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LEADERSHIP MESSAGE

Welcoming New Leadership

As MCW continues to grow and expand across our missions of education, research, clinical care and community engagement, our leaders remain committed to maintaining the inherent values of our institution in the face of ongoing changes in the healthcare environment. To aid us in this critical pursuit, in the past few months we welcomed three new leaders who bring significant passion and expertise to our team.

Gregory M. Wesley joined us in late 2016 as senior vice president, strategic alliances and business development. A former member of the MCW board of trustees, Mr. Wesley acts as a key strategic leader, ambassador and advisor for MCW, and is responsible for ensuring the execution of MCW's strategic initiatives through established and emerging partnerships. Mr. Wesley will deepen, nurture and create relationships with strategic partners, burgeoning enterprises and alliances, and others that support and create opportunities for MCW's long-term growth in Milwaukee, Madison and communities partnered with our regional campuses. His significant involvement with local and regional businesses, governments, civic organizations and philanthropic groups positions him well as a leader to grow and sustain MCW's critical partnerships and strategic initiatives.

In early January, we welcomed our inaugural chief diversity and inclusion officer, C. Greer Jordan, MBA, PhD, who provides strategic leadership including vision, management and strategic planning for institution-wide diversity and inclusion initiatives, and is responsible for developing a broad-reaching approach to enhancing the excellence of senior leadership and the entire workforce relating to diversity and inclusion. *See more information on Dr. Jordan on page 7.*

Also in January, Barclay Ferguson assumed the role of chief financial officer. Mr. Ferguson most recently served as chief financial officer at Integrated Health Network, and has more than 20 years of experience growing enterprise value for large public and private healthcare and health insurance organizations.

I am confident that these new leaders, along with the many talented individuals already on the MCW team, will continue to foster a strong institutional culture while also helping us to build for a successful and transformational future – in which we hope you will play a part!

I encourage you to share your input online or by contacting our editor at MCWmagazine@mcw.edu.

John R. Raymond, Sr., MD
 President and Chief Executive Officer

“I am confident that these new leaders, along with the many talented individuals already on the MCW team, will continue to foster a strong institutional culture...”



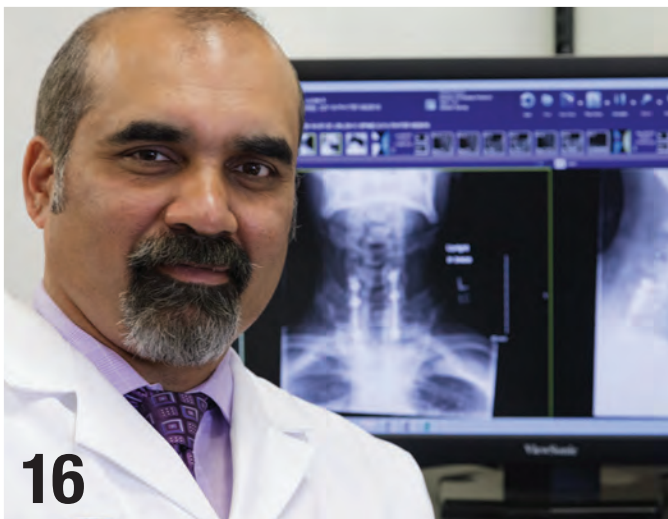
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ON THE COVER: Lucas Lindner, paralyzed in an automobile accident in May 2016, has regained some fine motor actions of his arms, hands and fingers following a clinical trial involving surgery to inject engineered stem cells into his spinal cord, performed by Shekar N. Kurpad, MD, FEL '01, PhD. The trial is based on more than 15 years of Dr. Kurpad's research into cellular transplantation for spinal cord injury. **PHOTO CREDIT:** Mark Battrell.



From Grad Students to Faculty Members



Photo courtesy of Jay Westhauser

(l-r) Alison Kriegel, PhD '08, and Caitlin O'Meara, PhD '11, earned doctoral degrees from MCW's Graduate School and later joined the faculty in MCW's department of physiology.

Medical College of Wisconsin assistant professor of physiology Caitlin O'Meara, PhD '11, first roamed the institution's halls as an undergraduate student interested in zoology, botany and cell biology. "A family friend had been in MCW's Summer Program for Undergraduate Research (SPUR) and had a wonderful experience," Dr. O'Meara says. "With my family in nearby Wauwatosa, it was a natural opportunity for me to explore biomedical research."

Alison Kriegel, PhD '08, MCW assistant professor of physiology, found her connection at a similar point in her academic career – when an undergraduate immunology professor told her about a major genetics grant for which MCW was recruiting staff to implement. "At the interview, I was absolutely fascinated by the opportunity to apply genomic analysis to physiological phenotypes, and I was hired in a support staff role," Dr. Kriegel shares.

