oberheu, of Dayton, Ohio, worked very hard to energize his classmates for their 50th reunion," Peterson notes. "Twenty-two members from all over the country came."

Before all the fun began, the board of directors had a productive meeting on Friday, focusing extensively on the problem of medical student debt.

"Our students graduate with an average debt of $145,000," says Peterson. "Raising funds to support scholarships and reduce student debt has become a top priority for us."

The WMAA and the UW Foundation each match every dollar raised with 50 cents, doubling each gift.

Awards

Alumni Citation Award

DONALD B. KOHN, MD '82

Children with adenosine deaminase-deficient severe combined immunodeficiency, or ADA-SCID (the "boy in the bubble disease"), have a big advocate in Donald Kohn, MD '82. He is a pioneer and world leader in gene therapy treatment of ADA-SCID and other inherited and acquired immunodeficiency disorders, including pediatric HIV/AIDS, sickle cell disease and childhood leukemia. His general approach has been to genetically modify the hematopoietic stem cells that do not function properly in those diseases.

For his years of dedication and the progress he has made in his field, Kohn was given the Wisconsin Medical Alumni Association's highest honor, the Medical Alumni Citation Award, at the annual Awards Banquet in April 2011.

Kohn returned to campus from his California base to receive the award and visit old friends and colleagues. He currently heads the Human Gene Medicine Program at the University of California, Los Angeles, and was a faculty member at the University of Southern California Medical School for 20 years.

Kohn showed signs that he might be exceptional during his pediatrics residency at UW Hospital and Clinics. During those years, he spent just a few months working in the laboratory of immunology researcher Richard Hong, MD, former SMPH professor of pediatrics, but it was enough time to make a good impression.

"I was very confident in suggesting that Don go to the National Institutes of Health and study in the laboratory of French Anderson, who was pioneering in the field of genetic engineering," says Hong. "It was clearly a hot area. And with the amazing

amount of information coming from the mapping of the human genome, the idea of actually replacing a defective gene and obtaining a permanent cure was a real possibility."

Kohn spent two years in the NIH fellowship.

"That Don not only finished the rigorous training in that high-powered lab, but has stayed in that same area of research after leaving and setting up his own independent laboratory shows that he clearly has the tenacity, ambition and brainpower necessary for ultimate success," says Hong. "Today, he is clearly one of the leading, if not the leading, clinical investigator in his field in the U.S."

Kohn was the first to successfully correct the genetic defect in ADA deficiency. The only other therapies are bone marrow transplant or continuous injections of the missing enzyme, but neither provides consistent restoration of immunity to the desired clinical level, says Hong. Kohn continues to refine his approach of treating ADA deficiency and similar disorders by modifying defective hematopoietic stem cells. He described promising new experiments during a talk at the SMPH over Alumni Weekend.

Kohn's body of research has been notably translational in nature, ranging from explorations into the most basic questions in gene expression and stem cell biology to the implementation of at least six gene therapy clinical trials. Among his many national leadership roles, he was a founding member and president of the American Society of Gene Therapy.

In addition to his scientific accomplishments, Kohn is highly valued as a clinician. He cared for critically ill children undergoing bone marrow transplantation at Children's Hospital Los Angeles for more than two decades and continues this activity today.

Kohn has received numerous awards and recognitions, including the H. Russell Smith Award for Innovation in Pediatric Biomedical Research, an Elizabeth Glaser Scientist Award from the Pediatric AIDS Foundation, and a Doris Duke Distinguished Clinical Scientist Award.

TODD BROWN, MEDIA SOLUTIONS (2)

Resident Citation Award

GEORGE MICHALOPOULOS, MD, PHD

George Michalopoulos, MD, PhD, an internationally acclaimed pathologist, is arguably the foremost authority in the world on liver regeneration. His work has helped explain how the liver can regenerate to full size after up to two-thirds of its mass has been removed.

In recognition of this and many other accomplishments, the Wisconsin Medical Alumni Association recently honored Michalopoulos with its highest award for a UW-Madison resident, the Resident Citation Award, at the annual Awards Banquet.

After earning his medical degree from Athens University Medical School, Michalopoulos came to UW-Madison to begin his residency in anatomic pathology.

"He was a hard worker from the beginning," says Henry Pitot, MD, PhD, then director of the McArdle Laboratory for Cancer Research and former chair of the SMPH Department of Pathology and Laboratory Medicine. Michalopoulos entered the graduate program in oncology under Pitot's supervision. And after obtaining his PhD, he completed his training in pathology for board certification.

As a graduate student, Michalopoulos developed technologies for liver cell culture that were not available at the time, says Pitot, himself a liver expert.

"George was one of the first to maintain liver cells in culture that had the capability of drug metabolism and its regulation," Pitot says.

Michalopoulos left UW in 1977 for Duke University, where he was a faculty member in the pathology department for

14 years. He then moved to the University of Pittsburgh, where he has spent the bulk of his career. He has served as chair of the Department of Pathology as well as acting dean of the medical school.

In addition to being an outstanding administrator, he has been a superb researcher, Pitot says. Michalopoulos was one of the first, if not the first, to demonstrate clearly the existence of hepatocyte growth factor (HGF). He outlined HGF's pivotal role in pathways related to extracellular matrix. He showed that plasma levels of HGF rise within 60 minutes during liver regeneration and that this is part of the signaling that leads hepatocytes to proliferate.

"Hepatocyte growth factor has proven to be extremely important, not only in liver cell growth, but in the growth of many tissues and especially in cancer cell growth," Pitot says. "This work led George to develop a molecular characterization of the factors needed for, and important in, liver regeneration."

Michalopoulos also continued and advanced his studies of liver cell culture and was one of the first, if not the first, to demonstrate the culture of rodent hepatocytes with continuous replication of cells in culture. These investigations opened the potential for liver transplantation at the cellular level rather than the organ level, in which it is carried out today.

Michalopoulos received a Merit Award from the National Institutes of Health and in 2009 was given the prestigious Rous-Whipple Award in Experimental Pathology from the American Society for Investigative Pathology. The award is presented annually to a senior scientist with a distinguished career in research who continues to advance the understanding of disease. Michalopoulos was honored for his research on growth factor pathways that lead the liver to regenerate.

Reunions

CLASS OF 1951

Front row, left to right: Don Schuster, Harold Ibach, Alfred Herlitzka and Jerome Cornfield. Back row: Louis Pfeiffer and Herman Tuchman.

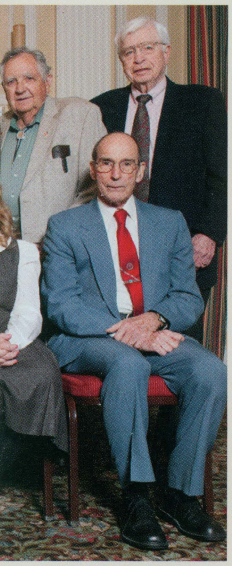
CLASS OF 1956

Front row, left to right: Clare Hutson, Lavern Herman, Carlyn M. Kline, Diane Bohlman and Robert Weaver. Back row: Loren Amundson, Richard Graf, Robert Goldberger, George Steinmetz Jr., David Lawrence, Kenneth Hurst Jr. and Benjamin Rusy Jr.

