

Quarterly

Preventing Obesity

RESEARCH AND COMMUNITY-BASED
PROGRAMS TACKLE THIS STATEWIDE
PUBLIC HEALTH CHALLENGE

WHITE COAT CEREMONY p. 8

ADVANCES IN ASTHMA
RESEARCH AND CARE p. 10

ALUMNI WEEKEND AND REUNIONS p. 14



School of Medicine
and Public Health

UNIVERSITY OF WISCONSIN-MADISON



There's More Online!

Visit med.wisc.edu/quarterly

QUARTERLY

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

MANAGING EDITOR
Kris Whitman

ART DIRECTOR
Christine Klann

PRINCIPAL PHOTOGRAPHER
John Maniaci

PRODUCTION
Michael Lemberger

**WISCONSIN MEDICAL
ALUMNI ASSOCIATION (WMAA)**

EXECUTIVE DIRECTOR
Karen S. Peterson

EDITORIAL BOARD
Christopher L. Larson, MD '75, chair
Jacquelynn Arbuckle, MD '95
Kathryn S. Budzak, MD '69
Robert Lemanske, Jr., MD '75
Patrick McBride, MD '80, MPH
Gwen McIntosh, MD '96, MPH
Sandra L. Osborn, MD '70
Patrick Remington, MD '81, MPH
Joslyn Strebe, medical student

EX OFFICIO MEMBERS
Robert N. Golden, MD, Andrea Larson,
Karen S. Peterson, Jill Watson, Kris Whitman

**BOARD OF DIRECTORS
2016-2017**

OFFICERS
Susan Isensee, MD '83, president
Daniel Jackson, MD '03, president-elect
Ann Ruscher, MD '91, treasurer
Patrick McBride, MD '80, MPH, past president
Steve Merkow, MD '80, past president

BOARD MEMBERS
Karen Adler-Fischer, MD '80
Mathew Aschbrenner, MD '06
Mark Fenlon, MD '84, MBA
Dirk Fisher, MD '79
Jennifer Foster, MD '04
John Kryger, MD '92
Christopher L. Larson, MD '75
Kyla Lee, MD '98
Meghan Lubner, MD '03
Gwen McIntosh, MD '96
Kathryn E. Nixdorf, MD '06 (national)
Leon E. Rosenberg, MD '57 (national)
John Siebert, MD '81
Alex Tucker, MD '75
Steven Wiesner, MD '85 (national)
Michael Witcik, MD '07

BOARD ADVISORY COUNCIL
Kathryn S. Budzak, MD '69
Philip Farrell, MD, PhD
Donn Fuhrmann, MD '76
Kay Gruling, MD '88
Charles V. Ihle, MD '65
Thomas Jackson, MD '67
Ann Liebeskind, MD '98
Sandra L. Osborn, MD '70
Anne Schierl, MD '57

CALENDAR

NOVEMBER 2016

Sunday, November 13 Alumni event in Seattle in conjunction with
the Association of American Medical
Colleges Conference

JANUARY 2017

Wednesday, January 11 Operation Education

MARCH 2017

Friday, March 17 Match Day

APRIL 2017

Friday, April 21 Spring WMAA Board Meeting,
SMPH/WMAA Scholarship Reception and
WMAA Awards Banquet

MAY 2017

Friday, May 12 UW-Madison Commencement

JUNE 2017

Friday and Saturday,
June 1 and 2 Spring Alumni Weekend
Class Reunions for Classes of '52, '57, '62, '67
and the Half-Century Society (all alumni who
graduated before 1967)

OCTOBER 2017

Friday and Saturday,
October 13 and 14 WMAA Fall Board Meeting
Homecoming Weekend, UW vs. Purdue
Class Reunions for Classes of '72, '77, '82, '87, '92,
'97, '02, '07, '12

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

For editorial information, call (608) 263-4613

For address corrections and to reach the WMAA, call (608) 263-4915

E-mail us at quarterly@med.wisc.edu

Visit us on the web at med.wisc.edu/quarterly



CONTENTS

QUARTERLY • VOLUME 18 • NUMBER 3

4



Obesity in Wisconsin

A broad approach to prevention includes research and strong community partnerships.

8



White Coat Ceremony

Entering medical students show their pride as they receive their white coats and take an oath to serve their future patients.

10



Asthma Research and Care

Over more than four decades, a team of leaders—backed by impressive research funding—has made major advances in patient care.

Campus Scene (above)

Practice makes perfect! The University of Wisconsin Marching Band practices music and fancy footwork on the west end of campus.

On the Cover

Educational gardens are an important way to promote health. The Cultivate Health Initiative, funded by the Wisconsin Partnership Program, expands the Wisconsin School Garden Network, which helps children learn about healthy foods.

14 Alumni Notebook

18 Alumni Profile

23 Max Fox Award

24 Spotlight

26 Research Advances

28 Connections

30 Student Life

32 Faculty Q&A

34 Giving Back

38 Healer's Journey

40 Perspectives

ROBERT N. GOLDEN, MD



Each year, we welcome the newest members of the University of Wisconsin School of Medicine and Public Health (SMPH) “family” at our White Coat Ceremony, which recognizes the recently arrived first-year medical students. In this issue of *Quarterly*, we also highlight a remarkable “family” of physician-scientists who conduct asthma research to help improve care for patients and advance the health of populations who suffer from this illness. The “patriarch,” Dr. William Busse, has raised a large number of innovative and accomplished scientists, and the research team is now welcoming its third generation of outstanding investigators as they extend the scientific scope and geographic reach of this important work. Similarly, our Wisconsin Partnership Program connects with its extended family of community partners throughout Wisconsin as they work together to attack the obesity epidemic in our state.

As always, our Alumni Notebook section features news about many wonderful events, including Alumni Weekend and reunions, which reconnect former classmates with

each other and with their alma mater. That section also describes the career of a vitally important teacher and role model, Dr. Michael Netzel, whom we honored with the Max Fox Award for his many years of mentoring medical students through the SMPH’s community-based Preceptorship Program.

A rapidly growing component of our extended family is the network of leaders and learners in our “Mini Med School,” which has grown beyond our wildest dreams. Started more than three years ago by Drs. Craig Kent and Richard Page—chairs of the SMPH Departments of Surgery and Medicine, respectively—this community education series explores compelling health issues and describes innovative programs that are improving the health of patients and populations. We recently welcomed nearly 500 participants who were eager to learn about advances in cardiovascular research and clinical care.

Our “maxi” medical student program benefits enormously from the generous ongoing support from the Herman and Gwen

Shapiro Foundation. The foundation funds the Shapiro Summer Research Program, through which nearly 100 rising second-year medical students participate in scientific investigation across the continuum of basic, clinical and translational science and public health. In addition, it provides scholarship support for many of our students.

The best of families look out for their neighbors and others in their community who are in need. The SMPH embraces its deep-seated commitment to eliminating the horrible health disparities that plague so many in our state, including right here in Madison and Dane County. With this in mind, our Wisconsin Partnership Program sponsored a day-long conference which focused on “Advancing Health Equity.” The event brought together thought leaders from the SMPH and other highly respected state and national organizations. We look forward to sharing with you a report on this ground-breaking conference in the next issue of *Quarterly*.

As I write this column, our SMPH extended family is already celebrating the beginning of what we anticipate will be another successful Badger football season. We hope you will come back “home” to visit your SMPH “relatives” this fall—whether it’s to attend a tailgate party and football game or to participate in some of Madison’s wonderful cultural offerings that take place each autumn. If you are planning a visit, please give us a call if you would like to see our exciting new facilities, learn about our innovative programs, or meet the faculty, staff and students who make our family so vibrant.

Robert N. Golden, MD

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

Greetings, medical alumni and friends! As I'm sure you can relate, it's hard to believe how quickly seasons fly by.

The new school year is in full swing, and our Wisconsin Medical Alumni Association (WMAA) is busy planning the academic year's activities for alumni, medical students and others who connect with our University of Wisconsin School of Medicine and Public Health (SMPH).

In the past several months, I have had opportunities to meet with alumni from all around Wisconsin and the United States. In some cases, it's when they return for a reunion or other event that brings them to UW-Madison (see reunion photos in the Alumni Notebook section). In addition, I represent the SMPH by chairing a steering committee, called the Group on Institutional Advancement, of the Association of American Medical Colleges (AAMC). My involvement allows me to learn about great things other professionals in roles like mine are doing that benefit their alumni, students and organizations. This also gives our office fresh ideas to try new things, and we're always interested in hearing your thoughts.

While the AAMC working group does much of its work remotely, when I've traveled as part of that role, I've been able to visit alumni in different cities. I am continually amazed by the talent you—our alumni—have, as well as the many things you're doing in your communities to make a difference for residents, patients and populations.

For example, in Portland, Maine, I met with Drs. Allen and Jennifer Hayman, who earned their medical degrees from the SMPH in 2002. Wisconsin natives, they moved out east, where they have established successful careers in anesthesiology and pediatrics, respectively, and are active in the Portland area.

Also, when Jill Watson of UW Foundation and I attended the national AAMC conference in Phoenix, we hosted a reception for SMPH

alumni from that region. Again, it was rewarding and enlightening to hear stories about people's careers.

I am so proud of all of you! From those of you who have just started your residencies to our more seasoned alumni—like Dr. George Magnin of the Class of 1943, who continues to share his gratitude for the medical degree he earned at the SMPH. He surely put that degree to great use during his distinguished career in Marshfield.

And I want to share a "shout out" to the SMPH's newest class of medical students. As you'll read in this issue of *Quarterly*, the WMAA welcomed the incoming class of SMPH medical students by hosting the White Coat Ceremony, Stethoscope Ceremony and Badger Cookout. As you can tell from the pictures of these events, the students are proud of what they've accomplished so far, enthusiastic about the opportunities ahead of them, and grateful for the support of many alumni, including all of you who purchased their stethoscopes. In the spirit of giving back, the new students started their class fund right away!

As I interact with our medical students, I envision these dedicated individuals—five to 10 years from now—doing great things in medicine, health care, public health, and more, all around Wisconsin and our nation.

We love to hear your news! Please feel free to contact me with your ideas, questions, updates and concerns. You can reach me at kspeters@wisc.edu or (608) 263-4913, or write to me at the address on the back cover of *Quarterly*.

I look forward to hearing from you!

Karen S. Peterson
*Executive Director, Wisconsin
Medical Alumni Association*





Ready for Pizza! After harvesting and preparing fresh ingredients, this young lady (above and right) and other children at Community Groundworks' Troy Kids' Garden learned that trying new vegetables and herbs can be fun—and delicious. The Cultivate Health Initiative expands a statewide support network for garden-based education to help strengthen youth gardens and improve the health of Wisconsin children.

Obesity in Wisconsin

BROAD APPROACH TO PREVENTION INCLUDES RESEARCH AND COMMUNITY PARTNERSHIPS AIMED AT PHYSICAL ACTIVITY, NUTRITION AND POLICY CHANGES

“More broccoli!” “Pass the onions!” This is not what you’d expect to hear among first- and second-grade students. Yet on a beautiful summer morning, children who gathered at Community Groundworks’ Troy Kids’ Garden couldn’t get enough vegetables, or in this case, pizza toppings. The group gathered to water and harvest vegetables and herbs, which they happily chopped in the outdoor kitchen. They topped their pizzas with the vegetables and baked them in the garden’s mud oven. To the kids, it was a magical day—harvesting, cooking and even

digging for worms. They didn’t realize they were reaping the benefits of an educational garden, a place to try new types of produce and be physically active, and a setting that represents part of the Wisconsin Partnership Program’s multi-faceted approach to obesity prevention in the state.

The University of Wisconsin School of Medicine and Public Health (SMPH) Partnership Program represents a far-reaching commitment to improve the health and well-being of Badger State residents through investments in research, education, prevention practices and interventions, and policy development.

For more than 13 years, the program has supported research grants and community partnerships aimed at preventing and reducing obesity in Wisconsin. Research in schools and neighborhood centers; grants to communities working to improve residents’ health; and support of the Wisconsin School Garden Network and strategic Obesity Prevention Initiative are a sampling of projects the Wisconsin Partnership Program supports in its multifaceted approach to

address obesity, among the most complex, pressing health issues.

According to the Survey of the Health of Wisconsin (SHOW), a Partnership-funded population health monitoring program at the SMPH, 39.4 percent of Wisconsin adults are obese. The Wisconsin Department of

39.4%
of Wisconsin adults are obese

Health Services (DHS) states that one in four Wisconsin high school students is overweight or obese, and 29 percent of children ages 2 to 4 participating in the Wisconsin Special Supplemental Nutrition Program for Women, Infants and Children are overweight or obese. People who are overweight or obese are at greater risk for type 2 diabetes, cardiovascular disease, asthma, high blood pressure and other chronic illnesses. Also according to the DHS, the annual economic burden to Wisconsin’s health care system is estimated to exceed \$1.5 billion.

—Continued on next page



The obesity epidemic has many contributing factors that go far beyond individual lifestyle choices. Physical environments, access to healthy food, and policy changes within schools and communities across Wisconsin must be part of the broad approach to address obesity.

Research Drives Obesity Prevention

Aaron Carrel, MD (PG '95, '98), a Wisconsin Partnership Program grantee and professor in the SMPH Department of Pediatrics, recognizes the importance of a broad approach to obesity. He regularly sees the health risks and consequences of obesity in his practice as a pediatric endocrinologist at the American Family Children's Hospital and medical director of the UW Health Pediatric Fitness Clinic.

"I see kids who are overweight or obese and at risk for many related problems, including high blood pressure and diabetes," says Carrel. "But it's hard to 'cure' obesity in a doctor's office. What a doctor says is important, but what happens outside the clinic—what the patient's school, peers, community and neighborhood are doing and saying—is as important, if not more so."

Much of Carrel's research focuses on increasing physical activity in schools, where children spend most of their time.

"Policies in schools can have active effects, like requiring more minutes for physical education (PE) class, or passive effects, like social supports for kids to participate in physical activity," he notes.

Through the Wisconsin Partnership for Childhood Fitness Project, Carrel and his collaborators have worked with the Wisconsin

Department of Public Instruction and school districts across the state to increase the use of evidence-based approaches to measure the cardiovascular health of middle school students and improve PE programs.

