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Quarterly



SMPH ORCHESTRA p. 8

CARBONE CANCER CENTER p. 10

School of Medicine and Public Health

JNIVERSITY OF WISCONSIN-MADISON

QUARTERLY

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

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APRIL 2019

Wednesday, April 17

Alpha Omega Alpha (AOA) de Harter Visiting Professor

AOA Banquet and Induction Ceremony Health Sciences Learning Center

MAY 2019

Friday, May 10

UW-Madison Commencement

Thursday, May 30, and Friday, May 31

Spring Alumni Weekend

Class Reunions for the Classes of 1954, '59, '64, '69, and the Half-Century Society for all

alumni who graduated before 1969

AUGUST 2019

Friday, August 23

SMPH White Coat Ceremony Memorial Union, Shannon Hall

Wednesday, August 28

M1 Stethoscope Presentation and Badger Cookout

Health Sciences Learning Center

SEPTEMBER 2019

Friday, September 13

Middleton Society Dinner Memorial Union, Great Hall

OCTOBER 2019

Friday, October 11,

Fall WMAA Board Meeting

and Saturday, October 12 Homecoming and Fall Reunion Weekend

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CONTENTS

QUARTERLY • VOLUME 21 • NUMBER 1





Diversity Summit

The second-annual event explores the impact of gender, race and class on academic medicine.



SMPH Orchestra

Faculty, staff, students and alumni share their talent in this new musical group.



Carbone Cancer Center

Having earned a rating of "outstanding" by the National Cancer Institute, the center celebrates successes as it looks toward a bright future.

Campus Scene (above)

An inflated Statue of Liberty replica returned to frozen Lake Mendota near the Memorial Union during the Hoofers' Winter Carnival in February 2019. Its periodic return honors a 1979 prank by candidates of the Pail and Shovel Party. --- Photo by Jeff Miller, UW-Madison

On the Cover

Melissa Metoxen (left) and Jennifer Edgoose, MD, MPH, of the SMPH, are among five UW-Madison faculty and staff members to earn 2019 Outstanding Women of Color Awards (see page 7).

—Photo by Andy Manis

- **14** Alumni Notebook
- **22** Goodbye Dear Friend
- 23 Student Life
- **26** Alumni Profile
- **30** Spotlight
- **32** Connections
- Faculty Profile
- **36** Healer's Journey
- **38** Research Advances
- **40** Perspectives

ROBERT N. GOLDEN. MD



t may be tempting for a high-performing organization to rest on its laurels, rather than pushing forward toward an even more ambitious vision of excellence. The faculty, staff and students at the University of Wisconsin School of Medicine and Public Health (SMPH) are immune to this malady; "coasting" is not in our vocabulary. For example, as you will read in the feature story, the UW Carbone Cancer Centera shining jewel in Wisconsin's crown is achieving even greater levels of excellence under the leadership of Dr. Howard Bailey. We applaud the hard work of the faculty and staff who have made Wisconsin's only National Cancer Institute (NCI)-designated comprehensive cancer center into one of the most respected rising stars in the small club of NCI-designated programs.

To achieve our full potential as a national leader, we must focus on expanding the diversity of our faculty, learners and staff. Under the leadership of Dr. Brian Gittens, we have launched several innovative programs in this area, including the successful Diversity Summit, described in a

feature story. The Ladder, another innovation described on page 32, is a pre-college pipeline program designed to increase diversity among future generations of health care professionals.

Dr. Jasmine Zapata, highlighted in the Alumni Profile, brings enormous energy to the sphere. A distinguished young alumna who joined our school's faculty in 2018, she focuses on improving the health of minority populations through the integration of pediatrics, preventive medicine, public health and community empowerment.

Speaking of energy, it is vitally important to provide adequate fuel for the engines of progress in each of our missions. Dr. Diane Heatley, a professor of surgery and the chief medical officer of the American Family Children's Hospital, uses her artistic talents to raise philanthropic funds for the SMPH and American Family Children's Hospital. Her recent Bucky on Parade project, "Blooming Bucky," embraces the spirit of giving back. Read the Healer's Journey article for details.

We also highlight the dedication of several Los Angeles-area alumni who

host gatherings to boost Badger pride and encourage support for the SMPH. The recent Madison in Medicine event in Los Angeles, hosted by Drs. Warren and Linda Procci, with Dr. E. Richard Stiehm as a keynote, accomplished all of that and more.

The future has never looked brighter for this hallowed institution. As Dr. Jacque Galipeau describes in his Perspectives essay, personalized cellular therapy—once considered a futuristic dream—is happening here and now. Under his guidance, the SMPH is playing a leadership role in developing this game-changing field. On a similar note, Dr. Elizabeth Burnside, highlighted in our Faculty Profile, is shaping the future of radiologic screening and diagnosis of breast cancer. She also plays a key role in our Institute for Clinical and Translational Research's administration.

As I reflect on these exciting advancements in translational research, health care and population health, my thoughts focus on the remarkable encouragement and support we receive from our alumni, donors and friends. It is music to my ears to receive your feedback. A rather different genre of music—the symphonic sounds of the new SMPH Orchestra—is now being shared with countless ears.

Please come visit your alma mater and accept my personal invitation for an individualized tour of your school of medicine and public health. If the timing works, perhaps we can include tickets to an SMPH Orchestra performance!

On Wisconsin!

Robert N. Golden, MD

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

KAREN S. PETERSON

reetings medical alumni and friends!
Your Wisconsin Medical Alumni
Association (WMAA) has been busy orchestrating many fun opportunities for you to engage with fellow alumni and medical students this spring, summer and fall.

We find it bittersweet as we prepare to say goodbye to the University of Wisconsin School of Medicine and Public Health's (SMPH) talented fourth-year medical students, but we share their excitement about the next chapters of their lives. As always, the thrilling Match Day included a WMAA reception for these students, along with their families and friends. Anticipation is building as we approach commencement! To celebrate and welcome the graduates to the WMAA, we'll host a reception and give a keepsake to each of them.

Our team also is looking forward to spring reunions on Alumni Weekend, May 30 and 31, 2019. See pages 16 and 17 for updates from class representatives for the Classes of 1954, '59, '64 and '69, and the Half-Century Society, who are helping us plan festivities. The Half-Century Society is for all MD alumni who graduated 50 or more years ago. Rather than wait to gather every five years, we hope anyone who graduated before 1969 will accept our invitation to attend Alumni Weekend each spring.

Further, all alumni are welcome at the Alumni Weekend kick-off event, a Mini Med School titled, "Life in Balance: Preventing Falls," and led by SMPH faculty experts. It will be held on Thursday, May 30, 2019, from 6:30 to 8:00 pm, in the Health Sciences Learning Center.

Spring in Madison is sure to be beautiful for Alumni Weekend events, which will include a trolley tour of campus, tour of the anatomy lab, Dean Robert N. Golden's reception, class dinners, and opportunities to meet with student leaders and recipients of scholarships and stethoscopes.

If you are interested in sponsoring a stethoscope for a medical student who will enter the SMPH in August, please visit

med.wisc.edu/alumni/make-a-gift/ and scroll down to the section about the Stethoscope Program.

As we look toward fall, we hope members of the Classes of 1974, '79, '84, '89, '94, '99, 2004, '09 and '14 are getting ready! We'll host these class reunions on Homecoming Weekend, October 11 and 12, 2019. Watch your e-mail for details.

Finally, I share heartfelt thanks to everyone who has supported the SMPH and WMAA throughout the year. Your generous donations of time, money and expertise—the lifeblood of our organization—have helped us achieve many goals. We send our sincere gratitude to all, including those who:

- joined our Student Alumni Partnership Program, through which you shared your wisdom to help guide medical students' career choices and/or hosted fourth-year medical students during residency interviews;
- sponsored the meaningful gift of a stethoscope for an incoming medical student;
- hosted an event in your community to help us engage recent graduates and reconnect with seasoned alumni;
- served as class leaders and initiated new class funds to support student scholarships; and
- bolstered the SMPH and WMAA's important initiatives through financial contributions, including donations to the Middleton Society, which welcomed more than 600 new members in 2018.

To learn more about the programs and events I have mentioned, please visit the WMAA Web site (med.wisc.edu/alumni) or check out our Facebook page. You're also welcome to send us an e-mail at WMAA@wisc.edu or call our office at (608) 263-4915. We always love to hear from you!

Karen S. Peterson

Executive Director,
Wisconsin Medical Alumni Association



Diversity Summit

A CALL TO ACTION FOR ACADEMIC MEDICINE AND BEYOND

onversations buzzed throughout the second-annual Diversity Summit hosted by the University of Wisconsin School of Medicine and Public Health (SMPH) in January 2019. More than 600 attendees filled the largest hall in the Health Sciences Learning Center and prompted the need for an overflow room.

Welcoming the guests, Brian E. Gittens, EdD, the associate dean who launched this program, emphasized the event's inclusive nature by saying, "Who is this Diversity Summit for, and about? Look to your left; look to your right. It's for all of us."

Dean Robert N. Golden, MD, described ongoing efforts aimed at increasing equity, diversity and inclusion at the SMPH, throughout medicine and public health, and across Wisconsin and beyond. He emphasized that there is much more terrain to cover, but that it's valuable to laud the breadth and strength of ongoing endeavors. These include teaching, research and service initiatives of the Collaborative Center for Health Equity; community and career development work by the Native American Center for Health Professions



Beverly Hutcherson (left) and Andrea Nino de Guzman Ramirez converse.

(NACHP); health equity grant programs of the Wisconsin Partnership Program; the public health emphasis of the ForWard Curriculum; a new outreach program, The Ladder, which encourages diverse K-12 students to explore medical fields (see page 32); and the schoolwide Building Community climate initiative for faculty, staff and learners.

"We should acknowledge our progress while continuing to do the hard work of looking within and identifying opportunities to accelerate our movement toward our ultimate vision," noted Golden.

Celebrating Health Equity Leaders

To recognize accomplishments of SMPH faculty and staff who have dedicated themselves to eliminating health disparities, school leaders honored three individuals and one organization with 2019 SMPH Diversity Awards. They are Nnenna Ezeh, Fabu Carter, Bret Benally Thompson, MD, and the NACHP.

Ezeh, a third-year medical student in the Training in Urban Medicine and Public Health program, received the 2019 Diversity Student Award. She coordinated the student-run MEDiC Clinic for underserved pediatric patients and their families and served as co-president of the Student National Medical Association. She is a member of the SMPH Health Equity Task Force and the Class of 2020 equity and diversity representative of the Medical Student Association. She also conducts research on the effects of smoking on patients with lupus and is working on a project to assess the impact of community health workers in Milwaukee.

Carter, an outreach specialist in the Department of Medicine and the Alzheimer's Disease Research Center (ADRC), received the 2019 Diversity Award for a staff





Brian E. Gittens, EdD, who organized the first- and second-annual Diversity Summits.

member. She recruits African Americans into the ADRC Clinical Core and volunteers in the SMPH Diversity and Inclusion Advocate Program. In 2016, she was honored as a UW-Madison Outstanding Woman of Color. A scholar of African American literature and past poet laureate of the City of Madison, she has published poetry books and won an Outstanding Achievement in Poetry Award from the Wisconsin Library Association. She also volunteers in local nursing homes leading the Alzheimer's Poetry Project.

Benally Thompson is a clinical assistant professor in the Department of Medicine's Division of Hematology, Medical Oncology and Palliative Care, and the Department of Family Medicine and Community Health. He received the 2019 Diversity Award for a faculty member. Benally Thompson is the medical director at UnityPoint Health-Meriter Hospital and is active in several organizations dedicated to improving and advancing health in Native American students and communities. This includes his membership in the American Indian Science and Engineering Society—for which he serves on the Elders Council—and the American Indian Cancer Foundation.

Benally Thompson also serves on the advisory council of the NACHP, which received the 2019 Diversity Organizational Award. The NACHP connects UW-Madison with Wisconsin's tribal governments and urban Native communities (see *Quarterly*, Volume 20, Number 4, 2018). It hosts an annual lecture series by an indigenous health care provider, focuses on improving the health and wellness of American Indian people and supports the career development of Native American clinicians.

Sharing a Sobering Message

The evening's highlight was the keynote lecture, "The Impact of the Intersectionality of Gender, Race and Class on Academic Medicine," by Denise Rodgers, MD, vice chancellor for interprofessional programs at Rutgers Biomedical and Health Sciences. She is the Hunterdon Chair in Interprofessional Education at Rutgers Robert Woods Johnson Medical School, where she is a professor in the Department of Family Medicine and Community Health.

"Dr. Rodgers has spent her career working with poor, minority and disadvantaged patients and their communities ... and led a nationwide pact of family medicine educators who promised not to teach about health disparities anymore without talking about the impact of racism as a critical social determinant of health," commented Jennifer Edgoose, MD, MPH, associate professor (CHS), SMPH Department of Family Medicine and Community Health.

Rodgers discussed a widely publicized 2017 research article in which analysts from the National Institutes of Health (Shiels, MS, et al.) identified demographic patterns in premature mortality, dubbed "deaths of despair" due to drug poisonings, suicide, and alcohol-related chronic liver disease and cirrhosis. Media coverage fixated on a rise in premature mortality among white individuals between 1999 and 2014, but largely omitted that premature mortality also increased for American Indians and Alaska Natives.

"In fact, during the 2011 to 2014 period, American Indians and Alaska natives had the highest mortality in the United States, followed by blacks," said Rodgers.

She reviewed U.S. data on health outcomes that show profound discrepancies by race, gender and income. These factors are tightly interconnected, she explained. The statistics hit hard, and they start at birth—the infant mortality rate for African Americans in Wisconsin is the highest in the nation—and continue through adolescence.

"Life expectancy for American Indian adolescents is eight years less than for Asian females and 10 years less for males," she noted, adding that, through adulthood, "African Americans have the lowest life expectancy by race in the United States, and in Wisconsin, American Indians are lowest, followed closely by African Americans."