CLASS OF 1966

Front row, left to right: Roger Rathert, Lawrence Betts, Patricia Randall, Richard Silberman, Paul Grotenhuis and Stephen Zimmerman. Back row: William Raduege, Joseph Zondlo, David Knutzen, David Hughes and William Busse.

CLASS OF 1961



Front row, left to right: Donald Shelp, Kenneth Oberheu, Richard Stafford, Patricia Heiser, Donald Nowinski, Richard Oehler, Thomas Malueg, James Dorr, James Plos and Robert Block. Back row: Johan Mathison, Rodney Chan, George Kopf, John Bentson, Mary Pratt, Robert Manis, Myrna Larson, Jerome Hanson, Richard Plater, James Sprecher, Norton Zarem and Leon Nesvacil. Not shown: James Falk and A.A. "Joe" Koeller.

CLASS OF 1976

Front row, left to right: James Zach, Sally Schlise, Suzanne Toce, Donn Fuhrmann, Barbara Olson and Laurie Kaufman. Back row: Thomas Luetzow, John McCullough, John Schwartz Jr., Robert Miller, Curtis Hancock, Gary Adamski, Samir Abdo and Alan Jacobs.

TODD BROWN, MEDIA SOLUTIONS (5)

CLASS NOTES

Compiled by Joyce Jeardeau

CLASS OF 1951

Neurologist **John Toussaint** retired in 2011 after 32 years as the founding medical director of Central Wisconsin Center for the developmentally disabled. He retired in 2002 after 12 years as a Wisconsin Air National Guard physician, serving the last eight years as colonel and medical commander at Truax Field in Madison. He also volunteers making audiotapes for visually handicapped and/or dyslexic persons and reading national examinations in mostly health-related professions for persons with similar limitations.

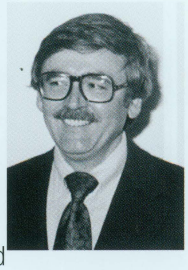
Taking classes at the University of Wisconsin-Milwaukee (mostly history and political science) two times per week, **Herman Tuchman** has audited 40 courses since he retired in 2002. With the help of an interpreter, he also volunteers to see primarily Spanish speaking cardiology patients at Aurora-Walker's Point Clinic. He still finds time to play golf and follow the performances of the Badgers, Packers and Bucks.

CLASS OF 1956

Thomas Subitch, an anesthesiologist, had a float plane for 30 years, which he and his wife flew over most of British Columbia and Alaska to camp and fish on the lakes. They now have an RV and travel two to three months a year, mostly in the southwest.

Ronald Szymanski enjoys growing and designing bonsai trees as well as general gardening and propagation of plants. He takes annual wine-tasting trips to Washington (which has 700 wineries), Oregon, California and British Columbia. A stutterer as a youngster, he says it took a while to overcome his problem, and it also had an impact on his choice to become an anesthesiologist.

CLASS OF 1961



Psychiatrist **Richard Stafford** states, "I've retired and then returned to work again more times than Brett Favre!" He likes traveling to Europe, cooking, reading and watching the Badgers and Packers.

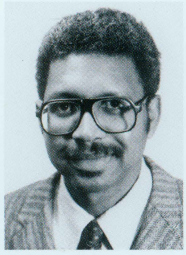
In his free time, **John Bentson** enjoys heli-skiing, which he has done in the deep powder snow of British Columbia for 35 years. He has also been windsurfing in Maui and bicycle touring in Europe and on the west coast.

CLASS OF 1966

Obstetrician gynecologist **William Lundberg** retired from private practice in 1988 and joined the U.S. Air Force. He says he had a fantastic career in the service and retired in 2005. After not working for six months, he was "bored beyond tolerance" so he began surveying with the Joint Commission and works one week a month.

James Anderson is an avid sailor on the "ever challenging inland sea of Lake Superior." He enjoys traveling in the U.S. and says he and his wife have set a goal of visiting the last two states they have not yet traveled to, making it "50 in 50" next year (their 50th wedding anniversary is in 2012). They have also been active partners in disaster relief through the Presbyterian Disaster Assistance Program.

CLASS OF 1975



Ricardo Lloyd, a pathologist who specializes in the endocrine system, recently returned to the SMPH to direct the Translational Science BioCore Service in the UW Carbone Cancer Center (for more, go to uwhealth.org/27019). He also spends time in research and on clinical service. After earning his MD and PhD at UW, Ric completed his pathology residency and a fellowship in cancer research at UW. He completed a second fellowship at Memorial Sloan Kettering Cancer Center before joining the faculty of the University of Michigan, where he ultimately became the Warthin-Weller Professor of Pathology. Most recently, he was a professor of pathology at Mayo Clinic before returning to the SMPH.

CLASS OF 1976

Neonatal-perinatal medicine physician **Suzanne Toce** recently got her certification to captain and charter yachts. She is active in perinatal and pediatric ethics and palliative care. Although still working too hard, she says she has "a much better work-life balance" since moving to Gundersen Lutheran in La Crosse. Suzanne had been a professor of pediatrics with almost $1 million in pediatric palliative care-related grants when she left St. Louis University.

Richard Heuser, chief of cardiology at St. Luke's Medical Center in Milwaukee, travels the world lecturing at medical conferences on his innovations in coronary stents. He co-developed the first catheter treatment for leakage of the mitral valve, which is used globally in a fifth of the angioplasty procedures performed. He is recognized internationally as a cardiologist,

inventor, educator and author and is one of the early pioneers of the angioplasty procedure. These are a few of the many reasons why he was named "Health Care Hero" by the *Phoenix Business Journal.*

CLASS OF 1979

In March 2011, **Michael Vrabec** and his sister Mary Vrabec, MD '83, and daughter Sara, an MD candidate in the SMPH Class of 2015, held an unusual Badger Reunion at the top of Africa–they climbed to the summit of Mt. Kilimanjaro in Tanzania. The climbers were joined by Sara's soon-to-be fellow classmate, Elyssa Guslits. In addition to mountaineering, Michael enjoys scuba diving, biking and flying.

CLASS OF 1999

Brian Boville is a pediatric intensivist at Mary Bridge Children's Hospital, south of Seattle, in Tacoma, Washington. He finished up his residency at the Children's Hospital of Philadelphia about six years ago and has been in the Pacific Northwest ever since. "Someday I hope to get back to Madison (it's been ages) for a game," he says, "or perhaps to relocate (if I'm lucky!). Go Badgers!"

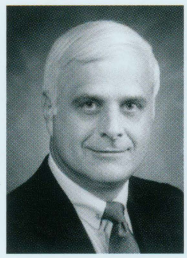
CLASS OF 2005

Jamie Van Gompel is a neurosurgery resident at Mayo Clinic and recently received the Mayo Brothers Distinguished Fellowship Award for 2011.