The research has resulted in schools with increased capacity to collect and report fitness data, and enhanced PE programs that implement effective physical activity strategies, interventions and policies. The project's second phase addresses the unique challenges faced by Wisconsin schools with high populations of students from low socioeconomic groups and racial minorities, for which research indicates higher rates of obesity and lower rates of physical activity. Carrel says the goal is to promote fitness and physical activity rather than weight loss.

"When we promote fitness for all students, we lower the risk of obesity and its related illnesses for everyone," he explains.

Community Partnerships Work to Prevent Obesity

Jane Busch, a lifelong resident of Cross Plains, Wisconsin, and director of the nonprofit Lifestyle Initiative for Fitness Empowerment (LIFE) Foundation, and academic partner Daniel Jarzemsky, MD (PG '84), a physician at the UW Health Cross Plains Clinic, are using a two-year, \$50,000 Community Opportunity Grant from the Wisconsin Partnership Program to improve nutrition, reduce obesity and increase physical activity in their rural community.

The group uses a social support strategy—which includes a Step Up walking club, nutrition education, fitness classes, weight management monitoring and support

groups—and promotes access to fresh, healthy foods. Garden beds at the local senior center's new community gardens were built at wheelchair and standing height, and the community's child care center features a new garden and a "Read It, Grow It, Eat It" partnership with a local library and dietician. Many participants have seen impressive results—inches off their waists, lost pounds, better control of diabetes and blood pressure and an improved quality of life.

"I'm so proud of them! They take exercise classes, walk on treadmills, practice portion control and use calorie apps," says Busch.

The project's broad approach ensures that residents of all ages and physical abilities have the opportunity to achieve better fitness, nutrition and health.

In 2015, the Wisconsin Partnership Program awarded a \$1 million Community Impact Grant to create the Cultivate Health Initiative, a joint project of Community Groundworks and the UW-Madison Environmental Design Lab, to expand the Wisconsin School Garden Network and grow and sustain the garden-based education movement throughout Wisconsin. The project is led by Nathan Larson, director of the Cultivate Health Initiative, and Sam Dennis, Jr., PhD, associate professor in the UW College of Agricultural and Life Sciences' Department of Landscape Architecture. Evidence increasingly shows that educational gardens improve the health and well-being of children, including choices they make regarding fruits and vegetables.

The Cultivate Health Initiative will provide direct technical assistance to 200 educational garden sites in Wisconsin and resources on best practices in garden-based education to more than 2,000 school teachers, early childhood care providers, parent volunteers and community educators.

"Children spend a significant portion of their time in school, after-school and early-childhood settings," notes Larson. "And



Jane Busch and members of the Lifestyle Initiative for Fitness Empowerment Foundation's Step Up walking club enjoy a scenic walk on the Ice Age Trail in Cross Plains, Wisconsin.



Educational gardens improve the health and well-being of children, including choices they make regarding fruits and vegetables.

pioneering studies have shown that garden-based education in those settings can improve childhood health through its positive associations with fruit and vegetables and opportunities for physical activity.”

Policy Change Impacts Obesity

The Obesity Prevention Initiative is a cornerstone of the Wisconsin Partnership Program’s strategic efforts to prevent childhood obesity. Launched in 2014, the \$8.6 million, five-year initiative provides the infrastructure to bring together communities, agencies, organizations, researchers, UW-Madison faculty and others to:

- develop a childhood obesity surveillance system to track obesity and disseminate information;
- promote statewide messaging and collaboration among groups working to prevent obesity; and
- test and implement novel community-based models for childhood obesity prevention in two Wisconsin counties.

Through research and community engagement, faculty, staff and community members work to promote changes in policy, systems and the environment that will lead to improved health. The initiative’s Wisconsin Health Atlas surveillance tool will equip researchers, educators and public health professionals with data and knowledge to drive local obesity prevention decisions. Sara Lindberg, PhD, director for evaluation and surveillance, says the tool monitors rates of pediatric obesity, evaluates how interventions to combat obesity are working in communities, and helps target interventions by identifying areas that have the greatest risk for obesity and need for resources.

“No comprehensive data sets exist related to children and obesity, as they do

for adults” says Lindberg. “Through our novel surveillance system, we will be able to dig deeper into pediatric obesity within communities and schools by monitoring what types of programs and policies they are implementing to promote health.”

In 2015, healthTIDE was launched to promote and support collaboration among groups and organizations working toward policy changes to prevent obesity throughout Wisconsin. It focuses on areas where evidence shows that action can impact change, such as promoting active communities, healthy food choices in restaurants and food retailers, and healthy food and exercise opportunities in schools and early childhood programs.

Faculty and community teams also are working with Marathon and Menominee Counties to pilot innovative models for childhood obesity prevention, based on each county’s needs and resources. This multi-faceted effort includes community coalition building, advocacy training, and engagement around data and evidence-based options for health promotion. Hundreds of residents in each county—including parents, teachers, tribal leaders in Menominee, public health leaders in Marathon, clinicians and other change-makers—are collaborating to forge policy, systems and environmental solutions to their health challenges.

Because the initiative is anchored in the SMPH, it has the ability to evaluate what practices are working in communities and course-correct when they are not.

“Working with our community partners promotes not only ‘evidence-based practice’ but also ‘practice-based evidence,’” describes Patrick Remington, MD ’81, MPH, associate dean for public health at the SMPH.

The group’s research and recommendations are designed to inform policy changes that will reduce disparities and impact health.

“Environmental changes, like safe biking and walking routes, and policy changes that provide healthy meals in schools and restaurants give us a tremendous opportunity to improve health by making the healthy choice the easy choice,” says Remington.

Training Lays the Foundation

Through external grants, Patrick McBride, MD ’80, MPH, and Gail Underbakke, RD—co-director of the UW Health Preventive Cardiology Program and a nutritionist in the field, respectively—have teamed up for decades to develop unique, effective ways to teach medical students, residents and fellows about nutrition and other factors, including obesity, that contribute to cardiovascular health problems.

“We’ve integrated nutrition throughout the MD curriculum,” explains McBride, a professor in the Departments of Medicine and Family Medicine and Community Health. “Our medical students have achieved very high national board subscores in this field. We’re proud of their nutrition knowledge, and encourage them to use it in their practices.”



Volunteers in Marathon County conduct a walkability audit to study pedestrian safety and improve walking routes in their community.

Future Outlook

“It is my long-term hope that the projects and research many of us are doing will lead to policy and environmental changes that prevent obesity in Wisconsin,” says Carrel. “The Wisconsin Partnership Program has been a very influential partner in improving health in the state. Its outward-facing grants—which go beyond the lab, into Wisconsin communities—continue to strengthen all of our efforts to combat the complex issue of obesity.”

 **There’s More Online!**
Visit med.wisc.edu/49223

PHOTOS BY TODD BROWN

White Coat Ceremony

ENTERING MEDICAL STUDENTS SHARE THEIR PRIDE

In late August 2016, the University of Wisconsin School of Medicine and Public Health (SMPH) welcomed 174 first-year medical students. The annual White Coat Ceremony is an important milestone for the proud new students and their families. As the students begin their medical education, the white coats—provided by the Wisconsin Medical Society—serve as a reminder of professionalism.

Faculty and staff of the SMPH and Wisconsin Medical Alumni Association provided words of wisdom and support, highlighting what a privilege it is to be a physician.

Addressing the students, SMPH Dean Robert Golden, MD, said, “You began your privileged engagement with patients during the first hours of your first day with us. Going forward, you will wear your white coats, which will provide practical advantages as well as symbolism of your

entry into clinical medicine, during your work with primary care physicians and clinical practices. As you listen to and learn from patients, please remember that one must develop empathy and interpersonal skills, along with an ongoing knowledge base and technical expertise, to become a complete physician.”

The entering students are the first to begin training with the school’s ForWard curriculum (see *Quarterly*, volume 17, number 4), which has been thoughtfully revised to make sure their instruction is highly relevant and effective. The curriculum also takes full advantage of the school’s 10-year history of melding medicine and public health into its mission.

Golden noted that the school received the largest number of medical student applications—more than 5,500—compared to any year in its 108-year history.

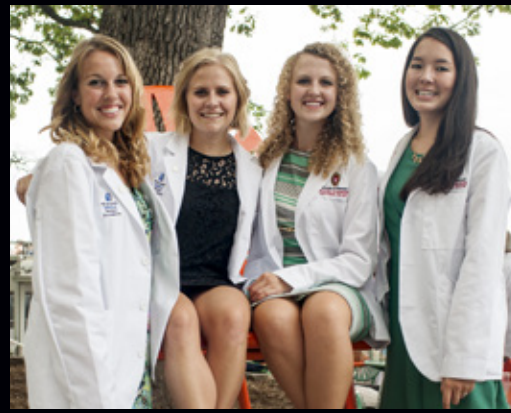
“I congratulate each of you on your acceptance into the University of Wisconsin School of Medicine and Public Health and applaud your wisdom in accepting our invitation to join us,” he said.

Golden also thanked the students’ parents, spouses and families, whose support and encouragement play a vital role in the students’ lives and ability to attend medical school.

He concluded, “The next four years will be transformational for each of you. All of us are fully committed to doing everything we can to facilitate your growth and development. We wish you happiness and success in your journey!”

—To learn more about the first-year medical students, see page 30.





Above, clockwise from upper left (left to right): M1s Steve Wang, Xavier Al Mateen (obscured), Alberto Perez, Vince Borkowski, Helen Tran, Kim Phan (obscured) and Andrew Truong snap a photo by Lake Mendota. M1 Jordan Smith (in white coat) and his family flash the “W” sign. M1 Bailee Stark is excited to put on her white coat, with help from M2 Andrew Van Pay. M1s Melissa Ricker, Sophie Shogren, Alekses Clifton and Eleanor Sato pose on a terrace chair. Nnenna Ezeh receives help with her coat from Tracy Downs, MD, assistant dean for multicultural affairs and associate professor, Department of Urology.

Below: The entering class of medical students, accompanied by UW School of Medicine and Public Health faculty members and Wisconsin Medical Alumni Association representatives, listen to White Coat Ceremony keynote speaker Laurel Rice, MD, chair, Department of Obstetrics and Gynecology.





CLINT THAYER

Asthma

LONG-STANDING TEAM DRIVES DECADES OF RESEARCH AND PATIENT CARE ADVANCES

“When I started caring for asthma patients, children and adults with this condition didn’t do physical activity. Students got doctors’ notes to sit out of physical education classes,” recalls William Busse, MD ’66, who began his medical career in allergy at a military hospital near Seattle in the late 1960s.

With few effective therapeutic options for asthma available then, physicians recommended against exercise because the risk of an asthma attack was almost unavoidable, explains Busse, a professor in the Department of Medicine’s Division of Allergy, Pulmonary and Critical Care Medicine at the University of Wisconsin School of Medicine and Public Health (SMPH).

Today, everything has changed.

“With the effective asthma treatment we have today, the vast majority of people with asthma can and do live more normal lives. They enjoy playing sports and go to school and work, hopefully without thinking about their asthma,” says Mark Moss, MD (PG ’00), an associate professor in the same division.

This success story spans more than four decades and involves hundreds of UW-Madison faculty and staff, and thousands of patients nationwide. And it continues to evolve in unexpected ways.

All Roads Lead to UW-Madison

“You’d be surprised how far Wisconsin’s influence reaches. Anytime you write a review of asthma, you ‘virtually’ pass through Madison multiple times,” notes Nizar Jarjour, MD, head of the Division of Allergy, Pulmonary and Critical Care Medicine in the Department of Medicine.

Recalling his internal medicine residency in Chicago, Jarjour shares, “Many patients came to the emergency room with bad asthma exacerbations—it was scary for them.”

As a pulmonary fellow at UW Health, Jarjour wanted to understand the disease better by observing events directly in the lungs during asthma attacks, despite having no prior formal research training. Encouraged by Busse and former faculty member William Calhoun, MD (PG ’92), Jarjour obtained funding from the Department of Medicine for a small study.

In the laboratory, he had subjects with asthma run on treadmills, and he immediately collected samples of their airway by doing a bronchoscopy and lavage after tending to their bronchospasms, so he could examine what was happening with their lung cells. Jarjour relished that opportunity and has extended this investigation to study the role of viruses, allergies and sleep in asthma.

When he became an SMPH faculty member in 1990 after his fellowship, Jarjour joined a convergence of asthma-focused faculty members, many of whom also were mentored by Busse.

“Robert Lemanske [MD ’75 (PG ’80)] brought a focus on pediatric asthma, an important step as that is when the disease begins,” explains Busse. “And James Gern (MD), a pediatric allergist and virologist, knew how to use new molecular approaches to study respiratory viruses involved in making asthma worse—another major step forward.”

All continue to make great asthma-related strides at the SMPH, along with several others, including:

- Christine Sorkness, RPh, PharmD, a clinical pharmacologist, Division of Allergy, Pulmonary and Critical Care Medicine and the UW School of Pharmacy, and a co-investigator on several National Institutes of Health (NIH)-funded programs;
- Christine Seroogy, MD, a pediatric immunologist and associate professor, Department of Pediatrics, who studies how and why children growing up on farms have immune responses that protect them from asthma;
- Loren Denlinger, PhD ’96, MD ’98, associate professor, Division of Allergy, Pulmonary and Critical Care Medicine,



CLINT THAYER

and Sameer Mathur, MD, PhD (PG '05), associate professor—both from the Division of Allergy, Pulmonary and Critical Care Medicine and both of whom Jarjour mentors—are assisting in studying eosinophils in asthma;

- Daniel Jackson, MD '03, associate professor, Division of Pediatric Allergy, Immunology and Rheumatology, Department of Pediatrics, who conducts clinical studies aimed at preventing pediatric asthma;
- Michaela Teodorescu, MD, MS, associate professor, Division of Allergy, Pulmonary and Critical Care Medicine, who is elucidating the links between obstructive sleep apnea and asthma; and
- Matthew Tattersall, DO (PG '10, '14), MS '14, assistant professor, and James Stein, MD, professor—both of the Division of Cardiovascular Medicine, Department of Medicine—who study the interrelationship between asthma and cardiovascular disease.