Data also indicate that gender and race intersect in discouraging ways. For example, bearing a child in the United States carries a higher mortality risk than any other developed nation, with 1,200 fatal complications and more than 600,000 near-fatal complications of pregnancy each year, with racial and ethnic gaps evident.

While showing a graph of rising maternal mortality since 1990, she shared, "I don't think there are any of us in health care or public health who can look at this graph and feel good about what we're doing."

Next, Rodgers showed a closer, even more troubling look at infant mortality.

"The greatest disparity in infant mortality by race is between college-educated black women and college-educated white woman. An African American woman with an advanced degree has an infant mortality rate that's higher than the rate for a white woman with an 8th-grade education," she said. "Education and income are somewhat protective, but clearly not enough."

It's essential to identify what is happening, as well as why it's occurring.

"What are some causes of these disparities? We cannot begin to have that conversation without talking about social determinants of health," noted Rodgers.

Chief among these determinants is poverty, which—in the United States—is tightly linked to race. Socioeconomic class is the driving factor underlying many, if not most, health inequities, she explained.

"If we look at family wealth by race and ethnicity, we see that Latino and African Americans are more likely to be poor compared to their white counterparts," said Rodgers.

Moreover, when comparing life expectancy of the bottom 10th percentile and top 10th percentile of earners, there is a marked discrepancy: a nine-year gap for men, and an eight-year gap for women. Rodgers reviewed recent work on the pathophysiology of toxic stress that is sparked by chronic poverty.

"Poverty itself is an adverse childhood experience," she said, noting that living in a society with high levels of structural racism is linked to poorer health outcomes, as well.

For an overview of institutionalized, personally mediated and internalized components of racial climate, Rodgers recommended a framework described in the article "Levels of Racism: A Theoretic Framework and a Gardener's Tale," published in the *American Journal of Public Health* in 2000 by Camara Phyllis Jones, MD, MPH, PhD.

The essential question for society, said Rodgers, is exemplified in a quote by the Rev. Dr. Martin Luther King, Jr., just days before his death: "There is nothing new about poverty. What is new is that we now have the techniques and the resources to get rid of poverty. The question is whether we will."

Rodgers issued a call to action for health care providers to tackle these issues.

"We must raise our voices in saying that this is not just a high moral theoretical thing, but this is a thing—poverty—that affects health. And we must do something about it," she urged, sparking a standing ovation.

Conceptualizing Change

Panel discussions evoked heartfelt dialogue. While the magnitude of health inequities weighed heavily on the clinicians, researchers and educators, the atmosphere was filled with hope and determination.

Panelist Chris Stillwell, director of Student Services, summarized his thoughts: "One reason I'm up here is that I'm driven by the idea that ending oppression is not the responsibility of the oppressed. ... There need to be people who [have the mantle of privilege] and who show up. When you do, the first thing you should do is listen. That goes doubly so for those of us who have a lot of privileged identities."



M2 Ninah Divine (left) and Jasmine Zapata, MD '13, MPH '17 (PG '16, '18), fielded questions in a panel discussion.

He concluded, "Once you've listened, partner and do something concrete. If you come to this summit next year and haven't done something concrete, I will feel like my words haven't hit strongly enough."



There's more online! See med.wisc.edu/ diversitysummit-2019

Honoring Outstanding Women of Color

Melissa Metoxen and Jennifer Edgoose, MD, MPH, of the University of Wisconsin School of Medicine and Public Health (SMPH), are among five faculty and staff members to earn the UW-Madison Outstanding Women of Color Award in March 2019. The annual tradition honors women of color among faculty, staff and students who are deeply rooted in the UW-Madison and Madison communities through their work in one or more of the following areas:

- social justice, activism and advocacy on behalf of disadvantaged, marginalized populations;
- community service;
- scholarly research, writing, speaking and/ or teaching on race, ethnicity and indignity in U.S. society; and/or
- community building to create an inclusive and respectful environment for all.

Metoxen (left in photo) is the coordinator for the Native American Center for Health Professions (NACHP). She is recognized for her committed efforts to forge lasting and mutually respectful relationships between UW-Madison and Native American nations, particularly the Oneida Nation and Ho-Chunk Nation; her role in "growing" the NACHP and transitioning it from a program within the Collaborative Center for Health Equity to an independent center within the SMPH; her success in helping increase applications of Native American students by more than 250 percent—a figure especially notable in this historically underrepresented community in medicine; and her careful negotiation of formal agreements that provide for clinic rotations and other community engagement opportunities within tribal health facilities. Her involvement in working with partners to enhance knowledge in areas ranging from food sovereignty to Alzheimer's disease research is remarkable.

Edgoose (right) is an associate professor (CHS) in the Department of Family Medicine and Community Health (DFMCH). Her efforts over nearly 20 years have created a definition of "continuity of care" that reaches far beyond clinic walls to address food insecurity,



educational outcomes, housing issues and neighborhood perceptions of safety. This includes her strong collaborations with educators, firefighters, county public health workers, fellow physicians and policy makers; her infusion of social justice principles into a robust curriculum on community and population health; her success in promulgating this curriculum nationally; her contributions shaping the DFMCH's action plan; and her devoted mentorship and commitment to open doors, support the career success of fellow people of color, and create a more inclusive and representative health care workforce.

Q

Mixing Music and Medical Careers

NEW SMPH ORCHESTRA STRIKES A CHORD



hether looking to ancient philosophers, such as Confucius—"Music produces a kind of pleasure which human nature cannot do without"—or contemporary artists like Elton John—"Music has healing power. It has the ability to take people out of themselves for a few hours"—the overarching message rings true: Music is good for the soul.

Recognizing that music's calming effect can help counter the stress that sometimes accompanies medical training and practice, in fall 2018, fourth-year medical student Joohee Son started recruiting orchestral instrument-playing students, alumni, faculty and staff of the University of Wisconsin School of Medicine and Public Health (SMPH). Receiving ample interest, she founded the SMPH Orchestra.

The musicians rehearsed throughout the fall semester and performed their inaugural concert in December 2018 at UW-Madison's Mills Concert Hall. Conducted by Michael Dolan and Jenny Yim from the UW School of Music, the performance featured classical pieces by Dvorak, Sibelius and Schubert.

Noting that the 40-member orchestra is now preparing for its second concert in spring 2019, Son says, "It has been an amazing experience working with the talented musicians at the SMPH. We hope to continue to create wonderful music and

share it with the community, including families and patients in the hospital. I hope that we also can continue to foster a supportive musical community and space for musicians to get to know each other."

The orchestra's founding faculty sponsor, Elizabeth Petty, MD '86 (PG '89), senior associate dean for academic affairs, notes, "I'm thrilled that the orchestra has been established, and I am grateful for Joohee Son's passionate leadership and the school's support. Music builds collaborative skills, promotes wellness, stimulates creativity and provokes thought. It stirs our souls. As such, the orchestra is a perfect addition to our community."

8 VOLUME 21 • NUMBER 1















Opposite page: The SMPH Orchestra's first concert, December 2, 2018, at Mills Concert Hall, UW-Madison.

This page: Top row (left to right): M2 Beth Klein, M2 Katy Jiang; M4 Joohee Son. Second row: Michael Dolan; Anne Marie Singh, MD (PG '09), Susan Killips. Third row: Sarah Whitt, M3/Grad 3 Jack Hunt; Nina Piazza, MD. Bottom row: (back row; bottom to top in frame) Didier Mandelbrot, MD, Suzanne van Landingham, MD, Ed Harris, Susan Killips; (front row, bottom to top) Rong Mao, M3/Grad 3 Anna Heffron, Judian Smith MD '82, Anne Marie Singh, MD (PG '09).



Carbone Cancer Center

BUILDING ON A STRONG FOUNDATION, LOOKING TOWARD A BRIGHT FUTURE

sk nearly anyone at the University of Wisconsin Carbone Cancer Center about its director, Howard Bailey, MD (PG '91), and you likely will hear about his good ol' midwestern modesty. A North Dakota native, Bailey was raised and educated in his home state through medical school prior to his residency in Michigan and eventual move to Wisconsin for post-graduate work. He has not forgotten his roots, even as he has risen to lead one of the top cancer research centers in the United States. He prefers to shine the spotlight on others rather than having accolades directed toward him.

However, when you talk to Bailey about UW Carbone as an institution, he can't conceal his pride. It is Wisconsin's only National Cancer Institute (NCI)-designated comprehensive cancer center. Nationwide, only six cancer centers—including UW Carbone—can claim the high honor of being among the first group, in 1973, to receive that designation by the NCI. And, while few of these centers have had Nobel Prizewinning work conducted at their institutions, UW Carbone is proud that Howard M.

Temin, PhD, received the Nobel Prize in Physiology or Medicine in 1975, along with two researchers from other universities.

Bailey, who became UW Carbone's director in 2015 after serving on its faculty and as the interim director, is well prepared for his role. He recognizes the center's strengths from before his tenure as director, and he gives credit where credit is due. He draws upon strengths to elevate UW Carbone in its national prominence, including acceptance into elite networks. And, in 2017, during UW Carbone's five-year "checkup" required by the NCI to continue as a comprehensive cancer center, Bailey led the program to its largest rating increase to date.

Specifically, the center passed its re-application renewal with flying colors, retaining its status as Wisconsin's only NCI-designated comprehensive cancer center and extending a \$5 million per year grant for core funding over the next five years.

About the first such renewal process under Bailey's leadership, he characteristically downplays his role in the successful score and states, "Many people worked long and hard to achieve it."

UW School of Medicine and Public Health (SMPH) Dean Robert N. Golden, MD, notes, "Under Dr. Bailey's leadership, UW Carbone has dramatically accelerated its progression to national prominence. The rigorous peer-review process confirmed the center's growing recognition as a rising star in the very selective galaxy of NCI-designated comprehensive cancer centers."

With pride, Bailey shares, "We strongly believe in the value of what we do and what we bring to our patients, to our communities and to Wisconsin. It's always helpful to have established leaders from other well-known cancer centers review us and give their unbiased view of what we are accomplishing."

He continues, "We were unanimously voted as 'outstanding.' Only a few centers in the nation receive that score or better."

In general, Bailey believes UW Carbone always has had the potential for this rating.

"We consistently have had great faculty researchers and staff," he says. "What we've done is get them more involved by having them determine what the Carbone Cancer Center is and help run it."

-continued on next page



With nods to the past and boosted by recent success, Bailey is leading UW Carbone to even loftier goals: increasing patients' access to groundbreaking clinical trials; fostering stronger connections with communities in addition to Madison to improve health outcomes throughout Wisconsin and beyond; and advancing research in strategic areas, such as cancer biomarkers, imaging and immunotherapy.

Celebrating Decades of Leadership in Cancer Research and Care

Prior to Bailey coming to the SMPH and UW Carbone for a medical oncology fellowship and research fellowship, respectively, and joining the school's faculty in 1994, cancer research at UW-Madison was already making a name for itself. In 1940, Harold Rusch, MD '33, formed the McArdle Laboratory for Cancer Research and established the nation's first cancer research department, the SMPH Department of Oncology.



Harold Rusch, MD '33

Rusch served as McArdle's inaugural director until 1972, when he turned his attention to developing the UW Clinical Cancer Center, which subsequently was renamed the UW Comprehensive Cancer Center and, in 2006, the UW Carbone Cancer Center to honor its second director, Paul P. Carbone, MD.

"After President Richard Nixon announced the National Cancer Act of 1971, Dr. Rusch



Paul P. Carbone, MD

was appointed to the president's national cancer panel," recalls Bailey, who is the Andy and Susan North Professor of Cancer Research. "The panel convinced President Nixon that the government needed to put more money into cancer research, and one of the things they convinced him of was making these comprehensive cancer centers."

UW Carbone's focus on clinical research and treatments complements McArdle's laboratory research. Over the decades, physician-scientists at UW-Madison have collaborated on numerous groundbreaking oncology-related investigations and made huge strides in patients' health outcomes.

In the 1960s, for example, SMPH Professor Fritz Bach, MD, was a pioneer in bone marrow transplantation, a technique still used today to treat a variety of diseases, from cancer to immunodeficiency syndromes. Paul Sondel, MD, PhD '75 (PG '80)—now a professor and research director of the Division of Pediatric Hematology, Oncology and Bone Marrow Transplant in the SMPH Department of Pediatrics—recalls how working in Bach's lab as an undergraduate propelled him into his physician-scientist career working on neuroblastoma immunotherapy.

"At that time, a lot was being written about early mouse experiments from a variety of labs, indicating that the same immune system that could reject an organ transplant might be able to be trained to reject cancer," says Sondel, who has dedicated his four-decade research and

patient care career in this field at UW Carbone and the American Family Children's Hospital. "When President Nixon declared the War on Cancer, it was clear to me that I should delve into analyzing whether the immune system could recognize cancers."

Fast forward to the 2000s, and Sondel's work has resulted in a U.S. Food and Drug Administration-approved immunotherapy for relapsed or refractory pediatric neuroblastoma. The therapy increases survival rates from 25 to 50 percent.

"We are pleased that this immunotherapy regimen has become the standard of care in the United States for children with high-risk neuroblastoma," exclaims Sondel. "We are investigating the use of personalized medicine to identify individuals with certain genes that might make them most likely to benefit from this treatment."

Another UW-Madison researcher, V. Craig Jordan, PhD, began pioneering treatments for estrogen receptor-positive breast cancers long before Bailey's time as UW Carbone director. Now a professor at the MD Anderson Cancer Center in Houston, Jordan created a strong foundation for current physician-scientists' work at UW-Madison.

Among them is Ruth O'Regan, MD, chief of the Division of Hematology, Oncology and Palliative Care in the SMPH Department of Medicine and associate director of clinical research at UW Carbone, who worked with Jordan at Northwestern University.

"Earlier in my career, I was involved in studying resistance to endocrine therapy in breast cancer," she says.

"At UW-Madison in the 1990s, Dr. Jordan was responsible for developing tamoxifen as a breast cancer drug," recalls O'Regan, whose internationally recognized research aims to continue identifying mechanisms of resistance to breast cancer therapies and developing innovative treatments.