CLASS OF 2008

Magnolia Printz was recently elected chief resident of anesthesiology at the University of Michigan Hospital in Ann Arbor.

POST GRADUATE



Cyril "Kim" Hetsko received the Wisconsin Medical Society's Presidential Citation Award on April 8, 2011, during the society's annual meeting. Thomas Luetzow, MD '76, outgoing president of the society, presented the award, stating, "To say Dr. Hetsko has been a tireless advocate for patients and our profession would be an understatement. His leadership and incredible dedication on issues such as access to high-quality care for patients across the country and his dedication to our profession are impressive and certainly worthy of our recognition." The award recognizes a physician who has made a significant contribution to medicine and public health. Kim has been a society member for 35 years and served as president from 1991 to 1992 and a member of the board of directors for many years.

IN MEMORIAM

Morton Futterman '59
September 22, 2010
Los Angeles, California

Stephen Kliman '75
October 26, 2010
Greenwood, Indiana

Charles Miller '62
May 18, 2011
La Crosse, Wisconsin

Nancy Ness '75
May 4, 2011
Mauston, Wisconsin

Charles "Chuck" Trush '49
March 25, 2011
Lynwood, Washington

Joseph Wepfer '45
November 18, 2010
Wauwatosa, Wisconsin

CORRECTION

Herb Simonson, MD, whose photograph and narrative were featured in the Healer's Journey section of the spring 2011 issue, was a 1960 graduate of the SMPH, not 1948, as indicated. We are sorry for the error.

GOODBYE, DEAR COLLEAGUE–LAWRENCE CROWLEY, MD

UW-MADISON ARCHIVES

*by Richard Rieselbach, MD, and Ralph Hawley**

Lawrence Crowley, MD, SMPH dean from 1973 to 1977, died at his home in Cupertino, California, at age 91 on March 30, 2011. A superb vascular surgeon, Crowley was a former roommate at Yale Medical School of UW-Madison Vice Chancellor for Health Sciences Robert Cooke, MD, who recruited him to Madison from Stanford School of Medicine, where he was an associate dean.

Upon arriving in Wisconsin, Larry was immediately thrust into a volatile environment that was in dire need of a cool head. With his friendly and unflappable demeanor and a tremendous reservoir of patience, he dealt with some very difficult problems.

A major challenge was creation of the Milwaukee Clinical Campus at Mt. Sinai Medical Center. He charmed previously antagonized Milwaukee politicians and worked out a compromise with the Medical College of Wisconsin that helped to neutralize strong opposition to a UW-Madison presence in Milwaukee.

After establishing the campus in July 1974, opposition to the UW presence in Milwaukee continued on several fronts. Larry was magnificent in dealing with Mt. Sinai private physicians who attempted to change the hospital bylaws in order to obstruct our educational program. He also developed an excellent strategy to overcome the Milwaukee Health Planning Agency's opposition to the development of the Mt. Sinai cardiology and nephrology programs.

Larry's tenure at Wisconsin was characterized by cordial and effective relationships with the hospital superintendent, department chairmen and university administrators. He recruited a number of clinical chairmen of superior quality and demonstrated his negotiating skill in developing an agreement with the Veterans Administration to ensure sharing of facilities between the new University Hospital and the William S. Middleton Memorial Veterans Hospital.

Larry also persuaded clinical departments to provide, for the first time, funds to help solve the construction budget shortfall.

He had a unique ability to bring warring factions into agreement. He genuinely enjoyed the challenge of medical school administration and was an excellent model of equanimity and honesty who firmly believed in mutual trust.

In 1977, because his wife Madeleine's health required a warm climate, Larry accepted a position as deputy dean at Stanford medical school. Within two years he was named dean. Soon after, he was appointed to the additional role of vice chancellor of medical affairs.

The equanimity and judicious decision making that were so evident in Madison served him well at Stanford, where the School of Medicine prospered under his strong and thoughtful leadership. In 1986, he resigned from his administrative role and devoted his efforts to the development of the Lucile Packard Children's Hospital, an outstanding component of the Stanford system. He ultimately became chairman of the hospital board.

As we look back upon the many accomplished leaders in our institution, Dean Lawrence Crowley stands out as a model for emulation.

**Rieselbach was dean of the Milwaukee Clinical Campus and Hawley was associate dean for administration at the medical school during Crowley's tenure as dean.*

MENN RECEIVES MAX FOX PRECEPTOR AWARD

Jeffrey Menn, MD '74, a popular and colorful pediatrician in the Viroqua, Wisconsin, area, was honored June 12, 2011, when SMPH officials presented him the 2010 Max Fox Preceptor Award. The school and the Wisconsin Medical Alumni Association hosted the event.

The Max Fox Preceptor Award is given annually to an outstanding preceptor whose effective service as a mentor and teacher has guided UW medical graduates. Some 50 physicians across the Badger State volunteer in the preceptorship program.

Menn has been a preceptor to SMPH students for 31 years, welcoming them into his practice to shadow him and learn as he cares for his patients. In the past 11 years alone, he has served as preceptor to 68 medical students.

The physician can be easily spotted all over Vernon County—he's known for wearing jeans and a cowboy hat and boots. He comes by the unusual dress honestly—members of his family wore vintage outfits from their collection at the award celebration.

Menn has many Amish patients in his practice and often makes house calls when a horse and buggy prove difficult.

Medical students greatly appreciate their experiences with Menn.

Wrote one student in an evaluation: "I enjoyed spending time in different clinics and getting a taste of what healthcare in Viroqua had to offer—alternative medicine, psychiatry, rural medicine for the Amish—including house calls. This was really a terrific experience. It was the perfect length, everyone was flexible about allowing me to tailor my own experience, and the community was very welcoming, plus I saw a lot of variety."

After earning his MD at the SMPH, Menn completed his residency at Cincinnati Children's Hospital and a fellowship at Milwaukee Children's Hospital. He has been with the Hirsch Clinic since 1977 and was a part-time emergency physician at UW Hospital and Clinics from 1977 to 2006.

Much beloved in Viroqua, he was named Physician Citizen of the Year in 2006.

The Max Fox Preceptor Award was created by Herman Shapiro, MD '32, in 1969, to honor his preceptor, Max Fox, MD. During his 46 years of practicing medicine, Fox greatly influenced the careers of some 4,000 physicians.

Max Fox Preceptor Award Recipients

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

ELIZABETH BAHN, MD '01

My decision to pursue emergency medicine came during a trip to France between my third and fourth years of medical school. At that point, I was only halfheartedly sure about my medical pursuits. After several long bike rides through the Loire Valley, my reflections led me to realize that I just simply liked everything in medicine and I wanted to "do it all." That insight led me to pursue emergency medicine.

Washington was my home, so I had a strong desire to return to practice there. I completed my residency training in emergency medicine at the University of Washington/ Madigan Army Medical Center. I now work in a busy urban-suburban hospital in Puyallup, Washington, near Tacoma.