Additionally, Ann Palmenberg, PhD, professor of biochemistry, and John Yin, PhD, professor of chemical and biological engineering—of the College of Agricultural and Life Sciences and Engineering, respectively—and other basic scientists throughout UW-Madison collaborate on asthma cell biology, virology and molecular biology studies.

“We are fortunate that basic scientists and clinical faculty members often combine forces, and so many individuals have a shared interest and enthusiasm,” shares Busse. “UW-Madison is particularly receptive to multidisciplinary collaboration.”

This collaborative approach has resulted in a long history of multi-investigator grants (see sidebar), says Jarjour, adding, “We were doing team science before the word was fashionable.”

#1

UW-Madison is the top-ranked public university in the United States for asthma research

Over the years, the team has been enriched with investigators from various disciplines, including Deane Mosher, MD, professor, Departments of Medicine and Biomolecular Chemistry; Paul Bertics, PhD, former professor, Department of Biomolecular Chemistry; Thomas Grist, MD, professor, Department of Radiology; Sean Fain, PhD, Department of Medical Physics; James Malter, MD, Department of Pathology; and Ron Sorkness, PhD '86, RPh, professor, Departments of Medicine and Pediatrics, SMPH, and professor, School of Pharmacy.

The approach has been productive. Based on publications since 2006, UW-Madison is the top-ranked public university in the United States for asthma research and the fifth-place institution in the world, according to research analytics firm Expertscape.

For example, the NIH’s National Institute of Allergy and Infectious Diseases recently awarded the SMPH a seven-year, \$70 million grant for its continuing work on the Inner-City Asthma Consortium (ICAC, see sidebar). The grant is the largest ever received by the SMPH, with ICAC’s total amount of NIH funding since 2002 at just over \$190 million.

Another large-scale, NIH-funded study, Childhood Origins of ASThma (COAST; see sidebar), is investigating the origins of childhood asthma. This prospective study enrolls children prior to their birth and

follows them, their respiratory illnesses and the development of wheezing illnesses until age 8, explains Lemanske. Multiple related projects have extended COAST and/or called upon its findings.

Clinician-Scientists Guide the Way

From the beginning, SMPH asthma experts integrated research and patient care. “Here, it’s not just research for the sake of doing the next study. Our research has a direct impact on clinical care,” notes Moss.

Because SMPH investigators have day-to-day experience in both the laboratory and clinical settings, pharmaceutical companies often seek their advice on new therapies. From the introduction of inhaled steroids to immunoglobulin E (IgE)-targeted biologics, SMPH researchers have been involved in clinical testing of every asthma medication developed in recent decades.

“Since the 1980s, our clinical research unit has evaluated new asthma medications, including efforts to learn how each drug works best and in which patients the treatment will be most effective,” says Busse.

Patients’ Environments Matter

SMPH researchers recognized that the presence or absence of animals, microbes, insects and even inanimate viruses in a person’s surroundings, particularly during youth, dictate whether—and how much—they will suffer from asthma.

Additionally, SMPH investigators were among the first to link respiratory infections and asthma. Busse’s mentor—Charles E. Reed, MD, former faculty member and head, Division of Allergy and Immunology—conducted studies that suggested the common cold virus could contribute to asthma attacks. Busse found this fascinating.

He explains, “Everybody gets colds, but the question was, ‘How could an innocuous

—continued on page 37

A Sampling of SMPH Asthma Research Projects

Asthma research at the University of Wisconsin School of Medicine and Public Health has long been supported by millions of dollars in funding from federal agencies, including the National Institutes of Health (NIH). In the following examples of current projects, the funding represents an average per year for multi-year awards:

AsthmaNet

Nationwide network to develop and conduct clinical trials for new asthma treatments in children and adults. Studies are conducted in 13 states.

- Principal investigators (PI): Robert Lemanske, MD '75 (PG '80); Christine Sorkness, RPH, PharmD; William Busse, MD '66 (steering committee chair)
- Focus: Vitamin D add-on therapy; acetaminophen vs. ibuprofen in children with asthma
- Funding: Approximately \$686,000 annually for seven years

Childhood Origins of Asthma

Study of 288 children living in suburban areas who are at high risk for inherited childhood asthma and allergies; cohort has been tracked since birth to evaluate genetic and environmental factors contributing to the disorders.

- PIs: Lemanske, Daniel Jackson, MD '03
- Focus: Impact of the viruses and the microbiome on asthma development
- Funding: Approximately \$2.3 million annually for five years

Inner-City Asthma Consortium (ICAC)

Nationwide, multi-center consortium to identify immune-based treatments for asthma in children in urban areas. Administrative headquarters are in Madison, and 10 large U.S. cities are study sites. The project involves hundreds of researchers and thousands of families,

and funds the Urban Environment and Childhood Asthma study (see below).

- PIs: Busse, James Gern, MD, Sorkness, Jackson
- Focus: Use of an anti-IgE drug (omalizumab) to prevent seasonal spikes in asthma attacks; use of environmental antigens to shift the immune response from allergy to tolerance
- Funding: Approximately \$10.8 million annually for seven years, including the Urban Environment and Childhood Asthma study (see below).

Urban Environment and Childhood Asthma

Study of 560 children living in inner cities who are at high risk for inherited allergies or asthma. They are being studied from birth to identify lifestyle and environmental factors in urban settings that influence early immune development and increase the risk of allergic diseases and asthma.

- PI: Gern
- Focus: Identifying early exposure to cockroach, mouse or cat allergens as protecting against asthma
- Funding: Included in ICAC (see above)

Eosinophil Program Project Grant

Basic and clinical studies to elucidate the role of eosinophils in inflammation and structural changes related to asthma

- PI: Nizar Jarjour, MD
- Focus: How eosinophils move into the airway and become activated during asthma
- Funding: Approximately \$2 million annually for five years

Severe Asthma Research Program

Study to identify factors that contribute to the development of severe asthma. Imaging techniques and biological tests are providing insight into changes in lung structure and function after exacerbations.

- PI: Jarjour
- Focus: Whether accumulated injury to lung tissue culminates in treatment-resistant asthma
- Funding: Approximately \$640,000 annually for six years

Wisconsin Infant Study Cohort

Part of the Asthma and Allergic Disease Clinical Research Center, which has been continuously funded for nearly 50 years, this birth cohort study is analyzing immune response and respiratory illnesses in Marshfield, Wisconsin-area children, grouped according to farm exposure.

- PI: Gern
- Focus: Immune maturation correlated with allergic and viral respiratory diseases in the first two years of life
- Funding: Approximately \$1.5 million annually for five years



Nizar Jarjour, MD, studies eosinophils in his laboratory.

CLINT THAYER

Spring Alumni Reunions

PICTURE-PERFECT WEEKEND GREETSS SENTIMENTAL CLASSMATES



This page, clockwise from left (left to right): Alumni Weekend participants embark on a campus tour; Peter Langhus, MD '66, and Becky Langhus pose on Bascom Hill; Ruth and Theodor Habel, MD '66, rub Abe's statue for luck. Opposite page, clockwise from top left: alumni and guests gather at Bascom Hall; Andrea Anderson, Barbara Zondlo, Joseph Zondlo, MD '66, and Craig Anderson MD '66, reunite on Observatory Hill; Robert Goldberger, MD '56, Stewart Quisling, MD '66, and Tom Davee, MD '66, tour the Anatomy Lab; William Busse, MD '66, visits with Richard Silberman, MD '66.

Like Mendota, Bascom Hill and other University of Wisconsin-Madison landmarks bring back fond memories for alumni who return to campus for reunions. Such was the case during the June 2016 Medical Alumni Weekend for graduates of the UW School of Medicine and Public Health (SMPH).

Many alumni participated in the SMPH's Mini Medical School event on Thursday evening, June 2, 2016. Sponsored by the Departments of Surgery and Medicine, the event's theme was "Caring for Your Heart and Arteries." (See full article on page 28.)

Friday's festivities, sponsored by the Wisconsin Medical Alumni Association (WMAA), included a Badger Trolley tour of UW-Madison, with popular stops at the Medical Sciences Center—where alumni visited the Anatomy Lab—and Bardeen Laboratories, followed by a luncheon with medical students and a Babcock ice cream social at the Health Sciences Learning Center.

SMPH Dean Robert Golden, MD, kicked off the Friday evening celebrations by hosting a Dean's Reception at the Fluno Center, where he provided an update on

school and campus news. Alumni and students socialized before members of the Classes of 1951, '56, '61 and '66 and their guests gathered for reunion dinners.

WMAA President Susan Isensee, MD '83 (PG '86), noted, "What a milestone for all of you who graduated from our medical school 50 years ago or more. Welcome to the WMAA's Half-Century Society!"

She introduced student ambassadors and past WMAA presidents Louis Bernhardt, MD '63, and Sandra Osborn, MD '70, and thanked



Roger Rathert, MD '66, for helping plan his class's reunion.

Isensee also shared a special welcome to five alumni who celebrated their 65-year reunion: Alice McPherson, MD '51, John Toussaint, MD '51, Gerald Gredler, MD '51, Don Schuster, MD '51, and Alfred Herlitzka, MD '51.

Golden and Isensee presented the annual Brown Derby Awards to the Class of '51 for the largest amount contributed, the Class of '67 for the largest percent of participation and the Class of '15 for the largest number of donors.

The symbol of the Brown Derby is a tribute to the iconic Dean William S. Middleton, MD, who used his hat to encourage students to share their knowledge during classes, embarrass those who were unprepared and recognize superior student achievement at the end of terms. It now serves as a way for the SMPH and WMAA to recognize alumni classes that have outstanding performance records in the Annual Giving Campaign.

Members of the Class of 1966 enjoyed their 50-year reunion dinner at the Edgewater Hotel, which offers sweeping

views of Lake Mendota. Participants shared memories of medical school and updates about their lives since then, and Golden and Isensee presented classmates with their 50-year medallions. Following dinner, members of the Half-Century Society savored the sunset over Madison's largest lake.

Class Reunions

CLASS OF
1951

TODD BROWN/MEDIA SOLUTIONS (4)



Left to right: Alice McPherson, Alfred Herlitzka, Don Schuster, John Toussaint, Gerald Gredler.

CLASS OF
1956



Left to right: Kenneth Hurst, Diane Bohlman, Robert Weaver, Robert Goldberger, James Brandenburg, Carl Schmidt, Richard Graf.

CLASS OF
1961



*Front row (left to right): James Kimmey, Myrna Larson, Arlyn (Joe) Koeller, Robert Manis, Leon Nesvacil.
Back row: Robert Block, Patricia Joo, Donald Nowinski, Mary Pratt.*

CLASS OF
1966



Front row (left to right): Stephen Zimmerman, Glenn Whitecotten, Joseph Zondlo, Theodor Habel, Lawrence Betts, Robert Santilli, Howard Michaels, Paul Grotenhuis, Tom Davee, William Busse, Richard Silberman. Back row: William Raduege, Dennis Maki, Herbert Oxman, Stewart Quisling, Victor Levin, Theodore Berndt, Keith Sperling, Roger Rathert, Jerry Behrens, James Anderson, Nyles Eskritt, Peter Langhus, Richard Katz, Thomas Ansfeld, Craig Anderson.

Making a Difference:

SUSAN ISENSEE, MD '83,
NEW WMAA PRESIDENT



by Masarah Van Eyck

When Susan Isensee, MD '83 (PG '86), was named the 50th president of the Wisconsin Medical Alumni Association (WMAA) on July 1, 2016, she knew just what she would do with her two-year appointment.

"Philanthropy is so important," she says, "I want to continue to find ways for us to have an impact on students where they can feel it right away."

Fundraising wasn't initially a role Isensee felt comfortable in. But in anticipation of her 30-year class reunion, she enjoyed successfully challenging her classmates to establish an endowed scholarship in the class's name. That reunion helped grow engagement with the WMAA, another area she would like to continue to work on.

"When you realize that some people can't go to medical school and contribute to society as physicians due to the cost, it really means something to appeal to your classmates and other alumni. You don't have to give millions to make a difference," she notes.

"I also realized that in all the years I had bought tickets to Badger games, I'd given more money to the Athletic Department than to the UW School of Medicine and Public Health!" Isensee laughs.

In fact, she has long supported the University of Wisconsin School of Medicine and Public Health (SMPH), having served on the WMAA Board of Directors and Advisory Board. Recently, Isensee's involvement has come close to home. Three of the students to whom she presented stethoscopes at the SMPH's White Coat Ceremony grew up in the Madison neighborhood where she and her husband, Glenn Isensee, raised their two children.

"One student's mother is in my book club!" she says, adding, "It's so amazing to see medical students beam when they get their stethoscopes."

The drive to make a difference seems to have propelled Isensee's career. Since joining Dean Medical Center in 1986 after

completing her family medicine residency in the SMPH Department of Family Medicine and Community Health, Isensee assumed a variety of leadership roles. She served as Dean Medical Center's chair of recruiting and as site chief for its West Madison Family Clinic. In 1993, she became the first woman elected to Dean Clinic's Board of Directors. And her commitment to patients earned her physician recognition awards from 1993 to 1996.

However, it was when Isensee observed her first bariatric surgery that she recognized a profound opportunity to make a difference, she explains, adding that Paul Huepenbecker, MD (PG '86)—who taught her how to tie a knot in medical school—performed the surgery.

Intrigued by the challenge of caring for patients' post-surgical metabolic changes, she traveled to weight-loss clinics to learn more about treating obesity.

"I looked at my practice and thought, 'I have a tremendous opportunity to treat this disease.' And obesity really is a chronic disease," Isensee notes.

As a result, she and her colleagues established the Dean Comprehensive Weight Management Program in 2005, of which Isensee served as medical director for the program's first eight years.

The program is unique because it consists of a multidisciplinary team—from surgeons and psychiatrists to dieticians and internists—who support patients through a variety of weight-loss programs. Together, the team approaches obesity treatment as something more than a matter of morality or self-discipline.

"Our clinic is comprehensive in that we have medical and surgical paths for weight-loss programs," Isensee explains. "Obesity treatment really is about health and not cosmetics because it's linked to many other diseases such as diabetes and heart disease—and it costs society a lot of health care dollars."