Leading the "Outstanding" Center Forward

As cancer research has progressed throughout the United States, UW Carbone remains one of 70 NCI-designated cancer centers, but it does not rest on its reputation as one of the originals. Case in point, in

2016, UW Carbone was accepted into the elite National Comprehensive Cancer Network, a not-for-profit alliance of 28 of the world's leading cancer centers; that network writes the standards for cancer care nationally and, increasingly, globally.

In preparation for the 2017 NCI review, when leaders from that agency and other NCI-designated cancer centers evaluated dozens of aspects of UW Carbone, Bailey and colleagues paid particular attention to reviewers' areas of focus: the amount of external funding the center receives, the impact of its research and the number of patients who benefit through clinical trials.

Results show many measures of success, including UW Carbone's robust partnerships with local philanthropists—including the Andy North and Friends golf and trivia events and the Garding Against Cancer events—which have boosted fundraising. These efforts help fund early-stage, high-risk

study protocols, obtaining human subjects approval, negotiating budgets with industry sponsors and caring for patients in their trials, according to Sarah Stewart, assistant director of clinical research at UW Carbone.

"Because patient care takes priority, under the old model, getting a new study up and running would sometimes be put on hold," she explains. "Industry partners prefer sites that can open trials quickly and produce results, and we were not always getting access for patients to trials we would have liked to open."

Bailey and Peter Connor, UW Carbone associate director of administration, worked with clinical research teams to determine how best to meet needs and accomplish goals more efficiently than in the past.

"We encouraged clinical researchers and gave them autonomy to make the necessary changes," says Connor, adding that successful results led to centralizing all



Helping patients return to health is at the heart of the UW Carbone Cancer Center's mission.

are decreasing—important metrics that mean we're getting patients on study as quickly as possible—are due to the centralized structure he created."

Beyond this, Bailey points to other improvements that were underway before he became director that helped buoy the center's success. An example is the construction of the Wisconsin Institutes for Medical Research, an innovative complex that brought together several cancer-focused groups—among them the Department of Human Oncology, McArdle Laboratory and the Department of Medicine's Division of Hematology and Oncology. This collaborative hub on the west end of UW-Madison is attached to the Health Sciences Learning Center—home to the SMPH—and the Clinical Science Center, which houses UW Hospital and UW Carbone.



While celebrating the successful core grant renewal, Bailey, Connor and other colleagues are taking steps to further elevate the center's reputation. They have structured the UW Carbone Strategic Plan around four key initiatives:

- further boosting of priority research areas;
- improving research facilities and infrastructure;
- increasing philanthropic funding; and
- expanding and nurturing community health partnerships.

TRIVIA NIGHT

Displaying their plaque, winners of the 2019 Trivia Night with Andy North celebrate.

research, which increases researchers' success in obtaining federal grants.

Further, since Bailey became director, the number of patients enrolled in clinical trials at UW Carbone has doubled. This corrected a local and national trend of declining clinical trial enrollment for the prior five to 10 years.

Looking into reasons for the local trend, the center's leaders discovered that each disease group had been run like an individual small business, meaning that each group was responsible for writing all aspects of clinical research.

Today, disease-specific research teams focus on enrolling and caring for patients on trials, while a fiscal team works on all budgets, a regulatory team obtains human subjects approvals, and dedicated coordinators propel studies through other steps of activation. Enrollment is the highest since 2009 and just over the 2012 level.

"Dr. Bailey deserves all the credit," Stewart states. "The reason our accrual is increasing and our time-to-trial activations

-continued on page 29

Madison in Medicine

LOS ANGELES-AREA ALUMNI UNITE



Jill Watson of the UW Foundation and Alumni Association (standing) introduces the guest speaker, E. Richard Stiehm, MD '57.

n advantage in southern
California is that even November
events can be garden parties.
Such was the case for the fall 2018
"Madison in Medicine" event organized
by the Los Angeles (LA) Badger Women,
a committee of the Wisconsin Alumni
Association: Los Angeles Chapter.

Aiming to boost Badger pride among University of Wisconsin-Madison and UW School of Medicine and Public Health (SMPH) alumni, Warren Procci, MD '72 (PG '74), PhD, and Linda Procci, MS '74, PhD, hosted the event at their vintage home in Pasadena. E. Richard Stiehm, MD '57, shared with the 55 guests his penchant for UW-Madison history.

"Everyone enjoyed the Sunday afternoon event—the beautiful setting, great conversation, delicious food and Dr. Stiehm's presentation," says John Mills, president, Wisconsin Alumni Association: Los Angeles Chapter.

Using a game format, Stiehm challenged participants to match the names of 13 people at UW-Madison who have made a major impact in medicine, with their contributions and related sites.

Sharing an example of Karl Paul Link, PhD '25, who discovered the anticoagulant warfarin, which led to a patent at the Wisconsin Alumni Research Foundation, Stiehm notes, "A perfect score was 26, and David Ward, UW-Madison's former chancellor, won!"

Madison in Medicine is the second event of this nature that Linda Procci and her husband, a psychiatrist, have hosted. The first was Madison in the Movies, featuring LA-area professionals in the movie industry, a year earlier.

Having retired after 17 years as vice president of service line operations at Cedars Sinai Medical Center in LA, Linda Procci capitalizes on her newfound time and the organizational skills she honed in numerous health care leadership roles

VOLUME 21 • NUMBER 1



Clockwise from left (left to right): E. Richard Stiehm, MD '57, Jeff Wendorf, Warren Procci, MD '72 (PG '74), PhD, Linda Procci, MS '74, PhD; George Johnson, Susan Mills; Anne Marx, Jeff Wendorf; Joy Picus, Gerald Picus; Linda Procci, Natalie Kustner, Mary Beth Gaik.

to support UW-Madison outreach and fundraising efforts. She serves on the UW Foundation and Alumni Association Board, the Dean's Advisory Board for the Wisconsin School of Business and the Board of Visitors for the UW School of Nursing.

Warren Procci earned his medical degree at the SMPH and completed a psychiatry residency at UW Hospital, and Linda Procci earned her bachelor's and master's degrees at the UW School of Nursing.

After she and her husband moved, in 1974, from Madison to California—where he pursued training in psychoanalysis and a fellowship at University of Southern California (USC) and, later, joined its faculty—Linda Procci completed a PhD in education at USC. She also became active with the Wisconsin Alumni Association: LA Chapter. The 2017 LA Badger of the

Year helped build the grassroots effort that has evolved into the LA Badger Women.

"This group started with a luncheon among six UW-Madison alumnae who agreed to meet regularly and network with others," says Linda Procci. "Not even two years later, we have 60 members, ranging from recent graduates to one who earned her degree in the early 1950s."

"Los Angeles is so large that each year we have a Founders Day event in April on the west side and the fall event on the east side," she says.

When planning the fall 2018 event, Sandra Damiani, MD '88, a member of the LA Badger Women and one of the 120 SMPH medical school graduates who live in LA County—volunteered to collaborate with Linda Procci. They anticipate continued success and appreciate the support of all members and guests who have become engaged in any way.









Know Your Class Representatives

Each University of Wisconsin School of Medicine and Public Health (SMPH) graduating class has one or more class representatives who play an integral role in working with the Wisconsin Medical Alumni Association (WMAA) to plan class reunions. Those featured here hope classmates will join them at their reunions in spring 2019.

Edward Pezanoski, MD '54

What type of practice are you in now, and where?

I spent my rotating internship, sponsored by the U.S. Air Force, at Madison General Hospital. I did my first year of obstetrics and



gynecology (OB-GYN) residency at Brooke Army Hospital in San Antonio, Texas, followed by assignments in OB-GYN departments at Air Force hospitals in Texas and California. I then completed my residency at Mercy Hospital and the University of California, San Diego, where I was appointed as an assistant clinical professor. I also was president of the Southwest OB-GYN Society. Although retired, I remain licensed in Wisconsin and California.

What's your fondest memory of medical school?

When Dean Middleton was planning a trip to Hawaii, urged by classmate Dr. Jack Lily, I placed a tray with a cocktail glass of pineapple juice on a gurney, wheeled it into the classroom and interrupted the lecture, when he expected it to be Derby Day. He raised the cherry into the air and placed it in his mouth. He presented the derby another day.

What are your hobbies/interests?

After my first wife, Lorraine, died, I married Joanne. She and I spend half the year in La Mesa, California, and the other half in Green Bay, Wisconsin. We travel a lot, including a recent cruise from Copenhagen

to Iceland, crossing the Arctic Circle. My interests include keeping up my CMEs, boating, fishing and visiting family in my hometown of Racine, Wisconsin. Together, Joanne and I have eight living children, 21 grandchildren and 14 great-grandchildren. I consider myself blessed.

What SMPH faculty do you remember the most, and why?

I most remember Dean Middleton, as well as Dr. Robert Burns, an orthopedic professor who brought humor to the classroom. I fondly remember many classes in Science Hall.

What are your plans for your reunion?

I look forward to meeting classmates, attending the social and educational events hosted by the WMAA, and seeing the changes at UW-Madison and in the city.

Message to your classmates?

There now are only 22 of us potentially available for the reunion. I believe we all would like to see what we look like in our maturity and share memories.

James Angevine, MD '59

What type of practice are you in now, and where?

I completed a rotating internship and three-year anatomic pathology residency at the University of Chicago and a two-year



clinical pathology residency at Fitzsimons

Army Hospital in Colorado. I was a staff anatomic pathologist at Tripler Army Hospital in Hawaii during the Cold War era and Vietnam War. I was an assistant professor at Marquette University Medical Center, Milwaukee, and later an SMPH clinical assistant professor. I practiced at St. Mary's Hospital in Madison, and I now am retired.

What's your fondest memory of medical school?

My fondest memory is my preceptorship with Dr. Phillips Bland in Westby, Wisconsin. The night before my arrival, during a major snowstorm, Dr. Bland had made a house call by snowplow to see a patient who had an appendicitis. That spring, I delivered my first baby solo and performed an appendectomy with Dr. Bland as my first assistant.

What are your hobbies/interests?

I enjoy painting. My wife, Marilou Angevine, and I have a book and collectible business in Madison. Also, I'm a docent at the Wisconsin Veterans Museum and volunteer for a weekly drop-in art studio for patients and family members at the William S. Middleton Memorial Veterans Hospital in Madison.

What SMPH faculty do you remember the most, and why?

My father, Dr. D. Murray Angevine, was chair of the SMPH Department of Pathology when I was in medical school. Our family moved from Delaware to Madison after World War II, when he was offered the department chair position at the SMPH. My family established a scholarship award in his honor in the

Department of Pathology; it has evolved into additional summer fellowships for students.

What are your plans for your reunion?

I'm hoping to see as many classmates as possible, as we live all around the United States and our numbers are dwindling.

Kathryn Budzak, MD '69

What type of practice are you in now, and where?

Following a rotating internship at Madison General Hospital (now Meriter), I practiced in the emergency room at St. Mary's Hospital for



four years. Next, I practiced adult urgent care with Dean Clinic in Madison until I retired.

What's your fondest memory of medical school?

I treasure the close friendships and support of classmates, particularly the women in our class. At that time, women made up less than about 10 percent of the class.

What are your hobbies?

I love spending time with my husband, Archie Budzak, and our family. I also enjoy traveling, knitting, reading and doing craft projects. I take crafting classes at several venues in Door County, Wisconsin, where we live.

What SMPH faculty do you remember the most, and why?

Medical school was challenging in many ways, and Registrar Isabelle Peterson was someone who always was there for us and very helpful. I also remember Dean William Middleton, who would stand and bow when a woman came into his office. An unfortunate memory is when Dr. Helen Dickie said I didn't belong in medical school because I had a husband and two children.

What are your plans for your reunion?

We have a great class! I look forward to seeing as many classmates as possible. We can relive old memories and catch up on news. We'll have a wonderful time!

John "Jack" Woodford, MD '69

What type of practice are you in now, and where?

I did a neurosurgery residency at Dartmouth University in New Hampshire and a pediatric neurosurgery fellowship at the



University of Pittsburgh, where I served on the faculty for a year before moving to Madison. I practiced adult and pediatric neurosurgery at Dean Clinic and St. Mary's Hospital in Madison: I'm now retired.

What's your fondest memory of medical school?

Fortunately, we tend to forget struggles and remember the good parts of medical school. I look back and feel that it was all worthwhile.

What SMPH faculty do you remember the most, and why?

Dr. Robert Schilling was an impressive advisor and friend. We talked many times about residencies; he recommended I not go into neurosurgery, but that's what I chose!

What are your plans for your reunion?

I am anxious to see how much our fellow classmates have accomplished since graduation. Please encourage all to attend!

Half-Century Society— Charles Ihle, MD '65 (PG '70)

What type of practice are you in now, and where?

I completed an internship at St. Mary's Hospital in San Francisco and an orthopedic residency at UW Hospital and



Clinics. Following active duty at a U.S. Naval Hospital in Taiwan, I established a private practice—the Ihle Orthopedic Clinic—in Eau Claire, Wisconsin, where I practiced until 1998. Next, I practiced at Midlefort Clinic, part of the Mayo Clinic Health System, in Eau Claire until I retired in 2014.

What's your fondest memory of your medical training?

My fondest memory is the time I spent in England and Switzerland during my residency, with Dr. Andrew McBeath. Back then, orthopedic physicians did all types of work. He was interested in joint replacement surgery and was among the first in Wisconsin to perform a hip replacement. I also performed that procedure during my career.

What are your hobbies/interests?

My wife, Rebecca Ihle, and I built a cottage on a lake north of Eau Claire, Wisconsin. Since I retired, we have made it our yearround home and enjoy the peace of northern Wisconsin. We enjoy traveling and boating.

What SMPH faculty do you remember the most, and why?

Dr. Otto Mortenson was my first-year gross anatomy professor and served as my mentor throughout medical school.

What are your plans for your reunion?

My wife and I are looking forward to the Half-Century Reunion. Reunions help me connect with classmates and others from different classes. At a recent reunion, I saw Dr. Eugene Nordby (MD '43), who was a teacher during my residency. I have since attended his 100th birthday celebration.