Teresa Patitucci, PhD '16, MCW assistant professor of anatomy,

Three Former Graduate Students Find a Home Within MCW's Faculty

worked as a technician in MCW's department of pediatrics (infectious disease).

Drs. O'Meara, Kriegel and Patitucci all later chose to attend MCW's Graduate School and earned their respective doctoral degrees. "I really liked the culture at

MCW, and the interdisciplinary program was a great fit for me as I was still deciding what to specialize in," Dr. Patitucci notes.

Drs. O'Meara and Kriegel each studied physiology, but with distinct research interests. Dr. O'Meara's advisor was personalized medicine pioneer Howard Jacob, PhD (who served on MCW's faculty from 1996-2016). "I focused on the genetic mapping of kidney disease and really enjoyed learning with the other graduate students, especially our tightly-knit cohort in physiology," Dr. O'Meara says. "We worked together well and challenged each other constantly"

After working as a staff member with Andrew Greene, PhD, the Dr. Robert D. and Dr. Patricia E. Kern Professor in Biotechnology and Bioengineering, and professor of physiology at MCW, Dr.



ALUMNI ASSOCIATION PRESIDENT'S MESSAGE



Photo courtesy of Emily Voss

MCW Graduate School alumna Teresa Patitucci, PhD '16, applied her anatomy skills and love of teaching to setting up and managing a new anatomy lab at MCW-Central Wisconsin.

Motivation for Discovery

Dr. Teresa Patitucci expected an emotional experience when she attended her first Spinal Muscular Atrophy Conference during graduate school. Organized by "Cure Spinal Muscular Atrophy," a non-profit foundation focused on funding research and supporting patients and families, this annual conference is the largest such event in the world for the disease, bringing together physicians and other healthcare providers, researchers and families.

"One part of the conference is for researchers and physicians to discuss and share the latest scientific findings. A second part is for families to network with each other and learn about new developments, such as new healthcare products and clinical trials," Dr. Patitucci says. While these pieces operate in parallel, the communities intersect in the evenings and during other activities.

"I was able to meet families and hear their stories. In just a few days, the research I was doing seemed so much more valuable, as I was able to get to know the people that my work was intended to help," she recalls.

"Whenever I ran into a particularly challenging obstacle in my science, I would think of the people I met and find the motivation to continue to push myself and find a solution."

Kriegel knew that she wanted him as her Graduate School advisor. "One thing I admire about Dr. Greene is his openness to new ideas and approaches, including those that I wanted to explore in cardiovascular physiology," Dr. Kriegel comments. "I also enjoyed the high-level research environment in which I was supported but also expected to be on the front edge of the field."

Dr. Patitucci's primary focus was her research into the role that structural brain cells play in spinal muscular atrophy, which she undertook with advisor Allison Ebert, PhD, assistant professor of cell biology, neurobiology and anatomy. Dr. Patitucci also worked with Todd Hoagland, PhD, professor of cell biology, neurobiology and anatomy, to train in anatomy.

"After I had proven my organization and time management skills, Dr. Ebert trusted me to meet my research obligations while learning anatomy and later serving as a teaching assistant for Dr. Hoagland," Dr. Patitucci recalls. "Many of my classmates joined MCW's department

» please see pages 26-27 for more

MARIE L. NAKATA, MD '89, GME '93

In 1996, the MCW/Marquette Alumni Association was at a crossroads. Its board of directors spent a great deal of time thinking about and discussing the organization's future. And, in the end, two pivotal decisions were made that allowed the Alumni Association to transition into an organization of greater inclusivity.

Those decisions – eliminate dues and welcome alumni of ALL programs into the Association – redefined the scope and breadth of our charge as an organization. At the time, the board hoped to encourage more people to participate in and take advantage of alumni programs. Now, nearly two decades later, our Alumni Association finds itself at a similar turning point.



With the tremendous growth occurring at MCW, the Alumni Association has a similar – and great – opportunity to advance in its mission. While we are in the initial stages of constructing a multi-year strategic plan, we have committed to initiate one major undertaking in early spring 2017.

In order to increase alumni engagement, we must design programming that is more aligned with our diverse population. One size does not fit all!

Thus, the Alumni Association has asked Ron Gerrits, PhD '99, to serve as chair of the Graduate School Alumni Engagement Taskforce. He, alongside board members Beth B. Krippendorf, PhD '93, and Jessica M. Olson, PhD '15, will assemble a workgroup to devise a plan to increase the Alumni Association's offerings to Graduate School alumni.

We must continue to serve all alumni – but also to better serve all alumni. ■

GRADUATE SCHOOL ALUMNI

WHAT DO YOU WANT FROM YOUR ALUMNI ASSOCIATION?