She continues, "The most touching thing for me is when I explain to a new patient how

obesity is a chronic disease and that we're going to be there to coach, motivate and educate him or her. But I tell patients, 'I'm not the food police sitting on their shoulder.'"

The relief she senses is palpable. Many patients have told her, through tears, "No one in health care has ever explained all of this to me and not judged me."

Noting that she thinks even some health care providers have biases against obesity and mental illness, she advocates for teaching all medical students more about these conditions.

As the Dean Comprehensive Weight Management Program's innovative approach gains national attention, Isensee increasingly has turned her attention to advocacy and education. One of just a few physicians in Wisconsin certified as an obesity medicine physician by the American Board of Obesity Medicine, she served on the Obesity Medicine Association's Curriculum Committee and Advocacy Committee. In 2015-16, she lobbied at the U.S. Capitol for the Treat and Reduce Obesity Act sponsored by Wisconsin Representative Ron Kind.

While others may see her as a teacher, Isensee remains a diligent student. In 2013, she spent tireless hours at her kitchen table preparing for the obesity medicine board exam, noting that it was the most difficult board exam she'd ever taken.

But hard work comes naturally to this Melrose, Wisconsin, native whose parents sent six kids to college, telling them, "No matter what you do, always do your best."

This ethic also may explain Isensee's enthusiasm about supporting the next generation of hard-working students.

"We have so much to be thankful for—including our wonderful careers and this great school that helped us become successful," Isensee says to her fellow alumni. "It's time for us to give back and support students so they can take care of us as we retire from this noble profession!"



KIMBERLY ARNDT, MD '05

I work at UW Health, as part of the University of Wisconsin School of Medicine and Public Health (SMPH) Department of Orthopedics and Rehabilitation Medicine. I am affiliated with the UW Physical Medicine and Rehabilitation (PM&R) Residency Program.

I work in an orthopedic clinic, where I see patients with a variety of conditions, including non-operative musculoskeletal problems. I also see patients for nerve conduction studies and electromyography (EMG) testing, which evaluates for nerve injury.

Another part of my job is working at Central Wisconsin Center, where I work with admitted patients who have developmental disabilities. Every patient has a unique story, and I enjoy getting to know each one.

I am the president of the Wisconsin Society of Physical Medicine and Rehabilitation.

I chose PM&R because I love to help improve someone's function and quality of life. Physical medicine and rehabilitation physicians get to diagnose many types of problems, some of which are complex, and figure out the

best way to decrease patients' pain, improve their daily functioning and get them back to activities they enjoy.

After I was briefly exposed to the field at the end of my third year of medical school, I participated in an elective rotation and quickly knew I had found my specialty!

PM&R is a great specialty. In inpatient and outpatient settings, we get to see a diverse group of patients who have had strokes or brain or spinal cord injuries. We also get to do procedural interventions to manage pain and spasticity, as well as EMG testing and



pediatric rehabilitation. And because every patient is different, we get involved in a lot of problem-solving and thinking outside the box. I find this work very rewarding!

ROSE TURBA, MD '89

Since I completed my residency at the Rehabilitation Institute of Chicago (associated with Northwestern University) in 1993, I have practiced in Green Bay, Wisconsin. I was a partner in a three-person physiatry practice that joined the newly formed multi-specialty Prevea Clinic in 1996. I practice at St. Vincent Hospital as a partner in the Prevea Clinic.

I am the medical director of St. Vincent's inpatient rehabilitation unit. I manage medical issues and direct a team of therapists, and I care for patients of all ages

who have disabilities—most commonly traumatic brain and spinal cord injuries, stroke, amputation and trauma.

One of my most memorable patients was a teen with a traumatic brain injury. While she was driving without wearing a seatbelt, her car hit a tree, and she was ejected. I first saw her on her third day in the intensive care unit. She thrashed her left leg constantly, was unable to move her right side, was nonverbal, didn't follow commands and was unaware of her environment. After six weeks of intensive inpatient rehabilitation therapy,

she went home, talking and walking. She has only mild weakness in one hand, has graduated from college and visits to show us her nearly complete recovery.

I learned about this field as a third-year medical student. I followed the consulting chief physiatry resident into the room of my neurology patient. The resident's recommendations made a big impact on the patient's quality of life, mood and motivation. They were simple things I hadn't considered while caring for this patient, and this experience



left me wanting to learn more about physiatry.

I enjoy caring for the whole person, and physiatry allows me to do that. I find great joy in helping people recover from devastating illnesses and injuries. This helps me appreciate simple everyday abilities.

STEVE WIESNER, MD '85

For more than 20 years, I've been the chief of the Kaiser Permanente East Bay Medical Center's Occupational Health Department in Oakland, California. We treat patients who have work-related injuries and exposures and provide comprehensive specialty services, including physical and occupational therapy, orthopedic and psychological evaluation and treatment, and physical medicine and rehabilitation.

As Kaiser Permanente's National Integrated Disability Management physician advisor, I help develop educational resources and provide training

for more than 16,000 clinicians in disability management. I participate in the Disability Management Employer Coalition and other national medical societies to help train clinicians in the importance of minimizing unnecessary disabilities and maximizing abilities throughout healing.

In medical school, I was fortunate to work on a clinical rotation with a wonderful pediatric resident who was aware of Graduate Medical Education National Advisory Committee recommendations that projected specialty needs. She shared that physical medicine and rehabilitation (PM&R) needed more

physicians and encouraged me in this direction.

I also received support from the late Dr. Paul Bach-y-Rita, then chair of University of Wisconsin School of Medicine and Public Health's Physical Medicine and Rehabilitation Department, a world-renown neuroplasticity researcher.

I completed my PM&R residency at Northwestern University School of Medicine and The Rehabilitation Institute of Chicago. There, I admitted a 16-year-old patient, John, who had a C6 spinal cord injury from a diving accident. I was impressed by how the team of physiatrists, nurses, physical and occupational therapists and a psychologist collaborated



to provide outstanding care and life skills training, which reinforced John's resiliency to focus on his abilities. I learned a tremendous amount from John.

In PM&R, an interdisciplinary team collaborates to help each patient reach his or her highest level of functioning—and this is the very reason I find the field incredibly rewarding.

CLASS NOTES compiled by Andrea Larson

We want to hear from you!
med.wisc.edu/shareyournews

CLASS OF 1954

Ralph Olsen wrote an essay to preserve the history of the polio epidemic in Madison, Wisconsin. It chronicles the summer of 1955, when he worked at Wisconsin General Hospital between his internship and residency. See med.wisc.edu/49225.

CLASS OF 1957

Arthur S. Leon received the American College of Sports Medicine's (ACSM) 2016 Honor Award. He has been a professor at the University of Minnesota since 1973 and the Henry L. Taylor Professor in its School of Kinesiology since 1992. He has been an ACSM fellow since 1970, an ACSM-certified program director since 1975, a recipient of the 1995 Citation Award and a two-term vice-president. He is internationally recognized for his research on the role of physical activity in preventing cardiovascular disease.

CLASS OF 1966



Victor Levin practices neuro-oncology in California and recently returned to the SMPH to present a Grand Rounds lecture in the Department of Neurological Surgery. Left to right: John Kuo, MD, PhD; Robert Dempsey, MD, department chair; Levin; and Manucher Javid, MD, former department chair.

CLASS OF 1975

C. Michael Bowman retired as emeritus professor from the Medical University of South Carolina at the end of June 2016. He will continue with activities to promote improved asthma care throughout South Carolina and remain involved with the South Carolina Chapter of the American Academy of Pediatrics.



CLASS OF 1988

Daniel J. DeBehnke is the new chief executive officer of Nebraska Medicine, an academic medical center in Omaha. Since August 2013, he had been the CEO of the Medical College Physicians, the Milwaukee-based group that represents more than 1,500 academic physicians and providers who practice at Froedtert Hospital, the Medical College of Wisconsin Clinics and other hospitals in southeastern Wisconsin. He simultaneously served as senior associate dean for clinical affairs-adult practice and professor of emergency medicine at the Medical College of Wisconsin.



CLASS OF 1999

Jeff Mjaanes started a new position as director of sports medicine and head team physician for Northwestern University in Evanston, Illinois. Even though he will be the Wildcats' physician, he says he will always be a Badger at heart.



CLASS OF 2000

Gwendolyn Sowa recently began serving as chair of the Department of Physical Medicine and Rehabilitation and director of the UPMC Rehabilitation Institute, affiliated with the University of Pittsburgh Schools of the Health Sciences. Her internationally recognized research centers on molecular, laboratory-based translational and clinical research related to the effect of motion on inflammatory pathways and the beneficial effects of exercise. She co-directs the Ferguson Laboratory for Orthopaedic and Spine Research and is investigating the role of molecular and clinical biomarkers in guiding individualized treatment in intervertebral disc degeneration and back pain. Her research informs her clinical work as medical director of the UPMC Total Care-Musculoskeletal Health Program, and she serves as the University of Pittsburgh associate dean for medical student research.

Do You Have Photos of Your Junior Skits?

We're interested in the history of Junior Skits and photos appropriate for a broad audience, which we may publish in *Quarterly*. Please send copies of photos (electronic or hard copy)—as well as class year and any information you wish to provide—to the editor using contact information on the back cover.

IN MEMORIAM

William Merkow, MD '43
Hartland, Wisconsin
September 22, 2016

Allen W. Wittchow, MD '50
Onalaska, Wisconsin
April 12, 2016

Donald R. Janicek, MD '51
Naples, Florida
April 15, 2016

Louis R. Pfeiffer, MD '51
Port Edwards, Wisconsin
September 12, 2015

James L. Craig, MD '52
New Richmond, Wisconsin
June 24, 2016

Philip S. Brachman, Sr.,
MD '53
Atlanta, Georgia
June 6, 2016

Louis D. Philipp, MD '53
Green Bay, Wisconsin
June 12, 2016

Robert O. Brown, MD '55
Casper, Wyoming
March 16, 2016

Thomas G. Olsen, MD '56
La Crosse, Wisconsin
May 26, 2016

Carol L. Levy, MD '61
Flint, Michigan
March 29, 2016

Thayer E. Cleaver, MD '66
Mount Shasta, California
February 17, 2016

Brown O. McGhee, MD '76
Memphis, Tennessee
June 21, 2016

Nathan T. Rasmussen,
MD '06
Eau Claire, Wisconsin
May 22, 2016

Former Faculty Member

Sung-Feng Wen, MD
Professor Emeritus
Madison, Wisconsin
May 14, 2016

Netzel Earns Max Fox Award

Michael Netzel, MD, earned the 2016 Max Fox Preceptor Award for his dedicated service to the University of Wisconsin School of Medicine and Public Health (SMPH) Preceptorship Program. For 17 years, he has been the chief preceptor at the Monroe (Wisconsin) Clinic, where he teaches fourth-year medical students the skills they will need in residency and beyond. Netzel is the head of the clinic's Pulmonary, Sleep and Allergy Medicine Department and medical director of the Cardiopulmonary Care Department.

SMPH and Wisconsin Medical Alumni Association (WMAA) representatives—including Dean Robert Golden, MD, and WMAA Executive Director Karen Peterson—honored Netzel at a ceremony in summer 2016.

"Dr. Netzel serves as an outstanding role model and provides each student with individualized learning experiences in a rural setting," says Golden. "One of our school's primary goals is to increase the number of physicians who practice

in Wisconsin, especially in medically underserved rural and urban areas. I thank Dr. Netzel and Monroe Clinic for sharing the resources and dedication to help us improve health in rural communities."

Preceptorship Program Director Paul Hunter, MD, shares student comments:

- "Dr. Netzel did a good job of letting me see diverse pathophysiology and learn about pulmonary auscultation, chest X-ray and CT reading."
- "Dr. Netzel does a great job of getting students up to speed on the patient's history/treatment course."

Byron Crouse, MD, director of the SMPH's Wisconsin Academy for Rural Medicine, notes, "In 1926, the SMPH created the nation's first preceptorship program in which medical students learn to practice medicine in community settings. It grew into one of the most popular aspects of medical education here."

The Max Fox Award, established in 1969 by Herman Shapiro, MD '32, honors volunteer preceptors whose outstanding



Seated: Michael Netzel, MD; Back row: (left to right): SMPH Dean Robert Golden, MD, Paul Hunter, MD, Byron Crouse, MD.

service has played an important role in educating SMPH medical students.

Netzel earned his medical degree from Creighton University School of Medicine and completed his residency in internal medicine and fellowships in allergy and immunology and pulmonary disease at Creighton University Affiliated Hospitals.

WISCONSIN AHEC RECEIVES NATIONAL AWARD



The Wisconsin Area Health Education Center (AHEC) earned the 2016 Eugene S. Mayer Program of Excellence Award from the National AHEC Organization (NAO).

The biennial award is given to an AHEC program that exemplifies community and university partnerships, comprehensiveness and responsiveness to community needs, and has had a significant impact on improving access to health care for citizens of the program's state.

Nancy Sugden, assistant dean, University of Wisconsin School of Medicine and Public Health (SMPH), and director, Wisconsin AHEC (pictured above, front row/center, with the team), accepted the award in Washington, DC, on behalf of the Wisconsin AHEC's seven regional centers in Manitowoc, Milwaukee, Beloit, Cashton, Wausau, Ashland and Rhinelander.

"It is especially gratifying to receive this award as we celebrate Wisconsin AHEC's 25th year," says Sugden. "We have enjoyed the UW School of Medicine and Public Health's steadfast support through those years, and many individuals, programs and partner organizations have contributed to the development of our AHEC System. I find remarkable the degree of collaboration among our seven regional AHEC centers. Shared programming and a cooperative spirit have enabled us to make the most of limited resources and build the program."

EMBOG'S NEURODEGENERATIVE DISORDERS RESEARCH LAUDED

The American Society of Neural Therapy and Repair (ASNTR) awarded the Bernard Sanberg Memorial



Award for Brain Repair to Marina Emborg, MD, PhD (pictured above).

The award recognizes Emborg's significant research contributions in neurodegenerative disorders, particularly in Parkinson's disease, in developing safe neuroprotective strategies to prevent, slow down or stop brain cell death using stem cells as model systems and cell-based strategies.