Other news

I joined the WMAA in 1975, became a member of its Board of Directors in 2004 and serve on the Board Advisory Council.

CLASS REPRESENTATIVES WHO ARE PLANNING REUNIONS

These classes will hold reunions on Thursday and Friday, May 30 and 31, 2019.

1954: Edward Pezanoski, MD

1959: James Angevine, MD

1964: Representative needed

1969: Kathryn Budzak, MD,

and John "Jack" Woodford, MD

Half-Century Society: Charles Ihle, MD '65 (PG '70)

Welcoming any alumni who graduated 50 or more years ago



MEGAN GUSSICK, MD '12 (PG '15)

I consider myself fortunate to have been able to continue my career at my alma mater—the University of Wisconsin School of Medicine and



Public Health (SMPH)—and UW Health in emergency medicine (EM) and emergency medical services (EMS). At the UW BerbeeWalsh Department of Emergency Medicine, I am an EM physician and serve as the medical director for the Madison Fire Department and Dane County Sheriff.

My career path began in high school when I became interested in EMS and began working as an emergency medical technician for the volunteer fire department. This experience increased my desire to advance my medical knowledge and eventually led me to enroll at the SMPH and pursue an EM residency at UW Health. I fell in love with this field because it allows me to help people in their most vulnerable states, which potentially can have huge impacts on their lives and families. This factor and my EMS background grew into my desire to bring a high level of care to the prehospital setting.

Following my residency, I completed an EMS fellowship at UW Health. Through this training, I saw how prehospital services

can have a huge impact on the health care system. I am committed to ensuring that all patients who are served by the Madison Fire Department receive high-quality, innovative prehospital care.

Over several years, I have worked to bring EMS education to our EM residents and medical students. As health care systems continue to expand, it is important for all physicians to understand and appreciate the EMS field and the impact it has on our patients.

18 VOLUME 21 • NUMBER 1

KACEY KRONENFELD, MD '12

As an emergency department (ED) physician, I practice with Madison Emergency Physicians, an independent



group in southcentral Wisconsin, and have partnered with SSM Health Wisconsin to develop a comprehensive emergency medical services (EMS) program for the region.

I care for all types of patients in multiple emergency departments, from tertiary-care centers to a single-coverage critical access hospital. I also spend more than half my time working as an EMS medical director, with the goal of supporting evidence-based emergency care protocols, quality assurance programs, performance improvement processes, and advanced training to help our prehospital providers deliver the highest quality of care.

I appreciate the ability to manage life-threatening situations in any setting. In medical school, I enjoyed my global and low-resource medicine experiences, and I wanted a career with diverse opportunities and variability. Thus, I chose emergency medicine and EMS/prehospital care, and I completed an emergency medicine residency and out-of-hospital-care fellowship at Indiana University.

Another important aspect of my position is collaborating with local, regional and national partners to assist in optimization and implementation of effective EMS systems. To fulfill this role, I am a member of several groups, including the Wisconsin EMS Physician Advisory Committee, and the National Association of EMS Physicians'

Quality and Safety Committee and its Wisconsin chapter.

I am fortunate to have found my niche in EMS, a field I love.

AURORA LYBECK, MD '12

I practice emergency medicine (EM) at Advocate Aurora Health, Grafton and Washington County Medical Centers, which are north and



west of Milwaukee, Wisconsin, respectively. I see all types of patients in the emergency department (ED) and those cared for by emergency medical services (EMS) agencies for whom we provide medical direction. Always striving to improve and learn is what I most value about my job.

I volunteered as an emergency medicine technician in my hometown while I was a UW-Madison undergraduate and medical student.

I considered several specialties, but the opportunity to keep doing what I love through emergency medicine and EMS won out. When the Accrediting Council for Graduate Medical Education accredited EMS as a subspecialty, it sealed the deal. I completed an emergency medicine residency at Washington University in St. Louis and an EMS fellowship at the Medical College of Wisconsin in Milwaukee.

I am active in the National Association of EMS Physicians (NAEMSP), the president-elect for the Wisconsin Chapter of NAEMSP and a board member of the Wisconsin chapter of the American College of Emergency Physicians.

The community of emergency physicians is fantastic, and we have lots of potential to make a positive impact by working with EMS providers, conducting public education, participating in

wilderness and event medicine, working with law enforcement agencies, conducting research, and becoming a leader and advocate, just to name a few!

ROBERT ZEMPLE, MD '12

medical school,
I completed
an emergency
medicine (EM)
residency and
an emergency
medical services
(EMS) fellowship,



both at Virginia Tech-Carilion Clinic. I chose this specialty due to influence from my classmate, Dr. Aurora (Reese) Lybeck, with whom I volunteered at the Waunakee-Area EMS before and during medical school.

I practice EM in the Advocate Aurora Healthcare System in Wisconsin, focusing on Aurora BayCare in Green Bay and working part-time at Aurora Oshkosh. In EMS, I serve communities in the Green Bay area.

I am involved at many EM and EMS levels, including serving as a co-chair of the American Academy of Emergency Medicine's Competition Committee, member of the state's EMS Physician Advisory Committee, and associate clinical professor for the UW School of Medicine and Public Health and Medical College of Wisconsin. I also serve as a board member of the Wisconsin Medical Alumni Association and the Haiti Medical Mission of Wisconsin, and a member of the Ethics Committee in the Village of Hobart, where I reside.

EMS physicians are fast becoming a staple in the emergency medicine community. I encourage interested medical students to learn how to manage the most complex emergencies both inside and outside the hospital by exploring opportunities in EM and EMS. I offer shadowing opportunities at any time!

Class Notes compiled by Andrea Larson

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

Class of **1943**

Eugene
Nordby—who
turned 100 in
April 2018—and
his family were
honored with a
"100 Seasons"
tribute by the
Green Bay Packers



and WPS Health Solutions during the Packers-Lions game in December 2018, for "Operation Fan Mail." This program honors families with a spouse, mother, father, son, daughter or sibling who is on active duty or who is a veteran. At each 2018 home game, the Packers and WPS Health Solutions recognized a family on the field. Nordby—originally from Baldwin, Wisconsin—served as a military surgeon in the U.S. Army Medical Corps during World War II from 1944 to 1946, first in Okinawa, Japan, and then in South Korea, achieving the rank of captain. Following his military service, he began practicing medicine in Madison, Wisconsin, and became boardcertified in orthopedic surgery. Later, Nordby became chief of the medical staff at Madison General Hospital and was the first physician elected to the hospital's board of directors. He also partnered in a private orthopedic practice, serving communities in southern Wisconsin, and founded and led a variety of orthopedic organizations in Wisconsin and around the nation. He served on the WPS Health Solutions Board of Directors for 55 years, including 30 as its chair, while the organization grew into an independent, not-for-profit corporation.

Class of **1951**

Alice
McPherson is
celebrating the
50th anniversary
of the Retina
Research
Foundation (RRF)
in Houston,
Texas. RRF was



founded in October 1969, with the mission to reduce retinal blindness worldwide by funding programs in research and education. Beginning with the first pilot research grant funded in 1973, RRF now supports a wide diversity of programs worldwide, including pilot research grants, chairs and professorships, research awards recognizing lifetime achievement, international fellowships training in developing countries, and educational and travel scholarships—all achieved through collaboration with the finest universities and ophthalmological organizations.

Class of **1972**

Bernard Mansheim published two medical novels in 2018. The first, *A Doctor a Day*, is the story of a doctor who becomes overwhelmed with the psychological pressure of caring for dying patients over a decade. The pressure becomes magnified when he is sued for malpractice, leading him down a dark tunnel with no apparent exit. It touches on multiple themes: physician suicide, empathy, the art and science of medicine, and inequities in health care coverage. The second novel, *The Making of a Doctor*, is a prequel. It chronicles the passage of the protagonist through a grueling internship.

Class of **1980**

Ruth Etzel
received the
Herbert L.
Needleman
Scientist-Advocate
Award from the
International
Society for
Children's Health



and the Environment in January 2019. The award honors an individual who has battled to protect children from environmental chemicals and persisted in the face of opposition. For the past two years, Etzel led 17 agencies in the development of a comprehensive federal strategy to reduce childhood lead exposure by removing sources of lead in housing, soil, air, water, toys and food. She is the founding editor of Pediatric Environmental Health; a fourth edition of this book was published by the American Academy of Pediatrics in November 2018. After completing a pediatric residency at the North Carolina Memorial Hospital, Etzel was a Robert Wood Johnson Clinical Scholar at the University of North Carolina at Chapel Hill, and there she earned a PhD in epidemiology at the School of Public Health.

Class of **1987**

Robert Steiner is now the editor in chief of the American College of Medical Genetics' (ACMG) peer-reviewed journal, *Genetics in Medicine*. He has been the deputy editor of the journal since 2011 and a section editor since 2006. He is a professor (clinical) of pediatrics at the UW School of Medicine and Public Health, and the chief medical

officer for prevention genetics, a geneticist and medical director at Marshfield Clinic Health System in Marshfield, Wisconsin.

Class of **1989**

David Margolis is among five Wisconsin business executives who were honored at the Donald Driver Foundation's sixth annual Driven to Achieve Awards event in March 2019. The winners received an award and a \$40,000 donation to their organizations. Margolis was chosen for his work with the Rainbow Day Camp at the Harry and Rose Samson Family Jewish Community Center in the Milwaukee area, where he works with the camp director to offer a week-long summer day camp for children who have serious health issues. Margolis previously was inducted into the *Milwaukee Business Journal's* 40 Under 40 Hall of Fame.

Class of **1997**

Kelly Carothers wrote a book,

An Eternity in a Moment, which addresses the alarming issue of the silent mental health crisis among physicians. It is a contemporary fiction novel inspired by many of the author's experiences. She has been an emergency room physician for more than 15 years.

Class of **2009**

DeAnna Friedman-Klabanoff

was awarded the Burroughs-Wellcome/
American Society of Tropical Medicine
and Hygiene Postdoctoral Fellowship in
Tropical Infectious Diseases. She will use
new high-throughput tools to study naturally
induced humoral immunity to plasmodium
falciparum in children in Malawi, where she
will spend three months per year during the
two-year award.

Class of **2012**

Prethy Rao

joined the faculty of Emory Eye Center in Atlanta as part of the vitreoretinal surgery and diseases service. She graduated from the UW School of



Medicine and Public Health's former Medical Scholars Program. During medical school, she pursued a master's in public health degree with an emphasis on epidemiology, biostatistics, and program planning and evaluation. She completed a one-year transitional program and ophthalmology residency at Beaumont Health System, followed by a fellowship in vitreoretinal surgery at Associated Retinal Consultants,

both in Royal Oak, Michigan. She has presented at numerous conferences and has published broadly. Her primary research interests include "big data" analysis to better understand risk factors and clinical outcomes of several adult and pediatric vitreoretinal diseases. She also has special clinical interests in pediatric vitreoretinal diseases and translation of telemedicine screening and treatment of adult and pediatric retinal disease. She has primarily worked with large-scale databases, most recently, the American Academy of Ophthalmology's IRIS Registry®, the first and largest national comprehensive eye disease database in the United States. She received the 16th Annual Raymond R. Margherio Award at the Retina Society for that work.

SEEKING SUBMISSIONS ABOUT JUNIOR SKITS

If you have photos and/or memories related to your Junior Skits (a former end-of-year program), we may be able to include them a future article. Electronic photos need to be high resolution; submitted prints will be returned to you. Please send submissions to quarterly@med.wisc.edu or via mail to:

Managing editor, *Quarterly* magazine Wisconsin Medical Alumni Association 750 Highland Ave.
Madison, WI 53705

IN MEMORIAM

James G. Stouffer, MD '46 Aledo, Texas May 13, 2018

Arpad L. Masley, Jr., MD '47 Bremerton, Washington December 13, 2018 Everett H. Johnson, MD '49 Turlock, California January 9, 2019

Hansi R. Patience, MD '49 Green Valley, Arizona February 10, 2019 Charles D. Edwards, MD '50 Nashville, Tennessee September 15, 2018

George P. Steinmetz, Jr., MD '56 Middleton, Wisconsin October 18, 2018 Donald H. Reigel, MD '63 Gibsonia, Pennsylvania November 5, 2018

Faculty Member: James C. Pettersen, PhD Madison, Wisconsin December 30, 2018

Goodbye Dear Friend

JAMES C. PETTERSEN, PHD

ames Clark
"Jim"
Pettersen,
PhD, professor
emeritus at the
University of
Wisconsin School of
Medicine and Public



Health (SMPH), passed away on December 30, 2018, at age 86.

The Winona, Minnesota, native (pictured above and below) earned his bachelor's degree in biology and chemistry from St. Olaf College in Northfield, Minnesota, in 1954. He attended the University of Minnesota Medical School but withdrew due to illness, after which he went into teaching and found his true passion.

In 1957, Pettersen married Gloria Erickson, and they moved to Little Fork, Minnesota, where he taught high school chemistry, physics and biology and coached the junior high football team, and she taught home economics; they have three daughters. After the birth of their first

SANGE THE DITT OF THEIR TIST.

daughter, the couple moved to Grand Forks, North Dakota, where Pettersen earned a doctorate degree in human anatomy.

He accepted a position as an anatomy instructor at the SMPH in 1963, and subsequently was granted tenure and full professorship. He retired in 1998 with emeritus status.

While at the SMPH, Pettersen won several teaching awards, served as chair of the school's Admissions Committee for eight years, and worked with its Course Review Oversight Committee and Medical Scholars Program. His family notes that some of his fondest moments were spent in the gross anatomy labs, teaching his students to become good doctors. He donated his body to the school, with the goal of teaching one more group of medical students.

Dennis Maki, MD '67, emeritus professor of medicine, reflects, "Jim was a legendary teacher of anatomy for nearly four decades and an extraordinary human being; he had a profound impact on thousands of medical students."

Longtime Department of Anatomy faculty member and a professor emeritus, John Harting, PhD—who served as chair of that department for nearly 29 years of his four-decade career at the SMPH—worked closely with Pettersen.