Our acuity is high, so critical care is a large focus in any shift, although I do enjoy the balance with minor care patients. My training has provided me the ability to pursue other interests as well. I serve as the medical director for several of our county EMS agencies, our hospital, the Crystal Mountain Ski Patrol and Mt. Rainier National Park. Teaching pre-hospital providers is rewarding and allows me the ability to practice in challenging environments.

Emergency medicine is also a very family-friendly profession. I work as an independent contractor and partner in my group, Mt. Rainier Emergency Physicians. As such, I have tremendous flexibility in scheduling. I enjoy eight-hour shifts, no call and a seven-days-on-seven-off schedule. This allows for a lot of family and personal time. Right now I am looking forward to our second baby's arrival.

Every shift presents an unknown challenge and every day is different. Anything can come through the ED doors. I

see a broad mix of patients from all demographics and socioeconomic groups. I am proud to say that as an EM physician, we never say no to patients because of their ability to pay or not. We are society's medical safety net. It is a great responsibility.

JANIS TUPESIS, MD '01

I am the director of the Emergency Medicine Residency Program at the SMPH/UW Hospital and Clinics. In addition to residency education, I am very interested in global health/emergency medicine. I am a member of several national groups related to these specialties.

Working in an academic medical center, we see a very wide range of disease pathology—from uncomplicated pediatric patients to multiorgan transplant patients and those who are involved in severe trauma. On any given day, it can be any or all of these!

One of the most memorable cases I've had was of a cardiac arrest patient a few years back. He arrived at the hospital without a pulse and was resuscitated and defibrillated 12 times. Once the emergency department team got a pulse back, the patient underwent therapeutic hypothermia and was admitted to the cardiac intensive care unit. Two weeks later I met him and his wife in line at the hospital cafeteria. It was a great example of the integration of pre-hospital, emergency and critical care medicine.

I did the first month of my med-four year at Cook County Hospital in Chicago. After my first shift there, I called my wife and told her, "This is what I'm supposed to do with the rest of my life!" I did my residency at the University of Chicago Hospitals and Clinics.

I chose my specialty because I love evaluating and treating the undifferentiated emergent patient. I enjoy treating young, old, rich, poor, black, white. I love emergency medicine's general mantra of "anybody, anywhere, anytime."

I would tell medical students about this wonderful variety. Emergency medicine gives you the ability to see many different kinds of patients with many

different disease processes—at their best and their worst. It also allows you to interact with physicians from all different specialties. Emergency medicine truly is the "front line" of medicine today.

JON VANROO, MD '06

Following my emergency medicine residency at Northwestern University in Chicago, I returned to Madison to work for a private group called Madison Emergency Physicians (MEP). The group covers five local emergency departments, and I work at St. Mary's in Madison, St. Clare in Baraboo and the Sun Prairie Emergency Center.

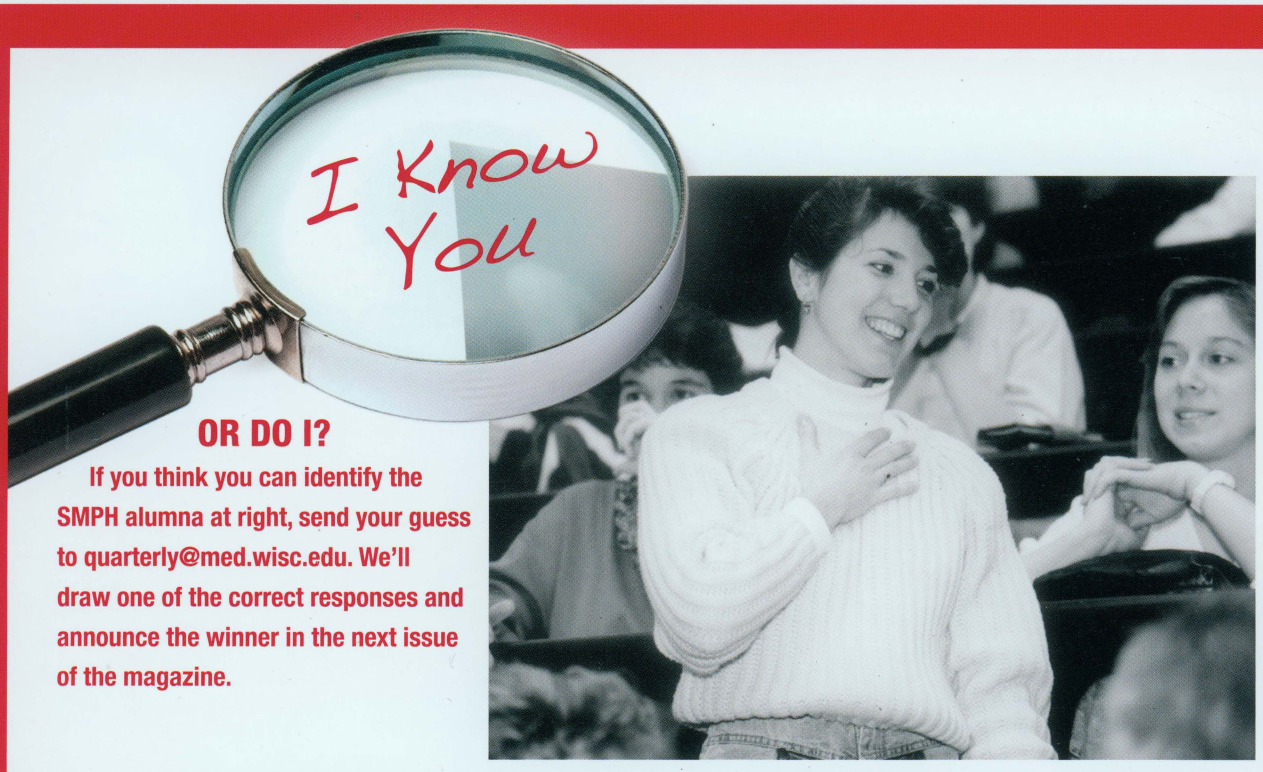
I handle all kinds of cases—literally whatever comes in the door. I think one of the most enjoyable and challenging aspects of emergency medicine is the breadth of the practice. You really do see an amazing spectrum of ages and diseases.

I had volunteered in an emergency department before going to medical school and knew I liked the pace and variety inherent in the job. During my third year of medical school, I enjoyed all of my rotations and considered multiple specialties. But when I rotated in the ED at the end of my third year, I was hooked on the variety, the pathology and the close working relationships with other ED staff.

I would tell medical students, overall, that it is a great career path. The amount of acute pathology, undifferentiated illness and variety make the job challenging but truly rewarding.

The nights, weekends and holidays can be difficult, but the flexibility of the schedule to take time off and travel is exceptional.

These days, I travel to Oklahoma about eight days each month to be with my wife, Erin Bishop, MD '06, who is doing a gynecology-oncology fellowship there.



OR DO I?

If you think you can identify the SMPH alumna at right, send your guess to quarterly@med.wisc.edu. We'll draw one of the correct responses and announce the winner in the next issue of the magazine.