Emborg is an associate professor of medical physics at the University of Wisconsin School of Medicine and Public Health (SMPH). She also directs the Preclinical Parkinson's Research Program at the Wisconsin National Primate Research Center. In her research, she uses a multidisciplinary approach to investigate non-invasive treatments, novel neuroimaging for real-time intra-cerebral targeting, and infusion monitoring of gene- and cell-based therapies. Her preclinical work includes creating animal models and experimental paradigms that better reflect clinical conditions, applying advanced imaging techniques for data collection and creating new clinical applications.

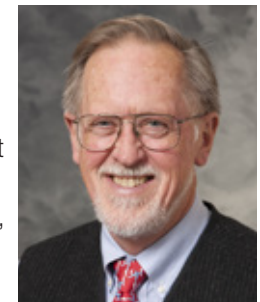
The award is named for Bernard Sanberg, father of Paul Sanberg, PhD, a co-founder of the ASNTR, a society for basic and clinical neuroscientists using a variety of technologies to better understand how the nervous system functions and establish new procedures for its repair in response to trauma or neurodegenerative disease.

THREE HONORED BY AMERICAN ACADEMY OF FAMILY PHYSICIANS

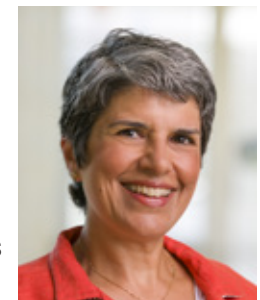
David Gaus, MD (PG '95), John Beasley, MD (PG '75), and Cynthia Haq, MD (PG '87), received major awards from the American Academy of Family Physicians (AAFP) in 2016.



Gaus, an honorary fellow at the University of Wisconsin School of Medicine and Public Health's (SMPH) Department of Family Medicine and Community Health (DFMCH), received the Humanitarian Award, which recognizes extraordinary and enduring humanitarian efforts.



Beasley, a professor in the DFMCH, received the Thomas W. Johnson Award for Career Contributions to Family Medicine Education, which recognizes outstanding contributions to family medicine education in undergraduate, graduate and continuing education.



And Haq, a professor in the DFMCH and founding director of the SMPH's Training in Urban Medicine and Public Health Program, received the AAFP Exemplary Teaching Award, which recognizes exemplary teaching skills, the implementation of outstanding education programs and the development of innovative teaching models.

The three are shown above: Gaus (top photo), Beasley (center), Haq (bottom).

GOODFRIEND HONORED NATIONALLY FOR PUBLIC SERVICE

Theodore Goodfriend, MD, professor

emeritus of medicine and pharmacology—a former division of the Department of Medicine of the University of Wisconsin School of Medicine and Public Health—was presented with a Jacqueline Kennedy Onassis Award for Outstanding Public Service Benefitting Local Communities at the Jefferson Awards Foundation National Ceremony in Washington, DC.

In the 1960s, Goodfriend started a free student-run health clinic to aid migrant workers. At the SMPH, he later helped guide a small group of medical students who established the MEDiC Program, which includes student-run free clinics that provide medical care to those in need. MEDiC now has eight clinics in the Madison area that serve more than 2,000 patients each year. It will celebrate its 25-year anniversary in late 2016.

Goodfriend's tremendous impact on the community has been felt not only by the patients served by his clinics, but also by his students and physicians in training.

According to Don Schalch, MD, medical director of MEDiC and SMPH emeritus professor, Goodfriend “has left an indelible imprint on hundreds, if not thousands, of physicians in training, practicing physicians and patients.”

Locally, the WKOW Jefferson Awards are sponsored by Group Health Cooperative; WKOW selected Goodfriend to attend the national ceremony, where he received the national award.

Goodfriend shares, “While I received the award, the hard work was done by dozens of volunteer physicians and students.”



LEWIS NAMED PEW SCHOLAR IN BIOMEDICAL SCIENCES

Peter Lewis, PhD,

an assistant professor in the Department of Biomolecular Chemistry, University of Wisconsin School of Medicine and Public Health, has been named a Pew Scholar in the biomedical sciences by The Pew Charitable Trusts.

The early-career award is meant to identify researchers with outstanding promise in science relevant to human health and with particularly creative and innovative approaches to their work.

“For more than 30 years, The Pew Charitable Trusts has proudly supported outstanding biomedical researchers at the start of their careers, encouraging the kind of creativity that leads to remarkable discoveries,” says president and CEO Rebecca W. Rimel. “The members of this exemplary group join a community of scientists that they will learn with, and learn from, for the rest of their lives.”

Lewis studies the way changes in the structure of chromosomes affect the development of animals. Chromosomes are long strands of DNA wrapped tightly around proteins called histones. The chemical composition of histones can mute or amplify the way individual genes, or groups of genes, are expressed

Each time a cell replicates, the strands of DNA are unwound, and histones are removed and replaced. Because histones often change during this process—and some histone changes are known to play a role in tumor development—Lewis hopes to understand those changes and how they could play a role in cancer treatment.



TURSKI RECEIVES NEURORADIOLOGY AWARD

Patrick Turski, MD (PG '79),

FACR, was awarded the 2016 American Society of Neuroradiology (ASNR) Gold Medal Award. His ASNR work spans many decades, including serving as the society's president in 2002, as chair of its Health Policy Committee, and as a member on multiple committees for the ASNR and ASNR Foundation.

A professor in the University of Wisconsin School of Medicine and Public Health (SMPH) Department of Radiology, Turski has maintained a research focus on magnetic resonance vascular imaging for more than 25 years, developing new technologies and applying them in clinical settings.

He is a co-principal investigator for a National Institutes of Health grant that proposes to integrate arterial wall imaging with 4D-flow magnetic resonance imaging. Some of his past innovations include contributions to the development of time-resolved, contrast-enhanced magnetic resonance angiography (MRA) and methods to accelerate MRA acquisition and reconstruction. He has written hundreds of peer-reviewed publications and dozens of chapters in neuroradiology textbooks; he also holds two patents.



Genetics Helps Solve 85-Year-Old Diabetes Mystery



A University of Wisconsin School of Medicine and Public Health team identified the cause for Mauriac syndrome, a rare condition seen in a small subset of children with poorly controlled type 1 diabetes. The research, led by Michael MacDonald, MD,

emeritus professor, Department of Pediatrics (pictured at left), was published in *Diabetes*.

Characterized by extreme liver enlargement from glycogen storage and growth failure, Mauriac syndrome was described 85 years ago. More than 100 papers have been published on the syndrome, but it took gene sequencing combined with biochemical studies to discover its cause.

Through DNA sequencing of a family of a child with Mauriac syndrome, MacDonald's group identified a mutation in a gene that encodes a key enzyme of glycogen metabolism. They expressed the mutant enzyme

in human liver cells in culture and found it suppressed the cells' ability to break down stored glycogen chains to glucose, thus contributing to high levels of glycogen in the liver. The patient's mother had the same gene mutation but not diabetes or an enlarged liver. The father had neither the gene mutation nor an enlarged liver, but had poorly controlled Type 1 diabetes.

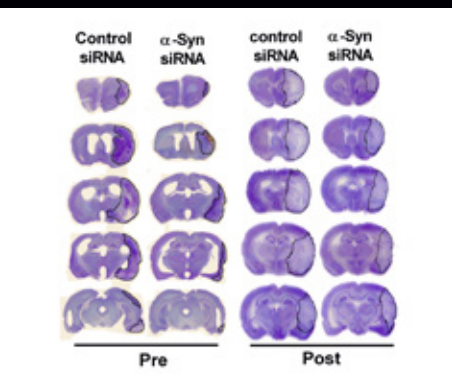
"Each parent had one component of the syndrome that alone was insufficient to cause the syndrome. It demonstrates how the effect of the mutant enzyme combined with hyperglycemia forces the

liver to store excess glycogen and cause growth failure," says MacDonald.

The discovery was made possible with funding from the Nowlin Family Trust of the InFaith Community Foundation.

MacDonald, who has researched diabetes for more than 40 years, cautions that although the discovery increases the understanding of Mauriac syndrome, it is unlikely to lead to an improved treatment anytime soon. However, he hopes to perform DNA sequencing on more patients with the syndrome to identify additional mutations that might cause the syndrome.

Blocking Brain Protein Eases Injury After Stroke



Experiments on small mammals show that blocking a protein helps ease the damage caused when an ischemic stroke temporarily cuts off blood and oxygen to the brain.

Interestingly, this same protein— α -Synuclein (α -Syn)—is known to cause

Parkinson's disease when it builds up in neurons resulting in their death.

"While the damage α -Syn causes in Parkinson's disease happens over years, it plays a role much more rapidly after stroke," says Suresh Mehta, PhD, a scientist in the lab of Raghu Vemuganti, PhD, professor, University of Wisconsin School of Medicine and Public Health Department of Neurological Surgery.

Lead author TaeHee Kim, a doctoral candidate, says that following a stroke and the reperfusion of the brain, neurons produce more α -Syn, which plays a role in

oxidative stress, inflammation, mitochondrial damage and cell death. The study was published in the *Journal of Neuroscience*.

The team showed that mice that lack α -Syn recovered better, suffered less brain injury and survived longer after a stroke than normal mice.

In other experiments, they looked at whether blocking α -Syn in normal rats would help them recover more quickly after a stroke. They injected the rats with small interfering RNA (siRNA) that was designed to block the production of α -Syn. Rats treated with siRNA produced less α -Syn in their brains following the stroke

and did better on behavioral measurements.

"We injected them pre- and post-stroke and found that treating them even 90 minutes after an ischemic stroke offered significant protection," Kim says, adding that this indicates α -Syn could be a potent treatment target for stroke even after patients arrive at the hospital.

Ongoing research aims to better understand how α -Syn causes cell death and finding the least toxic means to block α -Syn in various types of subjects, including older adults.

Novel Glaucoma-Related Gene Mutations

Research at the University of Wisconsin School of Medicine and Public Health Department of Ophthalmology and Visual Sciences has discovered novel genetic mutations responsible for primary congenital glaucoma (PCG), a devastating inherited eye disease that can present from birth through early childhood.

Published in *The Journal of Clinical Investigation*, the study shows that the *TEK* gene plays an essential role in eye health, and those who carry a mutation in this gene are at much higher risk of developing glaucoma, explains Terri Young, MD, MBA,

chair of the department and senior author of the study.

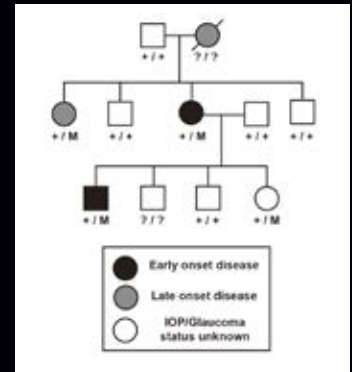
Mutations in only a few genes have been linked to PCG and account for a minority of cases. *CYP11B1* mutations are PCG's most common, especially in families with a high degree of marriage between relatives, but unknown mechanisms underlie most cases.

An international team of researchers found that *TEK* is necessary for proper development of Schlemm's canal, which drains aqueous humor from the eye. If the receptor's function is reduced or absent, the canal is poorly formed or missing, resulting

in elevated eye pressure and eventual optic nerve damage and vision loss.

The team recruited families with at least one child with PCG and found 10 mutations in the *TEK* gene. All mutations resulted in disturbance of the cellular signaling pathway necessary for Schlemm's canal development.

Stuart Tompson, PhD, a lead author and associate scientist on Young's team, notes, "Collaboration with researchers from Northwestern University was critical. They engineered mice with our identified human mutations that demonstrated defects in Schlemm's canal



underlying the disease. Prenatal and pre-disease onset genetic testing may now help determine who might be at risk and need treatment before optic nerve damage occurs."

Young concludes, "Our discovery will aid in developing new therapies for glaucoma."

Zika Infection is Prolonged in Pregnancy

University of Wisconsin-Madison researchers have shown that one infection with Zika virus protects against future infection, although pregnancy may drastically prolong the time the virus stays in the body.

David O'Connor, PhD, professor, UW School of Medicine and Public Health (SMPH) Department of Pathology and Laboratory Medicine, led a multidisciplinary team—including UW-Madison and Duke University scientists—that published a study in *Nature Communications*. It described work establishing rhesus macaque monkeys at

the Wisconsin National Primate Research Center as a model for studying how Zika infections may progress in people.

"What we've shown matches a lot of what people have observed in human epidemiological studies," says Emma Mohr, MD, PhD, an SMPH pediatric infectious disease fellow and the study's first author with Matthew Aliota, PhD '10, and Dawn Dudley, PhD, research scientists in UW-Madison's School of Veterinary Medicine and SMPH, respectively.

Researchers infected monkeys with the type of Zika virus causing an epidemic and found that those monkeys

resisted infection by the same strain 10 weeks later. But their findings showed the virus persisted in pregnant monkeys for 30 to 70 days, which has implications for the impacts of Zika during pregnancy, including severe birth defects.

The team believes the virus's persistence in pregnancy may be related to compromised immune systems of mothers-to-be or because the fetus may shed virus into the mother's bloodstream, as first proposed by Johns Hopkins University obstetrician Rita W. Driggers, MD. Another concern is that nobody fully understands the range of



outcomes for children affected by Zika virus during pregnancy.

"In Brazil, where the oldest children born to women who were infected with Zika are about 1 year old, we don't know whether some of the children who are apparently normal will have issues show up later in life," O'Connor says, adding that future research will shine light on these questions.

Tending to the Heart:

MINI MED SCHOOL HIGHLIGHTS CARDIOVASCULAR MEDICINE



Left to right: Mini Med School participants visit in the Health Sciences Learning Center atrium. Presenters line up post-event to field questions: Mohamed Hamdan, MD, MBA, Heather Johnson, MD '02, MS '11, Lucian Lozonschi, MD, Jon Matsumura, MD, K. Craig Kent, MD, and Richard Page, MD.

by Marigrace Carney

Each year, more people around the world—including an estimated one in four people in the United States—die of cardiovascular disease than any other cause. Coronary heart disease and strokes are the most common causes of cardiovascular disease-related mortality.

With such high stakes, the urgency of focusing on heart health is imperative. In June 2016, the University of Wisconsin School of Medicine and Public Health (SMPH) hosted a Mini Med School devoted to “Caring for Your Heart and Arteries.”