"Known as 'Mr. Anatomy,' Jim loved every medical student he met, and they loved him in return. His teaching commitment was unparalleled and demanding over many years. His popularity has helped raise donations via the Pettersen Teaching Fund," shares Harting. "Jim undoubtedly is one the most respected educators in the history of the UW School of Medicine and Public

Health. I always looked up to him as a junior faculty member and utilized his wisdom when I was the chair."

Edward T. Bersu, PhD '76, a professor emeritus in the SMPH's Department of Neurosciences and UW College of Engineering's Department of Biomedical Engineering, echoes these sentiments.

Having met Pettersen in 1968, when Bersu interviewed for a graduate student position in the Department of Anatomy, he calls it "the greatest of fortunes that he became my major professor/advisor and, subsequently, my colleague when I joined the faculty."

Bersu continues, "Over the years, Jim taught me, by example, how to be an effective educator and a good university citizen. Any successes that I have had in my roles as a faculty member at UW-Madison can be attributed directly to him. The years that we spent teaching together are among my most treasured memories, along with the lunch hours we spent discussing every topic under the sun!"

Further, because Bersu's parents died when he was young, he states that Pettersen became a "father figure" to him.

"He advised me on many topics that one would expect from a parent, including the purchase of a house," Bersu recalls. "And we shared many interests, including singing together in a Norwegian chorus and canoeing in the Boundary Waters Canoe Area."

Pettersen's family notes that the Boundary Waters in northern Minnesota and Quetico Provincial Park in Ontario, Canada, were his favorite places on Earth.

New Digs in Renovated Spaces

HSLC ENHANCEMENTS BENEFIT STUDENTS











t the beginning of the 2018-19 academic year, University of Wisconsin School of Medicine and Public Health (SMPH) students were greeted by new, boldly colored features in renovated spaces throughout the Health Sciences Learning Center (HSLC).

The school aims to create, maintain and improve its state-of-the-art learning environment. The enhancements actualized better collaborative surroundings and increased quiet spaces, including a large area that features soft seating and desks with seven private pods designed for studying and resting. A new Medical Student Lounge offers an area for students to gather in study booths, play ping pong and video games, and use the kitchenette to prepare snacks and meals on the go.

Other redesigned spaces include four classrooms that foster hands-on learning, as well as similar classrooms in the Clinical Teaching and Assessment Center: this center allows health sciences students and faculty to practice clinical skills in a setting that duplicates the real world as closely as possible.

The Native American Center for Health Professions and Office of Multicultural Affairs share a new suite that is more accessible for students and visitors. It also includes a student lounge to foster working together and socializing among groups.

The SMPH incorporated sustainability practices throughout the design and construction process.

Naming opportunities exist for many of these engaging facilities. For details, please contact Jill Watson, UW Foundation and Alumni Association, at jill.watson@supportuw.org or (608) 262-4632.

Dean's Cup Competition

BRINGING HOME THE TROPHY FOR TWO YEARS RUNNING

by Kris Whitman

he annual Dean's Cup competition between the University of Wisconsin School of Medicine and Public Health (SMPH) and Law School can easily be summed up by one of its events: Tug of war. Since the collegial yet intense competition began in 1995, students in the two schools have vied for the trophy and the hard-earned bragging rights each fall semester.

Both schools form teams that compete in numerous indoor and outdoor, physical and intellectual contests. As co-coordinators for the 2018 SMPH teams, second-year medical students Elliot Franczek and Gabe Sobczak helped plan, schedule, score and run the events. They also are members of the Medical Student Association, which—along with the Wisconsin Medical Alumni Association—helps support the annual tradition.

A t-shirt sale is an integral part of the competition. In addition to providing students with a keepsake, proceeds benefit a local charity. Profits from the 2018 custom t-shirts went to Porchlight, a local organization that supports individuals who are struggling with homelessness.

Team activities kicked off with a Trivia Night at State Street Brats in late August and culminated with a semi-formal Dean's Cup Bash at the Edgewater Hotel in early October. In between, competitors and cheering fans visited campus sports fields and local parks for everything from flag football and beach volleyball to tennis and a 5K run/walk, to name a few. Indoor challenges featured a board game night, bowling, ping-pong and a bake-off.

Noting that the latter is his favorite event, Franczek exclaims, "There is so much amazing food, and I get my sweet tooth fix for the entire month in one sitting. Some of the desserts are better than you can find at five-star restaurants!"

About the full event—which yielded 132 points for the SMPH and 118 for the Law School—he reflects, "It was a huge success, and it's great for both schools' health and wellness. The Dean's Cup brings classes together and forms comradery in a fun format. It's something most schools don't have, and I think it really speaks to our friendly community here at UW-Madison."



The trophy spends the year at the winning school.



Competitors in the Dean's Cup 5K run/walk enjoyed a beautiful day for the event.



Left to right: M2 Elliot Franczek and M2 Gabe Sobczak, SMPH Dean's Cup coordinators; SMPH Dean Robert N. Golden, MD; Law School Dean Margaret Raymond, JD; and Samantha Zlevor, Law School Dean's Cup coordinator.

SMPH leaders were nervous at first, as Sobczak recalls, "The Law School had a historically high first-year class enrollment, so Elliot and I initially were concerned that the competition wouldn't even be close! This definitely played out during Trivia Night, but as the Dean's Cup progressed, medical student participation stayed strong, and the playing field evened out."

Franczek agrees, adding, "The Law School beat us in participation, with 443 total contestants compared to 306 from the SMPH, but we won handily in performance."

Happy to have his school's team bring home the trophy in 2017 and 2018, SMPH Dean Robert N. Golden, MD, comments, "We are, of course, delighted that our students brought home the Dean's Cup again. But, in fact, every law and medical student who participated is a winner, as they forged new friendships and raised support for Porchlight, an important local charity."

About the final event, the Dean's Cup Bash, Sobczak says, "With a fantastic location at the Edgewater, mingling among medical and law students was a great way to cap off the Dean's Cup. We hope to keep the high excitement going into next year!"

The Dean's Cup bake-off event is always popular among participants.



The Origins of the Dean's Cup

With the goal of passing along history for future class years at the University of Wisconsin School of Medicine and Public Health (SMPH), second-year medical student Elliot Franczek explains that the idea for the Dean's Cup started when several UW-Madison medical and law students were visiting a friend who was a law student at the University of Miami.

During the 1995 spring break trip, the group learned about that university's "Dean's Cup"—an annual fall athletic competition between law and medical schools. Tim Stewart, JD '97, and Tim Richer, MD '98, UW-Madison students at the time, brought back the idea of starting a similar event, and true to the spirit of UW-Madison, they suggested adding a charitable component.

Following a student survey, Stewart and Richer organized committees to plan athletic events, promotions, charity selection and more for a 10-day competition in the fall semester. Students, faculty, staff and alumni became energized, and donations from the Wisconsin Medical Alumni Association and the UW Law School Alumni allowed the schools to design and purchase the Dean's Cup Trophy.

Franczek notes, "With a lot of time and effort by the medical and law student organizers, the first Dean's Cup competition successfully was held in fall 1995, with about 55 students participating from each school. More importantly, though, the competition raised approximately \$1,000 for charity, along with significant donations in a blood drive and food drive."

Over the next several years, he says, the competition expanded in length and number of events, and the rivalry intensified. The SMPH won the first four years, but the Law School turned the tide in 1999 to win its first Dean's Cup. The SMPH won the trophy back in 2000, but it was the closest finish between the two schools, which have each held the trophy several times since then.

"The competitive spirit shows no signs of diminishing," observes Franczek. "The Dean's Cup remains true to its purpose: to foster goodwill and friendly competition between the schools and to emphasize the service aspect of these professions by giving something back to the community."



by Andrea Schmick

asmine Zapata, MD '13, MPH '17 (PG '16, '18), believes that the pathway to improving African American birth outcomes begins long before conception, pregnancy or delivery.

It begins when girls of color are elementary-school age and start wrestling with self-esteem, relationships, physical health and emerging sexuality. It begins in the community, where they may need to overcome experiences of racism, poverty or violence. It begins in their hearts and minds, where they hold onto sources of inspiration and strength.

A career in medicine—her dream since she was 5 years old—now allows Zapata to provide hands-on care for infants and their mothers in the newborn nursery.

It also gives her a platform to research community-based solutions to maternal-child health disparities, serve as a role model for minority students in the health professions and amplify her message of empowerment for girls and women.

The Roots of Service

The valedictorian and graduation speaker for her Milwaukee high school class, Zapata earned a Burke Scholarship—awarded annually to 10 Wisconsin high school seniors who demonstrate a passion for social justice and a commitment to serving others—to Marquette University's College of Health Sciences.

While Zapata was an undergraduate student there, two events had a major impact on her future life. In 2006, she married her high school sweetheart, Miguel Zapata, who she describes as her "backbone." A year later, her younger brother died suddenly of unexplained medical causes, but with support from her family, friends and church, she pushed through the devastation and kept her education on track, graduating summa cum laude in 2009.

Zapata applied and was accepted to several medical schools, including Harvard Medical School, but chose to accept an Advanced Opportunity Fellowship to study at the University of Wisconsin School of Medicine and Public Health (SMPH).

"The fact that [the SMPH] is a school of medicine *and* public health dramatically influenced me," she reflects. "I was drawn to the mission of 'it's more than just medicine."

Premature Birth and Community Advocacy

In 2010, while a second-year medical student, Zapata had yet another life-defining experience: she went into premature labor with her second child. Daughter Aameira was born at 25 weeks, weighing 1.5 pounds. She underwent multiple surgeries and suffered severe complications in the neonatal intensive care unit, including brain hemorrhage, life-threatening infection and impending respiratory failure. But she recovered, left the hospital three months later and is healthy today.

In 2011, Zapata shared her experience about Aameira's premature birth in a *Milwaukee Journal Sentinel* cover story. The article focused on the interplay of biological, social and environmental factors that may contribute to the fact that African American babies in Wisconsin are nearly three times more likely to die before their first birthday compared to their white counterparts. The number-one cause is prematurity-related complications.

Zapata also stepped up the community advocacy work she had been doing since college. As the co-founder and director of the Madison Inspirational Youth Choir, Zapata used rehearsal time to talk about health and wellness topics, such as depression, drug and alcohol abuse, and healthy choices—and she hosted empowerment sleepovers to build peer support for teen girls in the choir.

"Late at night, I would ask them what was on their mind and what they wanted to talk about, and they would pour their hearts out about relationships, sex, depression and other problems," she recalls. "That's when I could get through to them."

During medical school, Zapata received an SMPH Student Leadership and Service Book Award for her service work, and she was inducted into the Gold Humanism Honor



The Zapata family shares some laughter.

Society, which recognizes professionalism and high standards in medicine.

With a track record of community service, experiences caring for acutely ill children on inpatient rotations and a journey as a mother of a premature infant under her belt, Zapata's vision for her future pediatric career started to come into focus.

Pediatrics and Preventive Medicine

In 2013, Zapata began her pediatrics residency at the SMPH and UW Health, with the goal of becoming a neonatologist.

Reflecting on what she calls "amazing" training and support during those three years, she mentions one mentor in particular: Olachi Mezu-Ndubuisi, MD, OD, an assistant professor in the Department of Pediatrics' Division of Neonatology and Newborn Nursery.

"She is an African American physician in the field of neonatology who I really looked up to and could relate with," Zapata remembers. "She went through a lot of the same things I went through, and when I was feeling discouraged, she was there to encourage and help me."

In her third year of residency, *BRAVA* magazine named Zapata a 2016 Woman to Watch, in recognition of her community leadership and commitment to improving the health outcomes of minority groups.

-continued on next page





Jasmine Zapata, MD '13, MPH '17 (PG '16, '18) (left), is grateful for the support of her mother, Julia Saffold, who is holding Zapata's daughter Lillyana.

Around the same time, Zapata realized that although she enjoyed neonatology—and knew she belonged in pediatrics—she wanted to do more than care for premature babies after they were born. She wanted to help prevent them from being critically ill in the first place.

With that knowledge, she entered the SMPH's Master of Public Health Program and its Preventive Medicine Residency.

"During the Preventive Medicine Residency, I finally felt like everything clicked together," Zapata says.

Residency Program Director Patrick Remington, MD '81, MPH, who also is the SMPH associate dean for public health, and Associate Director Parvathy Pillai, MD, MPH, helped her make connections with state public health offices and community organizations, advocate at the Wisconsin Capitol and develop media-relations skills.

"Twenty percent of a health outcome is based on the care you receive in the hospital and clinic, but the other 80 percent is based on social and economic factors, such as your environment or personal health behaviors," she reflects. "Drs. Remington and Pillai made that come alive for me. That residency program changed my whole life."

During that residency, *BRAVA* profiled Zapata again, in an article on empowerment as a preventive strategy to address the infant mortality crisis for African American women in Dane County.

She also wrote a book—her third—called Beyond Beautiful: A Girl's Guide to Unlocking the Power of Inner Beauty, Self-Esteem, Resilience and Courage. It's been translated into Swahili and Korean, and it is in the

curriculum of schools in Madison, Verona, Beloit and Milwaukee.

Last year, Zapata spent numerous weekends traveling the Midwest on a sevencity tour, presenting the book's content along with poetry, music and singing to connect with girls in a way not possible through a traditional clinic visit. She's planning a 10-city national tour in 2019.

"If I can reach girls when they're 7, 8 or 9 years old, and bring positive, uplifting support systems into their life at a young age, that's potentially preventing so much [that can happen] 20 years later," she says. "It's more than a book and singing; it's a community-based preventive approach to combating health inequities."

Zapata put her media-relations skills to use again when she had the opportunity to discuss her community health initiatives on the Today Show in November 2017.

"I was thrilled to share my message on live national television," she recalls.

An Academic Career Begins

In 2018, Zapata became an assistant professor in the Department of Pediatrics' Division of Neonatology and Newborn Nursery. As a hospitalist in the UnityPoint Health-Meriter newborn nursery, she cares for healthy newborns, attends high-risk deliveries, and if needed, transfers babies to the neonatal intensive care unit.