HINTS: This alum was co-president of her second-year medical school class. She was a student employee in the laboratory of Richard Moss, PhD, then a professor of physiology. Sometimes she was a house sitter for class mentor William Segar, MD, former chair of pediatrics at the school. A zoology major at UW-Madison as an undergraduate, she says many classmates in her undergraduate comparative anatomy class later became medical school classmates.

Douglas Angevine, MD '62 (above) identified our last "mystery alum" Phillips Bland, MD '47

Our last "mystery alum" was Phillips Bland, MD '47. As reported in the previous issue of *Quarterly*, Bland, of Westby, Wisconsin, died last spring.

A pillar in the SMPH Preceptor Program, he was given the school's Max Fox Preceptor Award twice. He also won the Ralph Hawley Distinguished Service Award for his contributions to his small community. Among many other things, Bland served as Westby City Health Officer and Vernon County Coroner. He was also highly regarded in the ski-jumping community.

Ten people identified Bland. In our drawing of correct guessers, we pulled the name of Douglas Angevine, MD '62. Rheumatologist Angevine was a faculty member in the Department of Medicine at the University of Rochester School of Medicine and Dentistry from 1969 to 2000 and was associate dean of student affairs from 1978 to 1990.

Bland was Angevine's preceptor in his last year of medical school. It was a rich experience.

"In addition to a unique exposure to the general practice, other 'perks' included: lunch and/or pie at Borgen's Cafe, driving Dr. Bland's Thunderbird, visiting the local ski jump, Caesar the St. Bernard that lived in the medical office and springtime in Westby!"

Since retiring, Angevine spends time fly-fishing, cross-country skiing, gardening and caring for his 1852 Greek Revival house.

Advancing Philanthropy FOR THE SMPH

BRAD JOLIN
Co-leader, Medical Advancement Group

NANCY FRANCISCO-WELKE
Co-leader, Medical Advancement Group

JILL WATSON
Director of Development for medical alumni

Recent changes at the University of Wisconsin Foundation have positioned the SMPH for even greater philanthropic success. An expanded Medical Advancement Group will work closely with medical school leadership to advance the SMPH tradition of teaching, research and service excellence.

New collaborations will work toward achieving a vibrant development program that engages individuals passionate about the SMPH and connects them with philanthropic opportunities that will make the critical difference in future SMPH accomplishments.

Nancy Francisco-Welke and Brad Jolin have been identified as the new leaders of the Medical Advancement Group, which in addition to the SMPH will represent UW Hospital and Clinics, the School of Veterinary Medicine and the Waisman Center. Mark Lefebvre, who led the group for the past 17 years, has taken on a new role at the foundation as senior vice president for principal gifts.

Francisco-Welke has worked as the senior director of development for UW Hospital and Clinics for the past nine years and led the campaign to build the American Family Children's Hospital. Jolin has led the development efforts for the School of Veterinary Medicine for nearly four years.

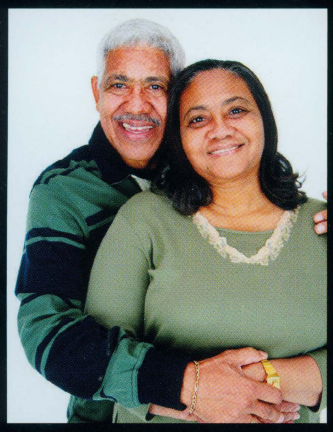
Jill Watson has been appointed the new SMPH director of development dedicated solely to medical alumni. She may be familiar to many alumni as the result of her work at the Foundation in support of the SMPH for the past 10 years.

Watson plans to engage and reconnect alumni with the school.

"I want to hear their stories about the SMPH and learn how they impacted their lives and professional careers, and to talk with them about how they might give back to their medical school," she says. "Alumni gifts are key to helping the SMPH achieve its margin of excellence."

The UW Foundation raises, invests and distributes funds for the benefit of UW-Madison. If you have questions or would like to discuss your interest in supporting the SMPH, please contact Watson at (608) 263-3173 or jill.watson@supportuw.org; Francisco-Welke at (608) 263-5960 or nancy.francisco@supportuw.org; or Jolin at (608) 263-5129 or brad.jolin@supportuw.org.

Minority Patients not Screened Enough for Diabetes



Although people from certain ethnic groups are at high risk for getting diabetes and should be screened, a new SMPH study suggests that such screenings are not being done as often as they should be—even for patients with insurance.

Ann Sheehy, MD, MS, a hospitalist and clinical assistant professor of internal medicine at the SMPH, was lead author on the study, which appeared recently in *Diabetes Care.*

Researchers gathered data from more than 15,000 patients between 2003 and 2007. All patients were insured and eligible for diabetes screening based on a number of known risk factors: 45 years or older, high blood pressure, high cholesterol levels, polycystic ovarian syndrome, obesity, heart disease, history of pre-diabetes and ethnicity.

Sheehy and colleagues at the UW Health Innovation Program found that according to information obtained from doctor visits of those in the study, more than 40 percent of minority patients should have been screened for diabetes based on their ethnic background but were not.

"I believe there is a lack of awareness that minority status is an independent risk factor not only for having diabetes, but for complications of diabetes," Sheehy says. "Minorities get diabetes more often and tend to do worse when they have diabetes. I don't think providers are necessarily aware of this."

More public and provider education is necessary to shed light on the increased risks minority patients face, not only in getting diabetes but also complications of the disease.

"We hope the information learned in this study will help us care for these patients better," she says.

Researchers Solve Membrane Protein Mystery

An SMPH team has solved a 25-year mystery that may lead to better treatments for people with learning deficits and mental retardation.

Synaptophysin is the first protein and most abundant ever found on the membranes surrounding the tiny sacs involved in fusion—the exchange of chemical messengers at synapses. Even though the loss of synaptophysin has recently been linked to learning deficits and mental retardation, scientists have been unable for more than a quarter-century to explain what it actually does.

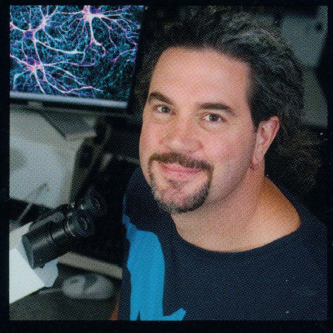
SMPH researchers recently reported in *Neuron* that synaptophysin controls the replacement of the constantly needed sacs, or vesicles.

Fusion begins when an impulse triggers exocytosis—when a vesicle releases neurotransmitter at the synapse. Then a receiving neuron on the other side of the synapse binds to the neurotransmitter and activates a signal. Finally, the spent vesicle is incorporated into the donor cell membrane.

In the recovery phase—endocytosis—a new vesicle is pinched off from the donor cell surface and reloaded with neurotransmitter.

"As vesicles are consumed, if they are not immediately replaced, then you have a synapse that is not active anymore, and this is a problem," says lead author Edwin Chapman, PhD, a Howard Hughes Medical Institute professor at the SMPH.