Mini Med School “deans” K. Craig Kent, MD, A.R. Curreri Professor of Surgery and chair, Department of Surgery, and Richard Page, MD, George R. and Elaine Love Professor and chair, Department of Medicine, led the event, and four other SMPH physician-researchers contributed to the lecture: Mohamed Hamdan, MD, MBA, professor and head, and Heather Johnson, MD '02, MS '11, assistant professor, Division of Cardiovascular Medicine in the Department of Medicine; and Lucian Lozonschi, MD, associate professor, and

Jon Matsumura, MD, professor, Department of Surgery.

Attended by approximately 500 people in three lecture halls, the event highlighted the research achievements of SMPH investigators in cardiology, as well as clinical programs and innovations designed to combat and cure cardiovascular disease.

Hamdan discussed the UW Health Faint and Fall Clinic. When patients age 18 or older suffer from fainting spells, they are referred to that clinic, which is the central location for coordinated care involving multiple specialists and tests. This approach saves patients from making numerous doctor visits and facilitates much faster diagnoses, thereby reducing the risk of future faints and falls. Hamdan also described the diagnosis of conditions causing syncope, ranging from suspected cardiac syncope, which requires heart monitoring; to reflex syncope or delayed orthostatic syncope, which is assessed by tilt table testing; and a non-syncopal faint, for which psychogenic evaluation is appropriate.

Next, Page spoke about ventricular fibrillation (VF), focusing on how VF and

cardiac arrest can be managed when they occur outside of a hospital setting. An expert in automated external defibrillator (AED) devices, he discussed the differences in survival rates when a person experiencing cardiac arrest receives no treatment aside from defibrillation 10 minutes after the episode (fewer than one in 50 survive), cardiopulmonary resuscitation (CPR) within two minutes followed by defibrillation 10 minutes post-episode (2 to 8 percent survive), early CPR and defibrillation (within six minutes; 20 percent survive), and both early CPR and defibrillation (within four minutes; 30 percent survive). Because shocking the heart into a normal rhythm is most beneficial when performed as soon as possible after a VF episode, Page participated in national policymaking to recommend that AEDs be placed on airplanes. He also illustrated the example of cardiac arrest incidences in a casino, where 75 percent of people who received defibrillation within three minutes of cardiac arrest survived. He went on to explain that the use of an AED is not an end unto itself; rather, AEDs are part



Clockwise from top left: Mohamed Hamdan, MD, MBA, chats with guests after his talk; audience members share ideas and questions; Sal Troia addresses the panel; an event participant reacts to the topic; audience members compare thoughts.

of a “chain of survival” that includes CPR and post-arrest care.

Lozonschi discussed innovative approaches to minimally invasive and highly effective cardiovascular surgery. He compared treatment of severe aortic stenosis using conventional open-heart surgery and a minimally invasive operation aided by robots. In his example, Lozonschi explained that a patient with narrowing and/or blockage in the right coronary artery and calcium deposits in the aorta could potentially be treated with conventional surgery or with placement of a stent followed by robotic-assisted coronary artery bypass grafting. By choosing the minimally invasive approach, the patient can experience minimal scarring and return to normal activities much sooner. Lozonschi also described transaortic valve replacement, a minimally invasive method for replacing a malfunctioning aortic valve with a synthetic valve.

Matsumura spoke about vascular surgery, claudication and aneurysms. He explained that vascular surgeons care for diseases of the blood vessels outside the heart, which

differentiates them from cardiovascular surgeons. He explained that claudication is usually treated by vascular surgeons with medical management and rarely requires catheter intervention or special procedures. Matsumura also talked about a study he participated in that compared three options for patients with claudication: optimal medical care (OMC, or smoking cessation, medication, optimized diet and exercise, etc.), supervised exercise and OMC, and stenting and OMC. The study found that exercise and OMC was the best course of treatment for those with claudication. Finally, Matsumura spoke about aneurysms, noting that treatment of an aneurysm that hasn’t ruptured may involve placing a stent in the enlarged artery. He is leading a National Institutes of Health-funded study to evaluate medication for the primary treatment of aortic aneurysms.

The last speaker of the night was Johnson, who shared her expertise about the “ABCs” of cardiovascular disease prevention:

- A stands for aspirin. Evidence recommends that individuals between 50

and 69 years old with a higher risk for cardiovascular disease should discuss taking 81 mg of aspirin daily to reduce their risk for a first heart attack.

- B stands for blood pressure. Individuals age 40 or older who have high-normal blood pressure, are overweight or obese, or are African-American should get their blood pressure checked yearly and take measures to lower it.
- C stands for cholesterol. Individuals who have high levels of low-density lipoprotein, diabetes and/or moderate to high risk of developing cardiovascular disease over the next decade should consider taking a statin.

Altogether, the ABCs lower the risk for cardiovascular disease and additional problems that can accompany it, such as kidney disease and diabetes.

The event concluded with a round of questions from the audience and a reception.

Marje Murray noted, “These are some amazing faculty members doing amazing work, and we are so lucky to have them in our midst.”

Welcome New Medical Students!

TODD BROWN/MEDIA SOLUTIONS (6)

In August 2016, University of Wisconsin School of Medicine and Public Health (SMPH) faculty, Wisconsin Medical Alumni Association (WMAA) representatives and SMPH upper-class students helped orient first-year medical students to UW-Madison.

Just before the new students attended the WMAA-sponsored Badger Cookout, an alumnus or alumnae presented each new

medical student with a stethoscope—a tool the student will use from Day 1 and throughout his or her career. The alumni who sponsored the stethoscopes hope the gift serves as a reminder of the caring network of SMPH graduates who are eager to support the next generation. Paying it forward and giving back are hallmarks of the school's alumni.



106
Students from
WISCONSIN

Above: M1 students Patrick O'Donnell, Eleanor Sato, Alekses Clifton, Prashanth Prabhakaran, India Anderson-Carter, Shoshana Rudin and Ahmad Mahmoodi thank alumni for their stethoscopes. Right: M1 Natanya Russek checks Bucky Badger's big heartbeat. Below: M1 Alec Winzenried makes a donation to his class fund on Day 1.



5,552
APPLICATIONS
RECEIVED



600
INTERVIEWS
CONDUCTED

174 STUDENTS
ENROLLED




**COLLEGES/
UNIVERSITIES
REPRESENTED**

Fulfilling an annual tradition, M2 students (left to right) Mary Finta, Thuy-Linh Nguyen, Andrew Vogel, Maria Roza, Haley Schoenberger, Abbey Debruin and Jeanette Comstock happily scoop Babcock ice cream for the new students.

135
Students in the Regular MD Program

24

11

FUTURE RURAL PHYSICIANS training in the Wisconsin Academy for Rural Medicine (WARM)

Students pursuing an MD/PhD in the **MEDICAL SCIENTIST TRAINING PROGRAM**



Gwen McIntosh, MD '96, hands a stethoscope to M1 Antonious Anis.



M1s Matthew Elissa and Brandon Brummeyer try out their new stethoscopes.



Incoming students visited more than **40 COUNTRIES**
Countries most visited were Honduras and Nicaragua



Sports Medicine Pioneer and Badgers Team Physician

GREG LANDRY, MD (PG '84)

Interview by Gian Galassi

After more than 35 years of service to UW Health, Greg Landry, MD (PG '84) is preparing to hang up his stethoscope for the last time in summer 2017. *Quarterly* magazine caught up with Landry and asked him to reflect on his career as a pioneering leader in pediatric and adolescent sports medicine, as a well-loved and dedicated professor, and as the longest-serving team physician in the history of Badger athletics.

A professor in the University of Wisconsin School of Medicine and Public Health's (SMPH) Department of

Pediatrics, Landry earned his medical degree from Indiana University and completed his residency and fellowship at University of Wisconsin Hospital and Clinics. He has received numerous professional awards and honors and is regularly listed on the Best Doctors in America list and *Madison Magazine's* Top Docs list.

When did you know you wanted to be a doctor?

I was only about 6 years old. I always liked helping people, and I was naturally interested in science, so it seemed to be a good fit.

You came to UW-Madison in 1980 for a pediatrics residency and ended up practicing primary care sports medicine? How did that happen?

During my residency, the UW Athletics Department was looking for a home for the general medical care of athletes. One day at lunch at UW Hospital, Dr. Bill Clancy, who was then the head team physician, asked Dr. Bill Segar, who was then the chair of the Department of Pediatrics, if he knew of any physicians who might be interested in working with athletes. Dr. Segar said Dr. John Stephenson, then director of adolescent medicine, would probably be willing to help.

After some initial eye-rolling because we were in pediatrics treating college students, they soon learned that we were pretty good at it. The Athletics Department staff knew I was a former athlete and saw how interested I was in the topic. In fall 1983, athletic trainers Dennis Helwig and Brad Sherman asked me if I wanted to be a team doctor. Of course, I said “Yes,” and they created a faculty position for me the following fall. Because I had not done a sports medicine fellowship, I had a lot of on-the-job training the first couple years.

In 1991, you were one of 20 founding members of the American Medical Society for Sports Medicine, which now has more than 2,700 members. What are some of the biggest contributions this organization has made to the field?

Back then, there was very little research being done on primary care issues in sports medicine, and as the organization grew, the quality and quantity of research has increased dramatically. Now people are designing studies that address many of the questions we’ve always had—and that’s very important for any medical field.

What are some of the most critical issues facing sports medicine today?

Our nation’s biggest problem is inactivity, so one of the most important parts of research is how to get inactive people to become more active. On the other hand, we also have many people who exercise too much, which leads to the second biggest issue in this field: how to prevent overuse injuries. A current hot topic is early sports specialization among youth. Some of my colleagues are researching risks related to that.

Do you think the culture of youth sports contributes to the problem of early sports specialization?

One of the problems, I believe, is that parents get caught up in the idea that their kid is going to get a college scholarship. But scholarships are really competitive, and if your child is not that talented, it doesn’t matter how many hours

he or she spends practicing or attending camps—a scholarship simply won’t be available. Many parents who read Malcolm Gladwell’s book *Outliers*, in which he states that a key to achieving expertise in any skill is to practice close to 10,000 hours, are going to be disappointed. In sports, that’s just not true. If you don’t have significant talent, you probably will not be playing college sports.

As a pioneer and leader in the field, you could have written your ticket to anywhere you wanted to go. Why did you stay in Madison?

When my family first moved here, people told us we wouldn’t want to leave, and they were right. After I’d found out what Madison and UW-Madison had to offer, I couldn’t think of any other place I’d want to live or practice. I came here for a residency not knowing I’d be able to take care of a college team. I often say it was an awesome opportunity disguised as more work, but fortunately, I have a spouse who knew that once I started working as a team physician, it was something I dearly loved. She supported me even though it meant a lot more parenting responsibilities would fall on her.

What would you tell an aspiring medical student who is considering a residency or fellowship here?

Madison and UW-Madison are easy to sell. Just ask our sports medicine faculty, all of whom were former fellows of the program. Once people come here and see all the opportunities to practice and do research, they are delighted when we offer them a job.

Describe some professional highlights from your 25-year career as Badgers team doctor (1984-2009).

One of the first honors was being asked to be a team physician for the 1992 Winter Olympic Games in France covering cross country skiing and the biathlon. Just to be a small part of the Olympic competition was very special.

It also was incredibly fun to watch a struggling football program hire a great coaching staff and return to glory. Today, we expect success—and going to the



Megan Landry Stalpes, MD '10, got to spend time on the sidelines with her dad, Greg Landry, MD (PG '84), before Stalpes' pediatric residency.

Rose Bowl in 1994 was one of the most thrilling events of my career.

Many people don’t understand that when you’re on the field with these athletes, you really start rooting for them as individuals. Sure, I root for our teams, but it’s different when you get to know these athletes through their good times and their struggles. Some of the most exciting times are watching UW athletes compete in the Olympics or in professional sports.

The NCAA national ice hockey championships in 1990 and 2006 also were a thrill, especially the one in Milwaukee. Watching those young men win a national championship was incredible!

Both of your kids have followed your footsteps into health care, one as a pediatrician and the other in public health. What does that mean to you?

Watching them grow in their careers has been a pleasure. It tells me that they knew I loved what I did. I always worried that my work was interfering with my family, but it must not have interfered too much. Medicine can overwhelm people, and more than a few physicians get caught up in it, to the detriment of their families. Although I was really busy, I always tried to make time to attend my kids’ activities, and they knew they were my priority.

Shapiro Legacy Supports Student Research

MEDICAL STUDENT AND MENTOR PAIRS FULFILL THE VISION



Medical student Claire Baniel and Paul Sondel, MD, PhD '75 (PG '80), worked together on cancer immunotherapy research through the Shapiro Summer Research Program.

by Kris Whitman

Herman “Murph” Shapiro, MD ’32, and Gwen Shapiro, BS in Nursing (’53)—a longtime faculty member of the University of Wisconsin School of Medicine and Public Health (SMPH) and head nurse at UW Hospital and Clinics, respectively—had a strong desire for their legacy to shape educational experiences for future generations of physicians and nurses.

Established in 1995, the Herman and Gwen Shapiro Foundation memorializes the couple, who worked hard, loved life and followed their hearts about ways they could assist others well beyond their lifetime, notes David Walsh, JD, chair of the foundation’s board of directors.

“They wanted to improve the human condition—the words from the Wisconsin Idea—and that’s why they were involved in academic medicine,” says Walsh, whose parents were friends with the couple, leading to a lifelong friendship among the Shapiros and brothers David and John Walsh.

David Walsh notes that the Shapiro Foundation, to date, has given more than \$13 million to support programs at the SMPH and UW School of Nursing.

The Shapiro Summer Research Program is among the SMPH activities the Shapiro Foundation supports. It provides half of each student participant’s stipend for an eight- to 12-week summer research experience between the first and second years of medical school. Mentors or departments pay the stipend’s balance, plus research costs.

“The Shapiro Foundation is at the heart of our student research programs. It has resulted in tremendous growth of those programs for medical students, who benefit greatly from the experience,” says Lynne Cleeland, assistant dean for academic affairs, adding that the following UW-Madison entities also have made significant contributions to support student research experiences: Carbone Cancer Center, Cardiovascular Research Center, Institute for Clinical and Translational Research and departmental National Institutes of Health training grants.