She also is an affiliate assistant professor (CHS) in the Department of Population Health Sciences, and she serves as the faculty director of the SMPH branch of The Ladder, a national community-based mentorship and health education pathway program that aims to prepare young people from diverse, urban and medically underserved areas for health professions careers in their communities (see article on page 32).

And as an SMPH Centennial Scholar, she conducts research on prevention strategies to improve maternal-child health disparities. Most recently, she received a grant from the Wisconsin Partnership Program's New Investigator Program to address inequities in African American birth outcomes in Wisconsin through a collaborative, community-based, culturally relevant model of prenatal care.

Specifically, she will determine the feasibility of implementing the Today Not Tomorrow Pregnancy and Infant Support Program (TNT-PISP), which combines community-based doula programs, group-based models of prenatal care such as Centering Pregnancy, and community-based pregnancy support groups—all led by women of color.

The project is based at the TNT Family Resource Center in Madison's East Side Community Center, and carried out in close collaboration with Project Babies, Harambee Village Doulas and the African American Breastfeeding Alliance of Dane County, Inc.

For her work as an author, physician, health educator, speaker, youth empowerment specialist and community leader who is known locally and internationally, Zapata received The Business Forum's 2018 ATHENA Young Professional Award in November 2018. The award actively celebrates the ATHENA mission of supporting, developing and honoring women leaders, inspiring women to achieve their full potential and creating balance in leadership worldwide.

All the Tools to Launch

Reflecting on her trailblazing journey, Zapata credits a big part of her success to her faith and extended community of friends and family, particularly her husband and her mother, Julia Saffold, who have always been by her side.

A stay-at-home father during his wife's residency, Miguel Zapata's work flexibility as a food-service manager and real estate investor makes it possible for Jasmine Zapata to manage her career and be a mother to son MJ (9), Aameira (8) and baby Lillyana (1).

Saffold lives nearby and is a big part of the family members' lives.

"I have a really strong support system," Jasmine Zapata affirms.

Today, she is thrilled to have a professional identity that bridges pediatrics, preventive medicine, public health and community empowerment. She's especially grateful to the SMPH for supporting her unique appointments, noting, "I have all the tools that I need to really launch."

Carbone Cancer Center continued from page 13

Imaging and biomarker research have been identified as priority research areas. Bailey cites a collaboration among Zachary Morris, MD, PhD (PG '16), assistant professor, Department of Human Oncology, and Jamey Weichert, PhD, professor, Department of Radiology, and Sondel as being particularly strong in these areas.

With a \$2.5 million NIH Cancer Moonshot Grant, they are developing an approach to immunotherapy that uses a novel form of molecular targeted radionuclide therapy (MTRT) to enhance the effectiveness of immune checkpoint inhibitors to treat metastatic cancer. The MTRT, which was developed by Weichert, is administered intravenously and selectively taken up by tumors, which receive a low dose of radiation. Rather than killing the cancer cells, this low dose of radiation temporarily eradicates suppressive lymphocytes in the irradiated sites to help restore the immune system's ability to recognize and kill cancer cells. The radiation also increases tumor cells' susceptibility to the immune response.

"The real key is that MTRT allows us to effectively deliver radiation to all tumor sites—even ones we can't see," Morris says. "We cannot achieve that short of doing total body radiation with external beam treatments. But that would deplete lymphocytes everywhere and prevent any immune response. In this research we're depleting some immune cells temporarily at the radiated tumor sites. MTRT does not radiate the lymph nodes, spleen or bone marrow, so there's a huge reservoir we can draw on to regenerate an effective anti-tumor immune response."

Morris' group and the other nine research teams receiving this grant nationwide are inaugural members of the NIH's Immuno-Oncology Translational Network, which aims to facilitate collaboration and spur further progress in the fight against cancer.

"I think working with these other researchers could be one of the most impactful aspects of this award," says Morris. "I also believe, in the future, we'll be able



Breast cancer researchers (left to right): Elizabeth Burnside, MD, MPH, professor of radiology, Bethany Anderson, MD '05 (PG '10), associate professor of human oncology, Ruth O'Regan, MD, professor of medicine, Lee Wilke, MD, professor of surgery.

to translate this treatment to patients with essentially any cancer."

Bailey observes, "UW Carbone fosters this type of innovative collaboration with strong potential for clinical relevance."

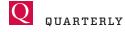
He points with equal pride to a shining example of UW Carbone's outreach efforts: the Precision Medicine Molecular Tumor Board (PMMTB; see article in Quarterly, Volume 20, Number 3, 2018), a statewide service available to oncologists throughout Wisconsin. Working in partnership with the UW Collaborative Genomics Core and UW Carbone, the PMMTB calls upon UW-Madison experts in pathology, genomics, genetic counseling, medical oncology and pharmacy, as well as collaborators from health systems throughout the state. The board focuses on helping patients who do not have a curable treatment option. Those involved discuss and analyze tumor genotypes and molecular abnormalities to recommend specific targeted therapies.

According to the board's co-leaders— Mark Burkard, MD, PhD, and Dustin Deming, MD '07 (PG '10, '12), associate professors, Department of Medicine, Division of Hematology and Medical Oncologycancers traditionally have been classified by their site of origin, meaning breast cancer starts in the breast, and colon cancer starts in the colon. This paradigm is now being challenged through the PMMTB.

"Since 2015, we have led a bimonthly, web-conferenced statewide tumor board through which physicians can discuss cancer patients, including their tumor DNA test results. To date, the PMMTB has reviewed DNA testing and provided specific recommendations for more than 1,000 patients," says Burkard.

Deming, who also holds an appointment in the Department of Human Oncology, adds, "Through the PMMTB's work, every cancer patient in Wisconsin can have access to the most sophisticated, state-of-the-art approach to personalized oncology care."

Reflecting on all of UW Carbone's past success and thinking broadly about its future, Bailey concludes, "We have a responsibility to impact cancer care and research throughout Wisconsin and beyond; we are proud to be among the long line of UW-Madison faculty and staff who incorporate the Wisconsin Idea into everything we do."



Drolet Named Chair of Dermatology

Beth Drolet, MD, is the new chair of the Department of Dermatology at the University of Wisconsin School of Medicine and Public Health



(SMPH). She previously served as vice chair of the Department of Dermatology at the Medical College of Wisconsin (MCW) in Milwaukee, where she was a professor of dermatology and pediatrics.

Drolet is a prolific researcher in the study of birthmarks, PHACE syndrome and infantile hemangiomas. Her clinical and academic interests focus on hemangiomas and vascular anomalies in infants and children. She established the Birthmarks and Vascular Anomalies Center at the nationally recognized Children's Hospital of Wisconsin in Milwaukee. She also served as chief experience officer and medical director of birthmarks and vascular anomalies at the Children's Hospital of Wisconsin.

She is past president of the Society for Pediatric Dermatology and the Hemangioma Investigator Group. Drolet is a principal investigator on several National Institutes of Health-funded research projects that bridge basic genetics/genomics with translational investigations.

"Dr. Drolet is a highly collaborative researcher, a compassionate clinician and a national leader," notes SMPH Dean Robert N. Golden, MD.

Drolet earned her medical degree at Loyola University in Chicago. She completed an internship in medicine at the University of Colorado followed by residency training in dermatology and a fellowship in clinical research and pediatric dermatology at MCW.

Remington Earns Distinguished Teaching Award

Patrick
Remington,
MD '81, MPH,
is honored
among the
most esteemed
University of
WisconsinMadison faculty



members, in receiving a 2019 Chancellor's Distinguished Teaching Award.

Established by former Chancellor Edwin Young in 1973, the Distinguished Teaching Awards honor six faculty members annually. Honorees are nominated by faculty members, department representatives and student organizations. Chancellor Rebecca Blank and Provost Sarah Mangelsdorf will present the awards in April.

A professor in the Department of Population Health Sciences at the UW School of Medicine and Public Health (SMPH), Remington also serves as associate dean for public health and director of the Preventive Medicine Residency Program.

He joined the Department of Population Health Sciences in 1997. Remington was the first person to serve as director of the Master of Public Health Program, UW Population Health Institute and UW Preventive Medicine Residency Program. He also was the first associate director for population health science in the UW Carbone Cancer Center and the inaugural associate dean for public health for the UW Medical School, for which he was influential in the school's 2005 renaming—to the UW School of Medicine and Public Health.

Remington's research examines ways to improve public health surveillance methods and outcomes. He led the development of the Wisconsin County Health Rankings, now a national program supported by the Robert Wood Johnson Foundation.

Evensen Receives Humanitarian Award

Ann Evensen, MD '95, associate professor in the Department of Family Medicine and Community Health (DFMCH) at the University of Wisconsin School



of Medicine and Public Health, was honored as the 2018 Humanitarian Award recipient by the American Academy of Family Physicians (AAFP). It honors extraordinary, enduring humanitarian efforts by AAFP members within and beyond the United States.

Evensen is the director of global health for the DFMCH and has interests in low-risk obstetrics, women's health, and the intersection of primary and emergency care, including emergency obstetrics. She was the inaugural course director for the Advanced Life Support in Obstetrics (ALSO®) programs in Ethiopia and India. ALSO was created in 1991 by DFMCH faculty members James Damos, MD, and John Beasley, MD (PG '75), and is now owned and operated by the AAFP.

In January 2019, Evensen was honored with a U.S. Fulbright Specialist Award, which funded a three-week visit to India to work in depth with the GVK Emergency Management and Research Institute. The institute provides ambulances, emergency medical technicians (EMTs) and 911-style call centers for more than 800 million Indian citizens. Because in some Indian states, more than 50 percent of ambulance calls are for obstetric emergencies, the organization has trained more than 30,000 EMTs in Basic Life Support in Obstetrics.

From 2013 to 2016, Evensen consulted with the Family Medicine Residency Program in Ethiopia. She is a member of the AAFP's Center for Global Health Initiatives Advisory Board and the ALSO India Advisory Board.

Rikkers Honored for Lifetime Achievements

Layton F. (Bing)
Rikkers, MD,
professor emeritus,
University of
Wisconsin School
of Medicine and
Public Health
(SMPH), was
honored with



the 2018 Society of University Surgeons (SUS) Lifetime Achievement Award, presented at the 14th Annual Academic Surgical Congress.

This award recognizes individuals with a sustained career in academic surgery who have made significant contributions to surgical science. He was nominated and selected by peers based on his leadership and contributions to academic surgery, as well as his strong support of the SUS.

He specialized in hepatobiliary, pancreatic and gastrointestinal surgery, including the treatment of portal hypertension. Rikkers was editor-in-chief of *Annals of Surgery* and served on 15 other editorial boards. He was chair of surgery at the SMPH from 1996 to 2008.

At the award presentation, Rikkers was lauded as the consummate surgeon-scientist, mentor, teacher and colleague. He was recognized for endeavors in clinical research, hepatobiliary surgery, student education and national leadership. He was called the consummate servant leader.

Rikkers has held leadership roles in many national and international professional societies, including the American Board of Surgery, American Surgical Association, Collegium Internationale Chirurgiae Digestivae, Halsted Society, International Surgery Society, Society for Surgery of the Alimentary Tract, Society of Clinical Surgery and Central Surgical Association.

Established in 1938, the SUS is one of the world's premier organizations dedicated to the advancement of the surgical sciences.

Gunderson Lauded for Surgical Research

Kirsten
Gunderson,
a third-year
medical student
at the University
of Wisconsin
School of
Medicine and
Public Health



(SMPH), received a prestigious national award for her surgical-education research.

She received the Promising Medical Student Surgery Education Research Award by the Association for Surgical Education to honor work examining whether surgical residents benefit more from verbal critiques or a new smartphone application—the System for Improving and Measuring Procedural Learning (SIMPL)—for providing feedback.

Her interest in research beyond her standard medical school training came in part from the evidence-based changes in the SMPH's Forward Curriculum, notes Gunderson—a member of the inaugural class using the innovative curriculum—who is considering a plastic surgery residency, and plans to pursue a research fellowship and do research in her career.

Her interest in research led her to participate in the 2017 Shapiro Summer Research Program under Hee Soo Jung, MD, and Sarah Jung, PhD, in the Department of Surgery. She presented the study at the Association of Program Directors in Surgery annual meeting and published it in the *Journal of Surgical Education*. The research showed that the use of this mobile app could be a reasonable alternative to traditional surgical feedback from instructors.

"She was strikingly independent in learning about new topics, systems and research methods," Hee Soo Jung notes. "She has a tireless work ethic and really drove the progress of the study."

Cryns Leads Statewide Active-Lifestyle Initiative

Fourteen
Wisconsin
communities
have joined
a statewide
initiative that
works to promote
active lifestyles in
communities.



Wisconsin Active Together, a program based at the University of Wisconsin School of Medicine and Public Health (SMPH), is a statewide network of partners and agencies that work to improve the health in their communities by promoting places to walk, bike and be active. This is affiliated with SMPH's healthTIDE network, which builds organizational relationships in the state to fight obesity and make the healthy choice, the easy choice.

"This began last year as part of our Obesity Prevention Initiative in partnership with state agencies and organizations, and we are now reaching 1.4 million people across Wisconsin," says Vincent Cryns, MD, professor in the SMPH Department of Medicine, and principal investigator for the Obesity Prevention Initiative, which includes healthTIDE.

Communities can apply to be a part of the program and receive support at WIActiveTogether.org.

In 2018, the Wisconsin Obesity
Prevention Initiative released a statewide obesity map by ZIP Code, based on electronic medical records, that shows 41 percent of adults and 15 percent of children in Wisconsin are obese. Adult obesity rates by ZIP Code range from 15.9 percent to 67.2 percent, meaning adults living in some ZIP Codes are more than four times more likely to be obese than people in other ZIP Codes.

The Wisconsin Partnership Program funded these projects.



The Ladder Program

STEM PROFESSIONALS HELP THE NEXT GENERATION SUCCEED

by Andrew Hellpap

he University of Wisconsin School of Medicine and Public Health (SMPH) and the Boys and Girls Club of Dane County launched, in fall 2018, a program aimed at increasing the number of students from underrepresented backgrounds choosing to enter health care and health science research fields.