Graduate student Sung E. Kwon studied a knock-out mouse with no synaptophysin. He found that the lack of synaptophysin had no effect on exocytosis but produced a clear-cut deficit in the recycling of vesicles during endocytosis.



"It will take more studies to directly link how this cycling defect leads to mental retardation, but we now have a good starting point," Kwon says.

Natural Estrogen May Improve Cognition for Alzheimer's

Postmenopausal women with mild to moderate Alzheimer's disease who wore a skin patch with natural estrogen for three months did better on cognitive tests than women who did not wear the patch, report SMPH researchers in the *Journal of Alzheimer's Disease*.

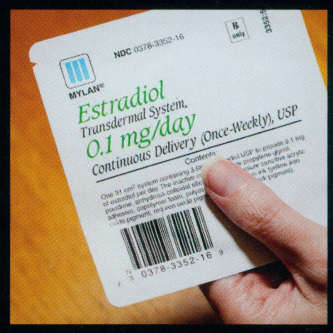
"The study shows that using a natural form of estrogen called estradiol, for short periods of time, may be cognitively beneficial for postmenopausal women with mild to moderate Alzheimer's disease," says lead author Whitney Wharton, PhD, of the SMPH Alzheimer's Disease Research Center.

Estradiol is a naturally occurring estrogen predominant in women before menopause. Estrogen is likely associated with the hippocampus, an area of the brain that has many estrogen receptors and is associated with Alzheimer's.

The study involved 43 postmenopausal women with mild to moderate Alzheimer's. Women were randomly assigned to one of five different treatment plans in the randomized, double-blind parallel group study: low dose or high dose estradiol patch with a placebo tablet or a 2.5 milligram tablet of progesterone; or placebo skin patch with a placebo tablet.

Participants underwent cognitive testing before and at intervals during the study. Women who received estradiol performed better on multiple tests than women in the placebo group. The cognitive improvements were directly related to estradiol levels.

Estradiol is different from a popular hormone-replacement



drug that contains conjugated equine estrogen (CEE), notes Wharton. Unlike estradiol, CEE is not naturally occuring in humans.

Insights Gained From Growing New Cold-Causing Virus

SMPH researchers were the first to grow human rhinovirus C (HRV-C) in culture, and that allowed them to study the virus in detail. As reported recently in *Nature Medicine*, they found that HRV-C has reproductive properties that differ from those of other members of the HRV family, the most frequent cause of the common cold.

"We now have evidence that there may be new approaches to treating or preventing HRV-C infections," says senior author James Gern, MD, professor of medicine and an asthma expert at American Family Children's Hospital.

Future drugs could be especially useful for children and adults who have asthma and other lung problems.

Recent studies suggest that HRV-C is responsible for 50 percent to 80 percent of asthma attacks during the peak rhinovirus season in the fall.

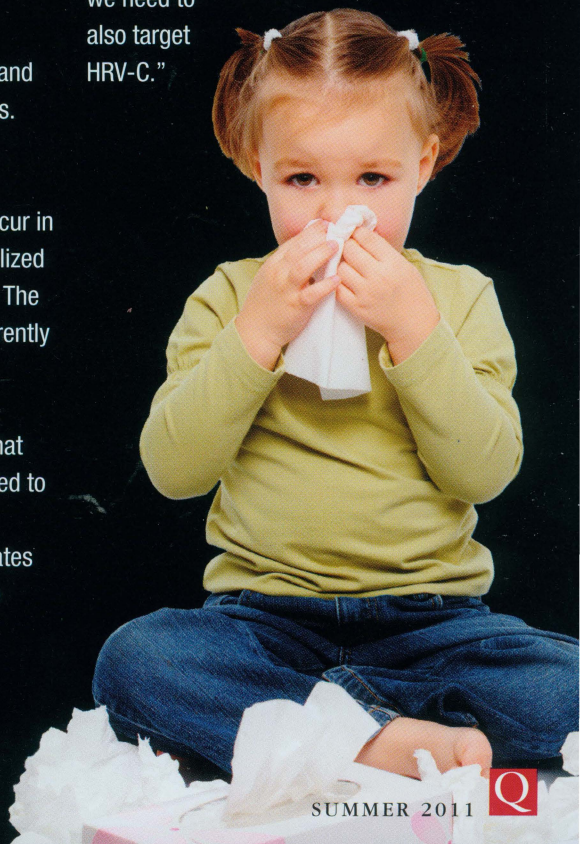
It is a frequent cause of wheezing illnesses in infants and may be especially likely to cause asthma attacks in children. HRV infections of all kinds also can greatly worsen chronic lung diseases.

Discovered five years ago, HRV-C has been notoriously difficult to grow in standard cell cultures and, therefore, impossible to study.

But Yury Bochkov, PhD, a virologist in Gern's lab, collected nasal tissue following sinus surgery—and successfully grew the virus. Studying its reproduction, he discovered that HRV-C replication appeared to occur in specific kinds of cells localized in nasal epithelium tissue. The virus also responded differently to antibodies that block receptor binding.

The findings suggest that new approaches are needed to treat HRV-C.

"Previous drug candidates for the common cold were tested only against HRV-A and HRV-B," Gern says. "For more effective medications, we need to also target HRV-C."



Get to Know
JAMES STEIN, MD

The physician investigator explains how his passion for cardiovascular disease prevention permeates his busy clinical practice, his broad research program and his teaching and mentoring.

How did you decide on your specialty?

I settled on cardiovascular medicine because heart disease is the leading killer of people in the United States and worldwide. Yet we know what causes it and there are many things we can do to help people who have it—and help them quickly.

You concentrate on prevention. Why?

Early in my career, I became very interested in how we could treat high blood pressure and cholesterol to avoid heart disease and strokes from occurring in the first place. I saw it as a great opportunity. With prevention, we have the possibility of virtually eradicating the disease. I'm passionate about prevention. It's the focus of all my work.

Why Wisconsin?

I'm from Wisconsin originally but left to go to Yale for medical school then did most of my training at the University of Chicago Medical Center and Rush Medical Center. I met my wife in Chicago. We never intended to leave. But I came up to interview at UW in 1996. Two things made me fall in love with the place. #1—the quality of life here. #2—when you're here you really feel like you're at an academic medical center. You can feel that the science that's done here every day spills right over and improves patient care.

Over the years you've taken on several leadership roles.

I'm the director of the Preventive Cardiology Program, the Vascular Health Screening Program and the UW Atherosclerosis Imaging Research Program. I'm the associate director of Adult Echocardiography at UW Hospital and Clinics.

You are a physician investigator. What is your philosophy about this dual role?

The two roles absolutely complement each other. I firmly believe that to give your patients the best care possible, you need to be on the cutting edge of the medical literature. But it's more than just reading the journals and being up to date. In order to really understand what's presented in the top journals, you must be a scientist.

What's the focus of your research program?

We use ultrasound to assess the structure and function of blood vessels. Such measurements can help predict who's going to develop heart disease and determine what factors increase people's risk of developing heart disease and stroke.