Cleeland helped create the Shapiro Summer Research Program, designed for

medical students who are not pursuing PhDs but want to conduct research. The program began in 2002, when it granted awards to nine students. It has steadily grown to today’s level of nearly 100 annual awards, to benefit more than 900 students since 2002.

Dedicated mentors are another key to the program’s success. Cleeland recruits faculty members for each annual cycle and notes that some mentors volunteer year after year. A few of the mentors used to be students in the program. Cleeland also recalls a number of mentors who have hosted students every summer since 2002, including Paul Sondel, MD, PhD ’75 (PG ’80), Reed and Carolee Walker Professor in Pediatric Oncology and director of research, Division of Pediatric Hematology, Oncology and Bone Marrow Transplantation, Department of Pediatrics.

Some mentors propose hypothesis-driven projects from which students choose; others are available to host students who propose projects. Inquiries in basic, clinical, population health or translational science; health services; quality improvement; or public or global health fit the bill.

Aiming to prepare students for future grant writing, the Shapiro Summer Research Program requires students to write a research proposal—including learning goals and a mentoring plan, with activities such as holding weekly meetings with mentors, shadowing clinicians, and attending grand rounds and journal clubs. A 12-member student research committee reviews applications and finalizes decisions about students’ placement with mentors.

After finishing their research stints, students must write an abstract to present at the annual Student Research Forum; this often extends to students co-authoring papers for submission to peer-reviewed journals.

Cleeland points to an exemplary match: medical student Claire Baniel, who met her summer 2016 mentor, Sondel, when he gave the previous year’s forum keynote address.

Sondel directs a nationally recognized laboratory for translational and clinical cancer immunotherapy research; has an active clinical practice; and teaches medical and



Herman “Murph” Shapiro, MD ’32 (left), was memorable for his outstanding educational skills, gentleness and humor. Born in 1904 in Garadia, Russia, he came to the United States in 1913 and sold newspapers to earn money to attend school. Shapiro earned a bachelor’s degree from the University of Wisconsin-Madison and a medical degree from the UW School of Medicine and Public Health (SMPH). A distinguished cardiologist and emeritus professor of medicine, Shapiro taught at the SMPH for more than 40 years. His wife, Gwen Shapiro, BS in Nursing (’53) (right) of rural Cuba City, Wisconsin, earned her nursing degree from the UW School of Nursing and was the head nurse at UW Hospital and Clinics for many years.

graduate students, residents and fellows. For his commitment to guide medical trainees at all stages, he earned the SMPH’s 2015 Dean’s Award for Research Mentorship.

He applauds students in the Shapiro Summer Research Program for using their break “to advance their career in a way that only time doing research can do” and says the stipend makes it possible for students to do this, rather than work somewhere else for a summer income.

“The program teaches students how to ask a research question, collect and analyze data, and explain the results, theories and proposed next steps. The work builds a connection with their chosen discipline that they can think about during future rotations,” says Sondel. “It’s an incredible experience to pack into a summer!”

While summer research students are not expected to have prior laboratory experience, Sondel was impressed with Baniel’s background knowledge and research skills.

“She hit the ground running, and we spoke the same language,” he recalls.

About her undergraduate years at Michigan State, where she worked in a lab

—Continued on next page

developing anti-cancer vaccines and learning many of the immunology, cancer biology and laboratory techniques she used in Sondel's lab, Baniel shares, "I was fortunate to have undergraduate research mentors who—like Dr. Sondel—took an interest in my work, as well as my development as a scientist."

Sondel notes, "When we met, I quickly realized there was a terrific project nobody in our lab had worked on that required the skills Claire had. She knew immunologic assays that usually take our part-time undergraduate assistants up to a year to master."

He continues, "Claire started injecting mice with the genetically engineered anti-tumor fusion protein we are developing in the lab and clinic, and she began collecting samples, doing assays and looking at antibody levels. Although she and I thought her research question may not give us answers, within two months, she came up with terrific data, and we learned new things. That's extraordinary!"

Baniel's project, "The Effects of Local Radiation and Immunocytokine on Antibody Quality and Diversity," was an important next step to a recent publication from this lab by radiation oncology resident Zach Morris, MD, PhD.

Finding ways to harness patients' immune systems to fight cancer has been the driving force for Sondel's career. Immunotherapy could reduce or eliminate the amount of chemotherapy and/or radiation therapy needed to treat cancer, potentially reducing dangerous, long-term side effects. For some adults, radiation and chemotherapy provide benefits, but they do not provide enough treatment for all patients.

"The results we're seeing in immunotherapy used to be just a dream. Today, immunotherapy is playing a helpful role in the treatment of several cancers. It's exciting to see our ideas being translated from efficacy in mice to clinical testing, with some degree of success," describes Sondel. "We think we have the tools and reagents to be able to move more of these concepts into the clinic, but we have to take it one step at a time to make sure it's safe and beneficial."

Baniel says she "never lost the sense of wonder" she felt on her first day in the

laboratory. That sense of wonder may be why she wants to become a physician.

"My mom is an emergency room nurse, and she inspires me. I grew up hearing about how incredible medicine can be and the impact doctors and nurses have on others—and that feels like a natural fit for me."

Having lost a close family friend to cancer, Baniel adds, "Whenever loved ones have been affected by cancer, or their treatments were going poorly, I would think that even if I couldn't help that person, maybe something I was doing at work would help others."

She continues, "When I heard Dr. Sondel speak about the impact his research was having, I knew I would find it meaningful to work in his lab."

Baniel plans to conduct further research in Sondel's laboratory.

SMPH medical students can continue to engage in research during medical school through the Path of Distinction in Research (also known as the Research Honors Program), which requires at least 16 weeks of mentored investigation plus additional criteria. These students graduate with honors in research, explains Patrick McBride, MD '80, MPH, the faculty director of the student research program.

"The Shapiro Summer Research Program is a springboard for students who choose the Path of Distinction, and they can count their Shapiro-funded research toward their 16 weeks," McBride adds.

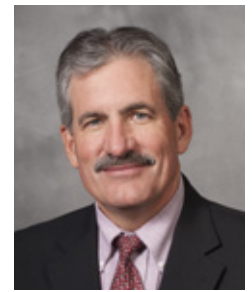
Baniel notes, "I love the fact that UW School of Medicine and Public Health offers many avenues in which I can do research, such as using elective time or taking a year off to expand my project. I'm not sure which option will work best for me, but I am excited by the opportunities."

Looking to the future, she adds, "I would love to have a career that allows me to practice in a clinical setting and explore research questions. Dr. Sondel is providing insight about how I can make this a reality."

Sharing her passion, Sondel explains, "My dream always has been to have one foot in the lab and one in the clinical environment, so I can connect them on a daily basis. I've been fortunate that my laboratory group



Lynne Cleeland



Patrick McBride, MD '80, MPH

includes people from many backgrounds, which adds strength to our research."

Most students Sondel has mentored in the Shapiro Summer Research Program have chosen a clinical discipline related to their research, he notes, making it clear that he loves to watch trainees succeed.

Cleeland says, "It has been exciting to build this program into what is it today. As the demand increased, so did the funding, thanks to the Shapiro Foundation. In the 15 years of the program, more than 900 medical students have been supported by the Shapiro Foundation for summer research fellowships."

She adds that the foundation also supports other SMPH programs, including the Student Research Forum, travel awards for students to present research at national meetings and conferences, scholarships, and a year-long Institute for Clinical and Translational Research (ICTR)-Shapiro Medical Student Research Fellowship.

Walsh observes that the school's student research programs perfectly match the Shapiro's goals.

Another perfect match came in summer 2016, when the Shapiro Foundation obtained matching funds through a gift to UW-Madison from Ab Nicholas and Nancy Johnson Nicholas for another program: the Herman and Gwen Shapiro Endowed Medical Scholarship Fund.

Walsh concludes, "As we honor the Wisconsin Idea—that the boundaries of the university are the boundaries of the state—and consider ongoing discussions about education, economic development and the creation of knowledge—we are happy to see the SMPH student research programs extending knowledge on which other people can build."

respiratory virus bring about such profound changes in asthma?”

In 1989, Busse and Lemanske published a study in which volunteers with mild asthma were exposed to a rhinovirus strain. They were stunned by the results: not only did some asthma patients have a significant inflammatory response to an inhaled allergen, but the virus caused abnormalities in their airways that lasted up to six weeks.

“Viruses made the allergic disease worse,” explains Busse.

These findings launched a series of studies to identify which rhinoviruses were most important, work that led Gern to identify rhinovirus A and C as key factors shaping respiratory health in asthma-susceptible individuals. To understand the interplay between immune responses and asthma, he and colleagues investigated the influence of microbial and animal-derived allergens on cohorts of children raised in inner-city, suburban or rural settings.

One of Gern's most surprising findings came from sampling vacuum cleaner dust collected from inner-city homes and correlating allergens with asthma in children. Studies on children raised on farms indicated that growing up around dogs or livestock led to lower rates of asthma.

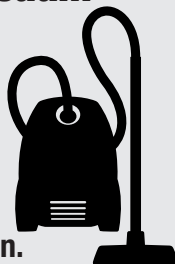
“In the inner city, though, we found that the more cockroach, mouse and cat allergens these little kids were exposed to, the better their respiratory outcomes. We couldn't believe it,” exclaims Gern.

Researchers knew that children with asthma who were allergic to cockroach allergens often had severe exacerbations. But the idea that exposure in the absence of an allergy could be protective turned conventional wisdom on its head.

“Obviously, we're not advocating that kids should have more exposure to cockroaches, but we need to learn how those exposures lead to better health,” notes Gern.

Today, Jackson wants to use this knowledge to nudge patients' immune systems toward preventing asthma. In one clinical trial, he is investigating whether

One of Gern's most surprising findings came from sampling vacuum cleaner dust collected from inner-city homes and correlating allergens with asthma in children.



giving children a bacterial extract, which is sold over the counter in Europe, can help prevent patients from developing severe respiratory illnesses. In another, he administers, to 2- and 3-year-old children at risk for asthma, a biologic medication that binds IgE to see if dampening a hyperactive immune system will be protective.

“Studies have identified modifiable risk factors for asthma development, and we want to apply this knowledge to prevent disease,” says Jackson.

Gern envisions a day when providers are able to test for a biomarker in children at risk for asthma and make recommendations based on the outcome. Could it involve a prescription for a pet—to the delight of children everywhere?

Laughing at the possibility of interventions measured in dog units, Gern adds, “We hope to learn what's good about being on a farm, for example, and to be able to bring the benefits of a farm lifestyle to children who grow up in suburban and city environments.”

What's Next?

After making numerous significant contributions to overall knowledge about asthma and effective treatments, the team is looking to the future. Gern explains that the potential for effective prevention techniques reaches beyond asthma, toward other respiratory conditions.

“A lot of respiratory diseases in adults start early in life. By learning how we can promote good respiratory health at a young

age, it's likely that we can improve health not only in kids but into the sixth, seventh and eighth decades of life,” he notes.

Another urgent need is to develop treatments for severe asthma. For a subset of patients, even the most advanced medicines inadequately control their disease.

“We still don't have a deep understanding of the mechanisms that drive their asthma,” explains Moss. “It will take the next era of research to understand that.”

True to character, SMPH researchers are continuing to explore new territory.

For instance, in September 2016, UW-Madison received a two-year, \$15 million NIH grant to establish and oversee a new Children's Respiratory Research and Environment Workgroup (CREW)—a national consortium of 14 institutions, including the SMPH, that will study how genetics interact with environmental exposures during the prenatal and early childhood years to cause specific subtypes of childhood asthma. Gern is the CREW principal investigator, and the grant is part of \$157 million in awards by the NIH that launch a national, seven-year initiative called Environmental Influences on Child Health Outcomes.

Also, nearly 40 years after being awarded his first extramural research grant, Busse is starting an entirely new line of investigation. He and Richard Davidson, PhD, are partnering on a psychoneuroimmunology study that will investigate the signaling mechanisms between the brain and lungs that influence asthma disease processes. Internationally recognized for his expertise in mind-body connections, Davidson is the Vilas Professor of Psychology and Psychiatry. The NIH-funded work could help researchers understand the influence of emotional states, such as stress and depression, on asthma.

“This field of study has implications for developing new ways to intervene with asthma,” says Busse—leaving open the possibility of prescriptions measured in units of Zen.

 **There's More Online!**
Visit med.wisc.edu/49224

Doctor, Patient, Author: Kristin Seaborg, MD '01

As a teen, Kristin Seaborg, MD '01, had the world at her fingertips—a loving family, happiness and security, early admission to medical school—until the frightening diagnosis of epilepsy threatened to destroy both her career path and her health. Living in constant fear that her seizures would intensify and prevent her from practicing medicine, Seaborg kept her condition a closely guarded secret, leading a double life as patient and practitioner. A memoir of discovery, acceptance and hope, *The Sacred Disease* chronicles her tenacious fight for a seizure-free life. Remarkably, although Seaborg's knowledge and expertise continue to develop as a pediatrician and mother, her experiences as a vulnerable patient provide the most valuable lessons of all.



CLINT THAYER

A University of Wisconsin School of Medicine and Public Health graduate and Madison pediatrician, Seaborg wrote a book detailing her personal journey with epilepsy.

by Doug Moe

Until she decided to write a book about her epilepsy, Kristin Seaborg, MD '01, knew almost nothing about her first seizure.

She was a toddler, living in Missouri, when it happened. The experience so upset her mother that she couldn't speak of it later without tearing up.

"She'd say, 'You had a seizure at 16 months,' and that was it," Seaborg recalls.

Seven years ago, Seaborg—who earned her medical degree at the University of Wisconsin School of Medicine and Public Health (SMPH) and became a pediatrician in Madison—decided to write a book "to give voice to my story and help change the tide of stigmatization," she explained in the foreword to *The Sacred Disease: My Life with Epilepsy*, published in November 2015.

Seaborg had been mulling over the idea for years, and early on, she told her mother, "I'm really writing this book!"

She needed those first painful details, and her mother obliged. She described a dark day in Springfield, Missouri, with low-hanging clouds, and a trip to the grocery store, after which Kristin spiked a fever. She was placed in her crib to nap. The seizure came moments later, with rapid convulsions that did not abate on the drive to the hospital, ending only when doctors induced a coma.