The Ladder, an eight-session program held during the school year at the Health Sciences Learning Center, is designed to expose children as young as 9 years old to the vast opportunities available in health and science careers, according to Beverly Hutcherson, the program's administrative director.

"The Ladder has been adapted to meet the needs of Dane County students," she explains, adding that the program at the SMPH was adapted from a program created by Renee Crichlow, MD, at the University of Minnesota. "Our program's leaders are all first-generation college graduates who have been successful in science, technology, engineering, math or health care."

The program's initial run is a two-year pilot with goals of shaping career aspirations, providing peer-to-peer mentoring, increasing student resiliency, and boosting awareness of science, technology, engineering and math careers. To achieve these goals, the sessions include exposure to health care careers and mentorship as students participate in hands-on science activities.

The inaugural class of 15 was recruited in partnership with the Boys and Girls Club. The Ladder partnership was an ideal fit, according to Alex Gagnon, vice president of school-based education for the Boys and Girls Club of Dane County. That organization is a local, not-for-profit youth development organization that serves more than 7,500 youths in 10 locations, including eight school-based sites and two traditional club sites. The clubs inspire youth to dream and



Brian Gittens, EdD, shares a story.

teach them the skills to achieve when they're most impressionable.

"Our driver, always, is leveraging partnerships in the community to create opportunities for our students to engage with the career sectors that interest them. The Ladder initiative is a perfect fit for our students to engage with the health sciences and generate immediate social capital in the field," Gagnon says.

The program serves as an intergenerational mentor support network



for students and is another step toward addressing a critical shortage of diversity in the health care workforce, according to Brian Gittens, EdD, an associate dean at the SMPH.

Gittens serves on The Ladder leadership team, along with the faculty director, Jasmine Zapata, MD '13, MPH '17 (PG '16, '18), assistant professor, Departments of Pediatrics and Population Health Sciences.

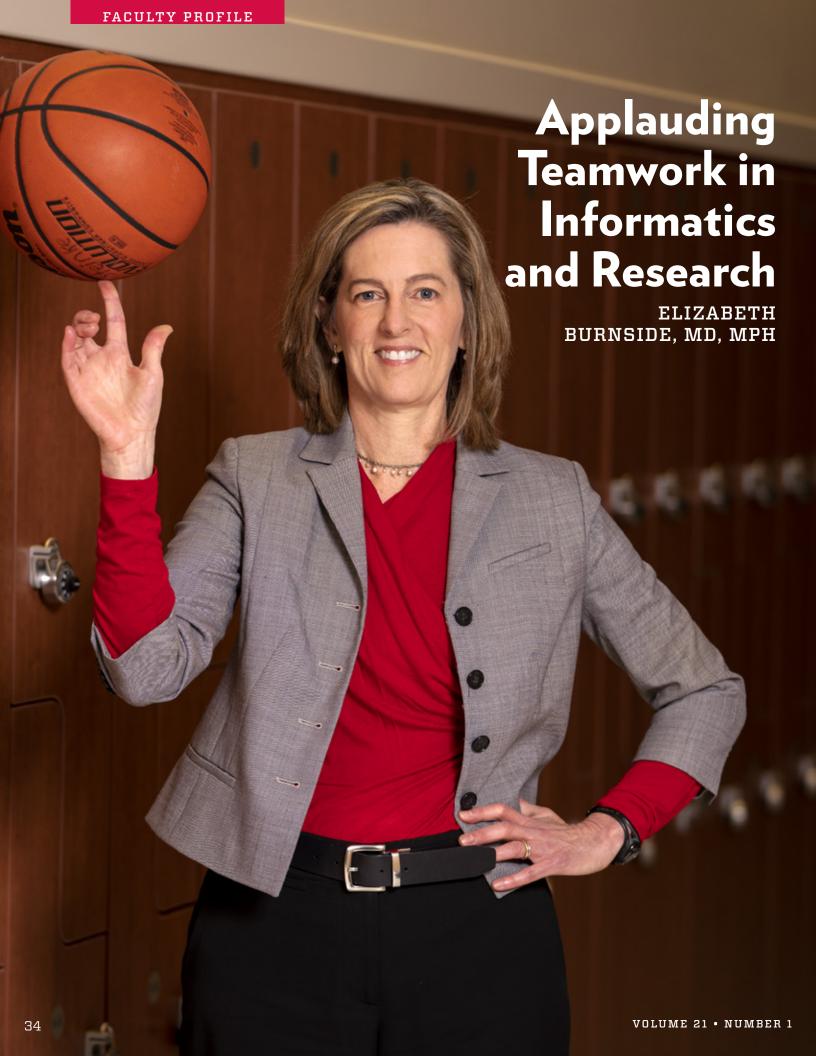
"A key contributing factor to this public health crisis includes a lack of long-term mentorship opportunities in health sciences for young students from diverse backgrounds," Zapata notes. "We aim to change that."

The Ladder is crafted to help young students learn about health sciences careers regardless of their life circumstances.

Left: Beverly Hutcherson responds to questions.

Opposite page: Early 2019 group from The Ladder, with learners wearing red and the following leaders and assistants wearing white: Teresa Baymon (standing); front row (left to right): Rastafa Geddes, PhD, Brian Gittens, EdD; second row: Beverly Hutcherson, Jasmine Zapata, MD '13, MPH '17 (PG '16, '18); third row: Janae Winston.





by Laura Hogan

eflecting on influential factors in her life, Elizabeth Burnside, MD, MPH, describes a wide array, from her training in San Francisco during the dot.com boom, childhood vacations in northern Wisconsin, the work of American biologist E.O. Wilson, and the persistent influence of teams and teamwork.

"Sports analogies can be overused, but truthfully, I was very athletically oriented and played team sports—basketball, softball and tennis—throughout high school. It was a big part of my life," explains Burnside, the associate dean for team science and interdisciplinary research at the University of Wisconsin School of Medicine and Public Health (SMPH).

"Looking back, it's not surprising that, when I was a new section chief for breast imaging, I championed a team approach for breast cancer care," muses Burnside, who joined the SMPH Department of Radiology in 2001.

During the first of her three tenures as a section chief, she created an interdisciplinary service line that included nurses, surgeons, pathologists, oncologists, radiation oncologists and others to advance a thennew paradigm for improving patient care.

"Coming together to form a health care team that focused our stellar care delivery on patients, rather than on physicians or the health care system, was an initiative that I felt privileged to fight for," she recalls.

After a few years of focusing intensely on clinical care, Burnside felt the pull of research and began laying the groundwork to create a clinical research program.

"I did a year of basic research after my undergraduate degree and loved it, but I always felt a missing connection related to how my work would translate into anything that could impact larger populations. This realization was part of why I did a dual MD/MPH program at Tufts University; I wanted to make connections between the care of individual patients and the care of larger communities," notes Burnside, who also completed a breast imaging fellowship at the University of California-San Francisco

and a master's degree in medical informatics at Stanford University.

Burnside credits her diverse experiences and education in basic, clinical and population health research with enabling her to appreciate the challenge and importance of translational research. At the SMPH, with the goal of creating a translational research program focused on breast imaging, she reached out to individuals across UW-Madison to find a collaborator. C. David Page, Jr., PhD, a professor in the Departments of Computer Science and of Biostatistics and Medical Informatics, helped her appreciate how informatics and data science connect disciplines.

"David became the primary mentor for my National Institutes of Health (NIH) K07 award. At that time (2007), it was kind of weird to have a radiologist's mentoring team include a computer scientist specializing in machine learning and an engineer from Stanford specializing in decision analysis. Fortunately, the NIH thought this team-science approach was novel and has supported our interdisciplinary team for more than a decade," explains Burnside.

Page comments, "Beth's research harnesses the power of informatics to create and sustain a highly translational program. Collectively, we have been able to apply novel machine learning methods to improve the detection and diagnosis of breast cancer. She was one of the first at UW-Madison to combine the power of interdisciplinary team science and emerging informatics methods to tackle challenges she saw in her practice."

Burnside says her role as the co-deputy executive director of the UW Institute for Clinical and Translational Research (ICTR) came about partly because her breast imaging research team was an early, heavy user of informatics—including methods for secure transmittal and storage of sensitive clinical data—offered through ICTR.

"Marc Drezner, ICTR's first executive director who is now retired, recruited me to lead the ICTR Imaging Informatics group and help hammer out how to expand informatics services to clinical investigators," says Burnside, now one of the two principal investigators of ICTR's Clinical and Translational Science Award from the NIH,

along with ICTR Executive Director Allan Brasier, MD (see *Quarterly*, Volume 20, Number 3, 2018).

Burnside's posts allow her to help expand the informatics infrastructure at the SMPH, where the ICTR Biomedical Informatics
Core recently evolved into the UW Clinical and Health Informatics Institute (CHI²). Also, she and Dorothy Farrar Edwards, PhD, a professor in the SMPH's Department of Medicine and School of Education's Department of Kinesiology, co-lead the UW-Madison team for the national All of Us Research Program, which launched from an NIH award focused on precision medicine (see *Quarterly*, Volume 20, Number 3, 2018).

Despite her commitment to new roles, she maintains a team-focused research program in the Department of Radiology.

"Holding me totally together is my wonderful research team. I feel like we make such a big difference; by working together, we accomplish things we couldn't do alone," Burnside reflects. "Every time I learn more about team science, I feel like our group is already striving to check those boxes!"

Brasier, a national leader in team science implementation, notes, "Emerging research has demonstrated that scientific breakthroughs are more likely to arise from smaller, more interdisciplinary teams. The history of Beth's research program is a perfect example of the successes that are possible when taking this approach. We are very pleased to have her on board at ICTR as we launch new initiatives to promote high-functioning research teams."

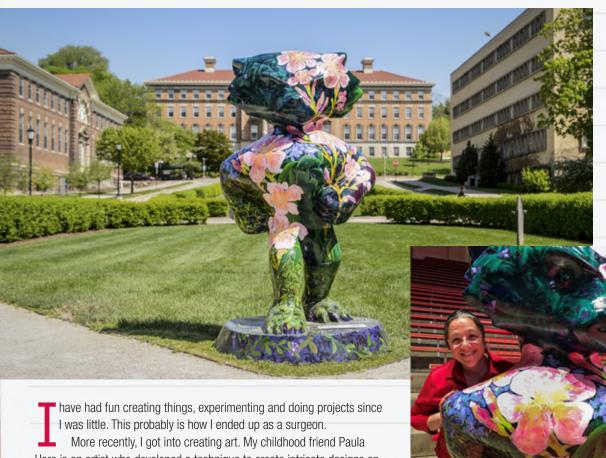
Burnside shares, "My goal in ICTR is to be a connector and to make it easier for different disciplines to work together. Informatics, data science and machine learning are increasingly important tools enabling researchers to look at problems in a way that transcends discipline."

She continues, "Typically, transdisciplinary teams develop shared goals, but the real advances happen when they collaborate deeply by modifying their original research questions and discovering uncharted territory between disciplines. The creativity inherent in team science is what I hope we can advance at ICTR, at the SMPH and in the wider clinical research enterprise at UW-Madison."

Blooming Bucky

ART PROJECTS PROVIDE BALANCE, HELP RAISE PHILANTHROPIC FUNDS

by Diane Heatley, MD '87 (PG '92)



More recently, I got into creating art. My childhood friend Paula
Hare is an artist who developed a technique to create intricate designs on
eggshells. About 10 years ago, she taught me the process of first painting
and then using a tiny drill to remove parts of the shell while keeping it overall
intact. As someone who likes to do ear surgery, this was right up my alley!
How much shell could I remove and still keep the egg in one piece? Since
then, I've created many delicate eggs, including some with the American

Family Children's Hospital (AFCH) logo. I enjoy donating eggs to fundraisers that benefit AFCH—my favorite charity. From goose eggshells to ostrich eggshells, they draw a lot of interest at silent auctions.

A few years ago, I took up painting from photographs, which involves using with her creation. your eyes more than your brain while recreating the images. Instead of my brain thinking "the flower is pink" or "the dog is black," I try to see the shades of red or blue or purple or brown involved in making it look like a pink flower or black dog. I continue to be astonished at how seemingly minor variations of shading or outline create depth and topography on a flat canvas.

In November 2017, Paula and I submitted a proposal for the UW-Madison Bucky on Parade public art event. We were invited to pick up a big, white fiberglass Bucky in March. The organizers waved us away with a smile and

Top: Blooming Bucky on display in summer

2018 on UW-Madison's Henry Mall, with

Agricultural Hall in the background; inset: Diane Heatley, MD '87 (PG '92),

told us to bring it back in four weeks, looking like the sketch we had provided.

Painting every bit of a six-foot-tall, three-dimensional mammal was way different than anything either of us had ever done! Our sketch included only Bucky's front, so there was a lot more creativity needed to make a 360-degree artwork. Of the 85 statues, ours was one of the few that did not look like a Bucky Badger. Instead, we used the Bucky shape as a canvas and created a floral scene loosely based on a photograph taken at Boerner Botanical Gardens in



Milwaukee, Wisconsin. We named it Blooming Bucky.

During summer 2018, our statue resided on Henry Mall near Agricultural Hall at UW-Madison.

Thousands of people visited the Bucky statues around Dane County. We got a lot of fun feedback and selfies of fans with our Bucky. A little girl who had visited all 85 statues was particularly excited to meet us, and her mom explained that Blooming Bucky was her daughter's favorite of them all!

Blooming Bucky was part of a fundraising auction, with proceeds supporting cancer research, treatment and awareness through men's basketball Coach Greg Gard's charity, Garding Against Cancer, and the Madison Area Sports Commission. Our Bucky raised \$21,500 for charity.

Every year I try slightly different things with my art. Like other physicians, my work is demanding. I realize I'm at

great risk of not unplugging often enough. Being able to sit down and create something pretty uses the "other half" of my brain and allows me to put aside whatever is churning around in there and relax.