The *Associated Press* recently reported on some of your research. What was that about?

The research entailed teaching Wisconsin doctors and their staff how to do ultrasounds of the carotid artery to see if patients were at increased risk of heart disease. They used handheld echocardiography machines that are smaller than a laptop.

This was based on your earlier research?

Yes, it involved measuring the intima-media thickness of the carotid artery with ultrasound. It's called carotid IMT. We can see if the carotid is thicker or aging more quickly than it should be and whether there are other pre-clinical signs of disease. We saw how powerful it was in the lab and said, "Why can't we use this in patients?"

So you developed a tool?

I helped develop approaches that could be used to translate the test from research laboratories in academic medical centers into ones that could be used in doctors' offices. I was the lead author on the 2008 recommendations on how to use the test, which is now widely used in the U.S.

How has the carotid IMT test helped you in your practice?

By knowing the "vascular age" of our patients, we can give them more precise estimates of their risk and start preventive care earlier if it's needed. In some cases, we can tell people that they don't need aggressive care or might be able to avoid medication. It's a great example of how being a researcher directly plays into clinical care.

What about your other research?

In 1999, we were the first group to show that the drugs that were helping people with HIV live much longer than before also caused blood vessel dysfunction. That opened up a whole new world of treating HIV patients. HIV drugs today don't have the same cholesterol effects. In fact, we think—and we're studying this—that the new drugs may help prevent heart disease.

Tell us about the "MESA" study.

This is a large multiethnic, population-based study that's been going on since 1999. It looks at what causes atherosclerosis and how it differs between the races. We're in charge of the carotid ultrasounds. Currently, we're analyzing the progression of blood vessel damage caused by air pollution over the past decade. Factors such as how much time people spend in their cars, how close they live to major highways and if they're exposed to cigarette smoke or secondhand smoke will be considered.

Are there other smoking-related studies you're involved in?

We've been doing a lot of work on smoking cessation with Dr. Michael Fiore at the UW Center for Tobacco Research and Intervention. The question was if you quit smoking and gain 15 pounds and your blood sugar goes up, are you better off just smoking? We found that the answer was clearly no! The ill effects of smoking on blood vessels dramatically outweigh any adverse effects of weight gain.

You are also involved in teaching and mentoring. Tell us about that.

I love working with trainees at all levels. Right now I have undergraduates, medical students, medicine residents and cardiology fellows working with me. I try to give them really top-notch mentoring—regular meetings with substantive discussions about what they're trying to accomplish and the progress they're making. I emphasize the importance of setting specific, realistic goals.

What about your own teachers and mentors?

First and foremost, Dr. Patrick McBride, who was head of preventive cardiology when I arrived. He fueled my passion for prevention

–Continued on page 39

55 Words

Fourth-year SMPH medical students on a rotation on the palliative care service were given the following assignment: Write a 55-word short story—not 48, 54, or 56 but exactly 55. In 55 words, reflect on an experience you have had on this service. Write in the first-person perspective from a patient or family member of someone you cared for on this rotation. Here is what they wrote:

Dying.
So sudden.
Why her? Why not me?
The doc's here. I hear him speak, but it's all just noise. All I think about is her.
Weeping, I lean over to show my love and kiss her goodbye.
She whispers to me, "Don't be sad. We've been married for 62 years.
We'll always be together."
by Paul Anderson

I am Frank's wife, and every time I talk about him it feels like the past tense. He had a brilliant mind. He was kind and considerate. He was a filmmaker. He would never forget the right word. He's back to me now, but I wonder when will be the next time I lose him.
by Emily Yu

"I don't understand why this is happening to me...
what did I do to deserve this?
God, why do you hate me?
I have prayed for you to heal me, but you haven't.
This isn't fair.
I'm too young to die.
What's going to happen to my children?
Who's going to take care of them?"
by Connie Gundacker

I thought it was a headache. They said it's cancer. Nothing to be done. Waiting. So many people in and out. Lots of people without answers. Lots of questions I can't ask. I'm in my own world. No family, just one friend. I hope she cares. My whole lifetime lost in this little hospital room.
by Angie Appel

"I'll go to my other home." That's right. This isn't my only home, and this body, it isn't my only body. The Lord, Jesus Christ, will give me a new body, one that is strong and cancer free! When? When the Lord is ready, and will I know the time? No, it's not my call.
by Melissa Taavola

Um, can I talk to you? I mean, really talk to you. It's about Mom. She just doesn't know yet, and we can't tell her. What do you mean? We just can't tell her! Won't she know? Maybe, but it's best that she doesn't. We love her and just can't break her spirit like this!
by Melissa Taavola

Death is not easy, even when it has been expected for awhile. It can be a fast process or a slow one, and it occurs in the young or the old. Death brings families together, but it can also tear them apart. It is an inevitable part of life, for which no one can prepare.
by Adam Szadkowski

I am not ready to die today.
I am not 90 years old today.
This disease is not going to beat me.
I'm tired
and alone.
They don't understand,
I don't want band-aids.
This is about me.
Lauren.
I didn't agree,
I decided.
I get my voice back.
I just don't want to be forgotten.
by Yuan Zhou

I am dying. Amidst the tubes and wires my body is slowing down. My family gathers but I cannot speak to them. I try to express my love for them in my eyes but do they see it? I cannot hold on or stay split between two worlds. I love them always. I let go.
by Anu Elegbede

There's More Online!
For information on how to submit entries, go to med.wisc.edu/27504.

UNIVERSITY HEALTH SERVICES *Continued from page 7*

factors, not just the number and type of services provided on campus. It's imperative that students have access to high-quality healthcare along with public health measures ensuring a healthy environment.

"Not one of these factors is more important than another," Van Orman says. "In addition to providing direct care, we must promote prevention, offer population-level interventions and address the environment. The opportunity to take an integrated approach and work on all levels is what makes our work so exciting."

UHS's approach to high-risk alcohol use, a big health concern on campus, offers one example of how a multipronged, integrated strategy works. Medical providers offer brief interventions for students who say they engage in high-risk drinking, and mental health experts may offer more comprehensive treatment for students with serious problems. The department's prevention team raises awareness of the problem through extensive social messaging, and UHS leaders engage in campuswide discussions about the problem, advocating when appropriate for policy change.

LOOKING AHEAD

In recent years, behavioral health, mental health, environmental health, public health and women's health have emerged as practice areas of significant growth. Mental health, in particular, presents unique challenges.

"Historically, there has been a barrier to asking for help," Van Orman says, "but those barriers are coming down. And with that comes a demand for services."

UHS's services include a 24/7 crisis line and "Let's Talk" drop-in groups started last January. Still, reaching everyone who needs mental health intervention is a conundrum.

"There's also the issue that we can't provide long-term care," adds Van Orman.

Healthcare in the future is bound to be even more complex than it is today. But the seeds of innovation that will evolve in college health over the next few decades may already be present on the campus today.