Seaborg remained hospitalized on a ventilator for two weeks, but the tiny child was resilient, and her strength and spirit returned. A doctor prescribed daily medication and, as the family left the hospital, said, "This may not be the end of Kristin's seizures."

Her mother would remember that line always, and it was true. Also true—and what no one could have guessed decades ago—was that the little girl would grow up to write a brave, deeply personal book destined to resonate with the countless people touched by epilepsy, so-called the "sacred disease" because it was once thought the work of demons or Gods.

Certainly it took a while before Seaborg, now age 41, could consider widely sharing the story she called "the dark secret of my heart."

When Seaborg was 5 years old, her family moved to Brookfield, Wisconsin, outside Milwaukee, and about then—having had no further seizures—she was taken off medication. At the same time, an EEG came back normal.

"Everything was totally fine until I was 14," she recalls.

That year, hanging with girlfriends at an amusement park, Seaborg had the first of many episodes that she came to call “weirds”— pulsing heat, the compulsion to swallow, difficulty speaking and an upset stomach. Her family doctor prescribed Maalox.

In fact, the episodes, which preceded her menstrual cycle, were small seizures. They were not addressed correctly for four years. At age 18, Seaborg had a grand mal seizure, during which she lost consciousness, and she was diagnosed with epilepsy.

It didn't stop her from following in the footsteps of her brother, Jon Gould, MD '96 (PG '01), and enrolling in the UW-Madison Medical Scholars Program. Good grades in the program assured Seaborg a spot in the SMPH.

She met her husband, Andrew Seaborg, at UW-Madison. Her memoir is part love story, too. She wrote about him being there for her when the epilepsy resurfaced, having been dormant during her early college years. One especially devastating moment came in 2003, when Kristin Seaborg was a medical resident in the SMPH Department of Pediatrics, months after she had surgery that everyone hoped would end the seizures. Instead, she felt a seizure coming on while driving, pulled over and managed to dial his number.

“Where are you?” Andrew Seaborg asked.

“I don't know. One of the side streets off Park Street,” she responded.

He found her. They wept together, out of both sadness and relief that she was OK.

“Epilepsy was back to stay,” Kristin Seaborg wrote of the episode in her book, but they could—and would—manage it. Before long, she was pregnant with their first child.

In March 2010, Kristin Seaborg—by then a successful pediatrician with three young children—read a Madison newspaper story about David Axelrod, celebrated advisor to President Obama, coming to speak at Monona Terrace at a benefit for the Madison Friends of the Citizens United for Research in Epilepsy (CURE).

Her eyes stayed on the article for a long time.

“Here was a group,” she says, “that was talking about epilepsy in a positive way, not like, ‘Oh, you're not able to function.’”

Kristin Seaborg contacted the local organizer, Eileen Sutula.

“She was the first person I was able to talk to about seizures without feeling sheepish and judged,” Kristin Seaborg reflects.

The following year, Sutula asked Kristin Seaborg to speak at the event.

“It was a catharsis,” Kristin Seaborg exclaims, adding that the memoir she had been considering began to seem possible, almost a logical next step. “I started carrying my laptop everywhere.”

It wasn't easy—one requirement of writing *The Sacred Disease* was reliving some tough moments—but it allowed Kristin Seaborg a peace with epilepsy. She was no longer hiding anything, and as a consequence, was no longer ashamed.

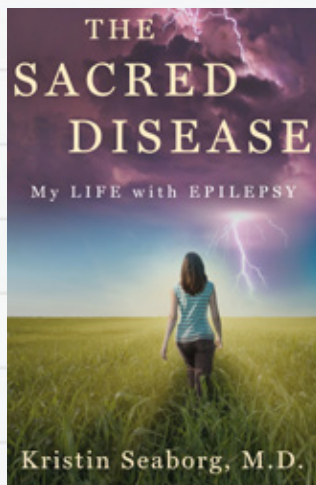
She found she had spoken for multitudes.

Reflecting on the book's impact, Kristin Seaborg shares, “I get notes from people I've never met, who say, ‘I read your book, and you put into words everything I've tried to describe to my family. I'm sharing it with them.’”



The Seaborg family loves spending time outdoors. Here, Andrew Seaborg and Kristin Seaborg, MD '01, pose with their children (left to right) Alex, Kalli and Will.

BECKY C PHOTOGRAPHY



In March 2010, Kristin Seaborg—by then a successful pediatrician with three young children—read a Madison newspaper story about David Axelrod, celebrated advisor to President Obama, coming to speak at Monona Terrace at a benefit for the Madison Friends of the Citizens United for Research in Epilepsy (CURE).

Her eyes stayed on the article for a long time.

“Here was a group,” she says, “that was talking about epilepsy in a positive way, not like, ‘Oh, you're not able to function.’”

Kristin Seaborg contacted the local organizer, Eileen Sutula.

“She was the first person I was able to talk to about seizures without feeling sheepish and judged,” Kristin Seaborg reflects.

The following year, Sutula asked Kristin Seaborg to speak at the event.

“It was a catharsis,” Kristin Seaborg exclaims, adding that the memoir she had been considering began to seem possible, almost a logical next step. “I started carrying my laptop everywhere.”

It wasn't easy—one requirement of writing *The Sacred Disease* was reliving some tough moments—but it allowed Kristin Seaborg a peace with epilepsy. She was no longer hiding anything, and as a consequence, was no longer ashamed.

She found she had spoken for multitudes.

Reflecting on the book's impact, Kristin Seaborg shares, “I get notes from people I've never met, who say, ‘I read your book, and you put into words everything I've tried to describe to my family. I'm sharing it with them.’”

Innovation in Medical Education

BENEFITS LEARNERS, SOCIETY*

Each year, I am delighted to welcome students to our University of Wisconsin School of Medicine and Public Health (SMPH). I am awed by their diverse accomplishments. They are musicians, athletes, scientists, dancers, artists, entrepreneurs, veterans, public servants and more. Collectively, they will make cutting-edge discoveries, provide outstanding service and become champions of health that will benefit individuals, families and communities throughout Wisconsin and the world.

Serving them heightens my optimism about the future and drives my commitment to ensure their success as they become health professionals and scientists. As faculty, staff, alumni and friends of the SMPH, we must fully invest in their education and development to help them become competent, compassionate professionals who work effectively on interprofessional teams to optimize health outcomes. Thinking about them also makes me reflect on medical education's history and future directions.

In 1870, Dr. A. Huxley already recognized an increasingly crowded medical education curriculum noting, "Anyone who adds to medical education one iota or one title beyond what is absolutely necessary is guilty of a grave offense." In 1898, Dr. H.W. Bowditch said "...in arranging a course for medical study, a distinction must be made between those subjects which it is essential that every student should know, and those subjects which it is desirable that certain students should know..."

Our school has wrestled with these issues since 1907, when UW-Madison established the two-year UW College of Medicine, led by Dean Charles R. Bardeen and launched in the attic of Science Hall in 1908.

The American Medical Association (AMA) and others had recognized a need for standardization in medical education to

better address health needs and optimize patient care. The Carnegie Foundation enlisted Abraham Flexner to evaluate U.S. and Canadian medical schools. Flexner's 1910 report helped establish that two years of basic science followed by two years of immersive, multidisciplinary training in clinics and hospitals was optimal for medical education. He also emphasized the importance of public and social missions. Wide-scale reforms led to the four-year medical education curriculum that became the cornerstone of medical education, including at our school in 1925. The SMPH began clinical teaching rotations at Wisconsin General Hospital and other facilities shortly thereafter and launched the nation's first statewide Preceptorship Program in 1926. The school has since implemented numerous innovations to improve the quality of education, including early clinical exposure; integrated courses; diverse electives and research opportunities; and rural, urban and global patient care, public health and community service experiences.

Over the past decade, the SMPH has become a visionary leader in academic medicine by fully integrating medicine and public health (see *Quarterly*, volume 18, number 2). To best meet societal needs and address health care access in underserved settings, we created the Wisconsin Academy for Rural Medicine (WARM) and the Training in Urban Medicine and Public Health (TRIUMPH) Program with statewide partners; established the interprofessional Master of Public Health (MPH) Program, dual MD-MPH and Master of Physician Assistant Studies (MPAS)-MPH degrees; started a Preventive Medicine Residency; and built robust recruitment programs to attract students who are passionate about improving health in underserved communities.



This graphic illustrates the ForWard Curriculum. For details, see med.wisc.edu/forward

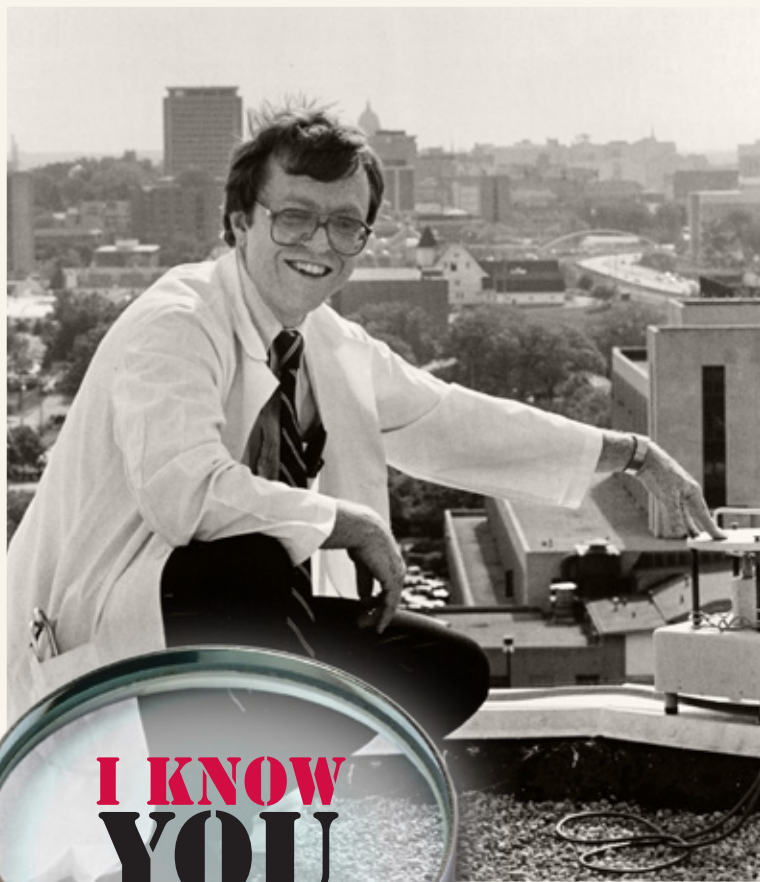
In August 2016, we launched the ForWard Curriculum (see image above and *Quarterly*, volume 17, number 4), which aligns with a national emphasis on clinical and basic science integration, interprofessional education, public and population health, and health care delivery improvements. Curriculum redesign—in this era of unparalleled technology and scientific advances, health system changes, and patient and community needs—required tremendous energy and expertise from hundreds of individuals. I appreciate their tenacity and the unwavering support of UW-Madison leaders, statewide partners and alumni as we strive to make our great school even better.

I am thrilled to serve our school during this exciting continuous quality improvement journey. I am grateful for the many opportunities I had as a student at the SMPH, where I learned from nationally recognized scientists, academic medicine leaders and expert clinician-teachers across Wisconsin, and participated in meaningful basic science research and community service. Thanks to the ongoing generosity and support from many of you, our SMPH health professions students will continue to enjoy opportunities like these to ensure their future success.

Elizabeth M. Petty, MD '86
Senior Associate Dean for
Academic Affairs, University
of Wisconsin School of
Medicine and Public Health

* References appear in the
online version of this column
at med.wisc.edu/49240.





... OR DO I?

If you think you can identify the person in the photograph at left, 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 *Quarterly*.

For the last issue (see below), Wayne Kubal, MD '78, won the prize drawing and will receive a gift from the Wisconsin Medical Alumni Association!

HINT: This physician-researcher's work included frequent visits to the Clinical Science Center roof.

For the last issue of *Quarterly*, 15 people correctly guessed the identity of Charles Mistretta, PhD, professor of medical physics and radiology, University of Wisconsin School of Medicine and Public Health (SMPH), with an affiliate appointment in biomedical engineering. He is world-renown for development of imaging instrumentation and techniques that have transformed the diagnosis and treatment of vascular diseases.

Wayne Kubal, MD '78, noted, "I worked in Dr. Mistretta's lab as a medical student. Those were exciting times as digital subtraction angiography was being invented. I continued my relationship with Dr. Mistretta during my radiology residency at UW Hospital and Clinics."

Sally M. Schlise, MD '76, recalled, "He was my medical school graduation ceremony escort in 1976."

John Floberg, MD, PhD '14, identified Mistretta as one of his mentors, pictured with "one of his inventions, digital subtraction angiography."

Rob Stanley, MD '77, wrote, "Chuck Mistretta came to UW-Madison . . . from Harvard, where, if I remember correctly, he measured the mass of the Pi Meson. He was a great teacher and an even better guy. He has turned out to be one of our greatest medical scientists, and we have had many!" (According to Mistretta, he measured the *radius* of the Pi Meson.)

Kurt Reed, MD '80, shared, "I had many fine professors at UW-Madison over the years, but Dr. Mistretta remains at the top of the list. He is inspirational not only as a brilliant professor but as a genuinely nice person."



We Want to Hear From You

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

Have you moved? Please send us your new address.

CONTACT INFORMATION:

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

OR online at med.wisc.edu/874

OR e-mail quarterly@med.wisc.edu



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

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

MS-45433-16

Your legacy. Their future.

Including the University of Wisconsin School of Medicine and Public Health (SMPH) in your estate plans is an investment in the future. For our students. For our school. For our university. For the world.

Establishing a Legacy

To learn more about your charitable options, without obligation, please contact Jill Watson, the SMPH's philanthropic partner at the University of Wisconsin Foundation, at (608) 262-4632 or jill.watson@supportuw.org



School of Medicine
and Public Health

UNIVERSITY OF WISCONSIN-MADISON



Aly Gonzalez and her great grandmother, Kathe Budzak, MD '69