About the Author

Diane G. Heatley, MD '87 (PG '92), is a professor in the Departments of Surgery and Pediatrics at the University of Wisconsin School of Medicine and Public Health (SMPH). She is the chief medical officer of the American Family Children's Hospital. After she earned her medical degree at the SMPH, Heatley completed an otolaryngology-head and neck surgery residency at University Hospital in Madison and a pediatric otolaryngology fellowship at St. Louis Children's Hospital at Washington University. In addition to her administrative responsibilities, she continues her surgical practice in pediatric otolaryngology.

Top: A painting by Diane Heatley, MD '87 (PG '92); left: a painted and drilled rhea eggshell she designed.

Candida albicans Creates Drug-Resistant Biofilms

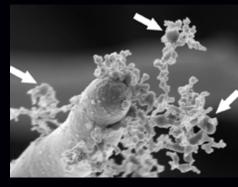
hen the pathogenic yeast Candida albicans colonizes surfaces of indwelling medical devices—such as catheters, joint protheses and mechanical heart valves-it assembles into a durable structure called a biofilm. Such biofilms, which enable immune system evasion and are nearly impervious to antifungal drugs, can be deadly, leading to bloodstream infections and systemic infections of tissues and organs. Each year, catheter microbial biofilms cause 100.000 deaths and cost \$6.5 billion in the United States alone.

Understanding how a drug-resistant biological barrier forms is key to disrupting it. That's the premise of research, published in *PLOS Biology*, led by David Andes, MD (PG '95, '99), who heads the Division of Infectious Disease in the Department of Medicine, at the University of Wisconsin School of Medicine and Public Health.

Using electron microscopy, Andes and his team saw small spheres emanating from *C. albicans* cells growing in biofilms. This suggested extracellular vesicles, which are balloon-like transporters of material surrounded by a fatty lipid bilayer. "Our challenge is determining which components of the vesicle cargo are responsible for protection," says Andes.

Experiments showed that biofilm-associated extracellular vesicles were distinct from vesicles produced by free-living *C. albicans* cells. Biochemical analyses showed that cargo of biofilm extracellular vesicles largely correspond to materials found in mature biofilms.

Several mutant strains with limited capability to produce extracellular vesicles created biofilms that were useless to the yeast in terms of protection against the antifungal drug fluconazole. When researchers



added normal biofilm extracellular vesicles to these strains, they became drug-resistant again.

"Preliminary results suggest that targeting key enzymes in the vesicles may serve as drug targets that will 'unprotect' the fungus from other common antifungal drugs," notes Andes.

Excessive Opioids May Be Prescribed to Kids

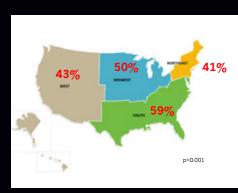
ore than 50 percent of children who undergo umbilical hernia repair are given opioids after surgery, according to a University of Wisconsin School of Medicine and Public Health study, published in *Surgery*.

Led by pediatric surgeon Jonathan E. Kohler, MD, the researchers examined a national database of nearly 4,400 cases of children who underwent uncomplicated umbilical hernia repair. They found that 52 percent of these patients filled opioid prescriptions, and the rate of prescribing opioids for this procedure increased

significantly from 2011 to 2014, with a modest decline in 2015.

"Almost half of the surgeons in this study, along with the American College of Surgeons, suggest that parents should expect their children to do fine with non-narcotic pain relievers after surgery for umbilical hernia repair," says Kohler. "This suggests that guidelines could be developed and disseminated to reduce opioid prescriptions for umbilical hernia surgery and other common pediatric surgery procedures. This could improve the quality of care for children and impact the opioid epidemic."

The most commonly prescribed medications for pediatric umbilical hernia repair are hydrocodone with acetaminophen, codeine with acetaminophen, and oxycodone with acetaminophen. The study also found that prescriptions for opioids vary among regions of the United States, with the south showing the highest rate at 59 percent and the northeast having the lowest at 41 percent. Perhaps most concerning, 6 percent of children who filled a prescription for opioids went on to fill another prescription for opioids, suggesting chronic use or even misuse.



"Pediatric patients can suffer respiratory depression from opioids," notes Kohler. "Unused opioids can be diverted or misused by others. Misused opioids are most commonly obtained free from friends and family."

38 VOLUME 21 • NUMBER 1

Paper Nabs Top Honor for Life-Expectancy Analysis

niversity of
Wisconsin-Madison
researchers' paper
about the gap in U.S. life
expectancy compared to
European nations has earned
top honors from the American
Public Health Association.

The paper, "Meeting the Institute of Medicine's 2030 U.S. Life Expectancy Target," was published in the *American Journal of Public Health* and authored by David Kindig, MD, PhD, emeritus professor, Department of Population Health Sciences at the UW School of Medicine and Public Health; and Jenna Nobles, PhD, professor,

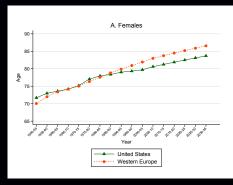
Department of Sociology, and Moheb Zidan, doctoral candidate, Department of Economics, both at UW-Madison.

The National Academies of Sciences, Engineering and Medicine has recommended reaching the mean of peer countries by 2030. The paper estimated that U.S. life expectancy would need to grow by 0.32 percent annually between 2016 and 2030 to meet this long-term goal, and that few nations and states had achieved this rate in the past.

"Closing the current gap will be difficult without sustained political will," Kindig states. "Failure to do so is costing us significant, unnecessary loss of life."

In 1960, U.S. life expectancy grew at a rate similar to that of Japan, Sweden and France (0.26 percent per year) until the mid-1980s when it began to slow. From 1985 to 2010, the rate slowed to 0.2 percent per year. And from 2012 to 2013, it slowed to 0.06 percent.

The causes of the slowing are numerous, including birth complications, addiction, injuries, homicide, HIV/AIDS, heart disease, diabetes and health factors related to obesity, and related societal factors such as gun violence,



environments that hinder physical activity, barriers to health care access, child poverty and income inequality.

Kindig, emphasizing the importance of collaboration across fields, notes, "It is a clear example of how different disciplines have to work together to tackle broad policy issues."

Stem Cells, Gene Therapy Help Address Blindness

ew approaches to treating an inherited eye disease are showing promise in restoring retinal cells to proper function, according to researchers at the University of Wisconsin School of Medicine and Public Health.

Published in the American Journal of Human Genetics, the study involves Leber's Congenital Amaurosis (LCA16), which causes severe visual damage and typically results in childhood blindness. It is caused by mutations in genes expressed in certain retinal cells.

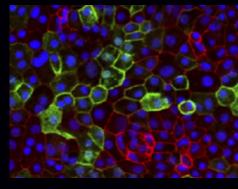
The gene KCNJ13 produces a protein that is a potassium ion channel in the retina. If

KCNJ13 is mutated, it cannot produce the protein correctly, the vital ion channel does not function properly, and photoreceptor cells cannot encode visual stimuli. This progresses to blindness.

The research team was led by principal investigator Bikash Pattnaik, PhD, assistant professor in the Department of Pediatrics and Department of Ophthalmology and Visual Sciences, and included David Gamm, MD, PhD (PG '02, '03), associate professor of ophthalmology and visual sciences, and Pawan Shahi, PhD, postdoctoral research associate in the Department of Pediatrics. They created a

"disease in the dish" model, removing skin cells from two family members, one with LCA and one without. The team "re-engineered" the cells to an undifferentiated state and analyzed them. Both cell types appeared normal in structure, but when they matured, cells from the LCA-affected person lacked expression of the protein needed for the ion channel to function.

Researchers tried to "rescue" the deficient ion channel through an approach known as read-through therapy, using an antibiotic to suppress the signal that stops DNA translation. While only a portion of the cells completely



recovered, this approach shows promise for future treatments. The team also used gene therapy to try to re-establish a proper ion channel.

"Our findings support the promise of precision medicine in addressing childhood blindness," says Pattnaik, who also is an investigator at the UW-Madison McPherson Eye Research Institute.



Cellular Pharmaceuticals Meet the Wisconsin Idea

raditionally, drug development arises from a university discovery for which a pharmaceutical company acquires the rights and thereafter navigates the path to market approval. This process of shepherding a therapeutic discovery to become a U.S. Food and Drug Administration (FDA)-approved drug costs hundreds of millions of dollars. Historically, due to mission and structural reasons, universities simply have not been involved in drug development and manufacturing. Rather, they relied on industry to pick technologies and bear the burden and risk of developing blockbusting winners.

Today, the advent of cellular therapy has changed the constraints of that paradigm, as informed by the revolution of living cells used as drugs. Academic medical centers, including the University of Wisconsin School of Medicine and Public Health (SMPH) and UW Health, now can take ownership of developing their own innovations for the greater good.

A Bit of Background

Bone marrow transplantation, like blood transfusion and solid organ transplantation, is a "practice of medicine," and blood and tissues are not considered "drugs" according to state and federal regulatory agencies. Any properly accredited hospital can provide these services. However, if cells or tissues are "more-than-minimally manipulated" by laboratory handling or gene engineering, they are considered to be "drugs" and are subject to exacting safety and manufacturing oversight by the FDA. Indeed, FDA-regulated cell therapies are emerging as a positive force in achieving a cure for cancer and alleviating suffering for vexing health problems that have been inadequately addressed by traditional methods.

More than half a century ago, Dr. Fritz Bach, then a faculty member at the SMPH, discovered a means for performing successful bone marrow transplantation. His work led to the first-ever cure of a toddler with an otherwise lethal bone marrow disease in 1968. Bone marrow transplantation is now routinely curing adults and children with cancer. Similarly, two decades ago at UW-Madison, Dr. James Thomson launched the field of modern stem cell regenerative medicine. As these examples show, UW-Madison historically has been a thought leader in transformative discoveries in cell therapies.

A Look to the Future

The next logical step is owning the clinical development of these life-saving cell therapies to benefit people in Wisconsin and beyond. To drive such innovation, academic medical centers must retool as FDA-compliant drug manufacturers, akin to the biotech industry. This is not a straightforward feat, nor is it naturally aligned with the historic expectations of centers of learning and discovery. Few are determined or destined to do so, but the SMPH and UW Health have joined an elite group of centers that are leading the charge in developing advanced cell therapy.

Together, in 2016, the SMPH and UW Health launched the UW Program for Advanced Cell Therapy (PACT). Its mission is to develop and deploy advanced cell therapies for unmet medical needs, including cancer, in children and adults. The PACT's operational model bridges UW-Madison discoveries and FDA-regulated deployment. Through UW Health's pharmaceutical-grade manufacturing capabilities, which are part of the PACT, we can de-risk living-cell technologies on their clinical development pathway to marketing approval while providing our patients access to cutting-edge cell therapies.

Three elements of PACT's future success are ingenuity in discoveries at the SMPH, clinical excellence at UW Health and sustainability of the program. The PACT

upholds the important value of providing patients who are suffering from unmet medical needs with access to safe, FDA-compliant, innovative cell therapies dispensed by our expert clinical scientists.

Our first studies—led by Drs. Inga
Hofmann and Arjang Djamali (PG '03)—
will examine the use of immune cells to
treat life-threatening virus infections in bone
marrow transplant and kidney transplant
recipients, respectively. Additional cell
therapies driven by UW-Madison discoveries
are in the hopper. Many of these technologies
are amenable to traditional pharma-driven
developments, and we see ourselves as an
enabling cog in the Wisconsin entrepreneurial
life sciences ecosystem. An added element
of uniqueness is our ability to develop and
deploy cell technologies that are impactful
and sustainable.

The PACT's vision is that future advanced cell technologies will be affordably dispensed in a distributive justice model—meaning that patients who need it can access it without financial jeopardy. This is where UW-Madison innovation, the Wisconsin Idea and cell therapy development intersect to achieve improved patient outcomes at our academic medical center.



Jacques Galipeau, MDMarilyn and Don Anderson Professor of
Cancer Research and Associate Dean for
Therapeutics Development, SMPH

There's more online! See pact.wisc.edu

I Know YOU

... OR DO I?

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

For the last issue (see below), Mark Stampfl, MD '79, won the prize drawing and will receive a gift from the Wisconsin Medical Alumni Association!



HINT ABOUT PHOTO ABOVE:

He was a big fan of the Green Bay Packers, and his nickname was Corky.

ABOUT LAST ISSUE'S PHOTO:



In the past issue of *Quarterly*, 11 people correctly guessed the identity of JoAnne Selkurt, MD '68. Until her retirement, she was a clinical adjunct professor of pediatrics at the University of Wisconsin School of Medicine and Public Health (SMPH), and she practiced at Gundersen Health System in La Crosse, Wisconsin. There, she served as a preceptor for SMPH medical students on their rotations.

For her dedication, Selkurt earned the SMPH's Distinguished Teaching Award in 1977 and 1978, and the Wisconsin Medical Alumni Association's Sigurd Sivertson Medical Education Award in 2010.

Three of her family members—husband W.B. (Brad) Martin, MD '69 (PG '73), and daughters Julie Martin, MD '01, and Elizabeth (Beth) Bjerke, PhD—responded to the photo contest. Julie Martin wrote, "It's so fun to have seen both my parents in this section of the magazine!" (Brad Martin was featured in the photo contest in *Quarterly*, Volume 18, Number 2, 2016, in a Class of 1969 hockey team photo.)

Bjerke stated, "My mother always enjoyed working with all of the medical

students throughout the years she mentored them at the Whitehall Clinic."

Among those students was Sonia Valdivia, MD '88, who shared, "I did a fourth-year pediatric rotation in Whitehall in 1987. Dr. Selkurt was very involved in her community, while she maintained a pediatric practice and raised a family. She was a great role model and mentor."

Robert F. Lemanske, Jr., MD '75 (PG '80), noted, "When I was a pediatric resident doing a rotation at Gundersen Clinic, she invited some medical students and me to her home for dinner. She has touched many lives in her career, including my own."

Sharing additional praise, Merlin D. Marquardt, MD '71, exclaimed, "Dr. Selkurt is one of the most wonderful physicians to have graduated from the UW School of Medicine and Public Health!"

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 750 Highland Ave. Madison, WI 53705



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