"We are most proud that we have been able to continue to develop that college health model of 100 years ago," says Van Orman. "We feel fortunate to have been able to adapt to a changing healthcare and university environment while maintaining our goal of protecting students' health and happiness so they will best be able to succeed as students and alumni."

CULTURE OF COMMERCIALIZATION *Continued from page 13*

investors a preview of exciting coming attractions and scientists a chance to learn how to interact effectively with investors.

At the other end of the pipeline stands University Research Park (URP). The park provides office and laboratory space for more than 126 companies in 37 buildings on its 260 acres three miles west of campus. Itself a "spin-off" of UW-Madison—the land was once used for UW agricultural research—URP also returns money to the university.

Other small clusters of start-ups are scattered around town—east, west and south—making Madison an increasingly attractive place for biotechnology to flourish. The companies add tangible as well as intangible value.

CDI employs 107 people, Stratatech 30. More than 700 people work in high-quality jobs at Accuray-TomoTherapy, Novelos-Cellectar, Hologic-Third Wave, Roche NimbleGen and Roche Madison combined. Many other start-ups have also contributed to Madison's relatively stable job scene.

With state and federal budget austerity likely to be the norm into the foreseeable future, local biotechnology companies can help provide balance.

"It's a wonderful secondary benefit when our activities can create jobs, infuse capital and provide more resources in communities," says Golden.

Contributions to health must also be recognized.

"We know that one of the biggest drivers of good health is economic stability and security," he says.

FACULTY Q&A *Continued from page 37*

and facilitated research opportunities. He also gave valuable guidance on balancing my clinical, research and teaching loads with my private life. Another influence has been my colleague Dr. Peter Rahko, director of the Adult Echocardiography Laboratory. He supported me when I wanted to branch off from traditional cardiac ultrasound and get into blood vessel research. He helped protect my time so I could achieve my goals.

What do you do for recreation?

My hobby is cycling—I try to get in more than 100 miles a week. I especially like climbing hills. I also go to a lot of Brewers games with my son.

What about the rest of your time away from work?

I spend as much time as I can with my children, wife and parents. I try to do a good job of separating my work life from my private life. It's hard—a matter of organization, prioritization and delegation. I also do a lot of volunteer fund-raising and philanthropic work in the Jewish community. For five years I was chairperson of Camp Shalom, Madison's oldest and largest day camp. That activity nurtures my soul and distracts me from work. It's another way to help the world.

SELECTING FROM THE MOST QUALIFIED

Late summer days in Wisconsin for me mean heat, thunderstorms, time at the beach and assorted outdoor activities with friends and family. They mean farmer's markets with fresh fruit, corn and tomatoes, and favorite backyard barbecue entrées washed down with cool drinks. With the end of summer freedoms comes the first hints of fall and its joyous burst of color. It's a great time of year.

This time of year also brings excitement to the campus with the arrival of the new class of first-year medical students. Candidates who were carefully reviewed and interviewed during the last academic year show up as motivated Med Is, ready to learn. They know that a rigorous admissions process has brought them to our outstanding medical school. In a way, it's a chance to validate our system of evaluating and ranking candidates for our medical school.

As you can imagine, a lot of effort goes into that process, with a committee determined to interview all second-round applicants and identify the best and most well-suited candidates for our school. According to Jane Yahr Shepard, MA, director of admissions for the school's MD Program, more than 2,734 secondary applications were reviewed from the initial pool of some 4,000 applications, resulting in 175 students in the soon-to-arrive Class of 2015.

Eleven of the students are MD/PhD candidates and 25 are part of the Wisconsin Academy for Rural Medicine (WARM). The numbers of students pursuing a Masters of Public Health degree are growing, but students won't declare their intent to seek the dual degree until later in medical school.

Of course, selecting talent and predicting future success is somewhat challenging. Becoming a physician, among all career path possibilities, remains very competitive. All of our applicants are intelligent and hard working, with outstanding grades and superlative letters of recommendation. With so many excellent candidates, identifying the most qualified and talented is not easy.

To illustrate, I would like to tell you a story about a young man who lived in a small town in Oklahoma. He was good at math and learned Morse code, allowing him to operate the telegraph office at the train station. He taught himself to play guitar and entertained people who were waiting for the train to come. One day, a customer who had been listening told the amateur singer that he was very talented, gave him a card with the name of a music producer in New York and advised him to go to an audition. The customer was humorist Will Rogers.

The young man traveled to New York to audition and was promptly rejected. The experts who listened to him in the big city did not appreciate what Will Rogers saw in him. He left New York but did not give up. He subsequently became the top recording artist of his day, with more than 640 recorded songs (300 written by him) and 100 million records sold, including the first-ever gold record and a dozen gold and platinum records. "Back in the Saddle Again" and "Have I Told You Lately that I Love You" are two of his hits.

He started his own music label, became one of the top three movie stars in the country with his own movie studio, acquired radio and television stations, became the original owner of a professional baseball team and was a Hollywood success, with five stars on the Walk of Fame.

Can you guess? It was Gene Autry.

It's tempting to laugh at the New York executives who couldn't recognize the spark in this future superstar. But it is very challenging to distinguish the stars from among a group of great applicants. Nonetheless, watching each year, as the leaves begin to reveal their hidden brilliance, I know the admission committee has found yet another remarkable class.

Christopher Larson, MD '75
Quarterly Editorial Board Chair

Inbox

SUBJECT: NEW PUBLIC HEALTH COURSES

The SMPH continues to transform medical education by integrating public health into the four-year curriculum. Topics range from ethical issues in population health to leadership to improving quality in healthcare. Go to med.wisc.edu/31776.

SUBJECT: EXPERTS IN OUR VIDEO LIBRARY

Dipesh Navsaria, MD, of American Family Children's Hospital, recently discussed "Books Build Better Brains: Applying Principles of Early Brain and Child Development in Busy Clinics." It's one of hundreds of interesting, free videos of educational events that have taken place at the Health Sciences Learning Center. Go to videos.med.wisc.edu/.

SUBJECT: IMPROVED COGNITION FOR ALZHEIMER'S PATIENTS

Whitney Wharton, PhD, an investigator at the Alzheimer's Disease Research Center, discusses her study on a natural estrogen patch that improves performance on cognitive tests among women with Alzheimer's. See med.wisc.edu/31756. Other discussions on Alzheimer's research advances can be found at uwhealth.org/28017 and med.wisc.edu/28747.

SUBJECT: WHAT IS CONSCIOUSNESS?

Giulio Tononi, MD, PhD, a professor of psychiatry at SMPH, discussed consciousness with filmmaker Charlie Kaufman and moderator Alan Alda at the 2011 World Science Festival. See the video at med.wisc.edu/31684.

SUBJECT: JOIN OUR UW HEALTH COMMUNITY

Be a part of our growing community and receive regular updates on health issues, medical innovations, and more, by signing up for one of our free e-newsletters dedicated to UW Health, Carbone Cancer Center and American Family Children's Hospital. Each contains inside information, patient stories and the latest from UW Health. Go to uwhealth.org/11929.

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.

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