EMAIL US AT ALUMNI@MCW.EDU

STAT REPORT



Photo courtesy of Gary Porter

Preparing Students for Medical/Grad School



Photo courtesy of Gary Porter

In December 2016, MCW hosted more than 150 Milwaukee-area middle/high school students who learned about StEP-UP (Student Enrichment Program for Underrepresented Professions in Medicine) – a new pipeline program in which they will be able to participate.

StEP-UP, supported by funding from the Advancing a Healthier Wisconsin Endowment, helps address the gap between the diversity of the medical workforce that MCW educates and the diversity of the populations cared for by this workforce.

Starting in fall 2017, MCW will host quarterly weekend programs for 50-65 StEP-UP middle and high school partici-

pants. In addition to a science enrichment curriculum, the Program will address practical skills, such as test-taking strategies and how to pursue a path to medical or graduate school. A goal of StEP-UP is to give students the academic preparation, mentorship and other tools they need to be strong candidates for medical or graduate school.

During the December visit, students got a taste of what StEP-UP will offer. Five 20-minute sessions led by MCW medical and graduate students covered such topics as brain anatomy, auscultation, vitals, bedside manner and ultrasound – followed by a panel discussion. ■



New Family Medicine Residency Accredited

The Medical College of Wisconsin and Froedtert Health are scheduled to launch a new family medicine residency program this summer at Froedtert and the Medical College of Wisconsin Community Memorial Hospital in the Milwaukee area. The goal is to train more resident physicians who will elect to stay in Wisconsin to practice and meet the rising demand for family medicine expertise.

The new program will train six family medicine residents per year over a three-year period – for a total of 18 new residents in place once the program is up to full speed. MCW already has begun recruiting, with a planned start date for the residency program of July 1, 2017. As background, there is a current deficit of nearly 200 family medicine/primary care physicians in Wisconsin and a projected deficit by 2035 of about 900 to 3,800 – mostly in primary care and psychiatry.

While the shortage of family medicine doctors is greatest in Wisconsin's rural areas, it also is a problem in Milwaukee and other cities throughout the state. Increasing residency positions is a proven strategy for recruiting doctors to stay long-term, according to Ken Simons, MD, senior associate dean for graduate medical education and accreditation at MCW and executive director of Medical College of Wisconsin Affiliated Hospitals. "Physicians who complete residency in Wisconsin have a better than 70 percent chance of remaining in the region to practice medicine," Dr. Simons shares.

"If even one of the residents from this program decides to stay and practice in Wisconsin, MCW will have greatly improved access to family medicine/primary care within a decade," adds Joseph E. Kerschner, MD '90, FEL '98, executive vice president and dean, School of Medicine. ■

Chief Diversity and Inclusion Officer Joins MCW

Greer Jordan, MBA, PhD, joined MCW as chief diversity and inclusion officer on January 3, 2017. Most recently, Dr. Jordan served as associate vice chancellor, diversity and inclusion, for the University of Massachusetts Medical School and UMass Memorial Health Care, and was assistant professor of nursing in the Graduate School of Nursing.



In her new role at MCW, Dr. Jordan will provide strategic leadership including vision, management and strategic planning for institution-wide diversity and inclusion initiatives, and will be responsible for developing a broad-reaching approach to enhancing the excellence of senior leadership and the entire workforce relating to diversity and inclusion.

More specifically, Dr. Jordan will provide strategic direction in recruiting, attracting and retaining diverse faculty, physicians, students and staff, identify areas of opportunity, collaborate with departments, programs and constituencies, and serve as a liaison between MCW and individuals with similar roles – both locally and nationally – to share best practices and innovations related to diversity and inclusion.

Prior to her career in academia, Dr. Jordan worked in the automotive industry for nearly 20 years – in engineering and management positions at Ford Motor Company and General Motors. The breadth of her experiences gives Dr. Jordan a deep understanding of organizational culture, academia and the mission of an academic medical center. ■



Drs. Ann Rosenthal and Lawrence Ryan authored a review article in the June 2016 issue of the New England Journal of Medicine which reflects more than 40 years of research on Calcium Pyrophosphate Deposition disease.

Photo courtesy of Gary Porter

THE LAWRENCE M. RYAN, MD, ENDOWED EDUCATION FUND IN RHEUMATOLOGY

has been established to permanently honor Dr. Ryan's contributions. Through this endowed fund, donors will help residents, fellows and medical students travel to rheumatology conferences, sponsor external expert speakers to discuss clinical and research topics, and support other educational opportunities that enhance the vitality of MCW's division of rheumatology. For more information, please contact Angela Nelson, senior director of development and alumni giving, at (414) 955-4708 or annelson@mcw.edu.

For a disease that was discovered more than 50 years ago, Calcium Pyrophosphate Deposition (CPPD) disease, a form of arthritis caused by calcium pyrophosphate crystals, remains relatively misunderstood and underdiagnosed.

As major contributors to our understanding of this disease, Ann Rosenthal, MD, FEL '89, Will & Cava Ross Professor of Medicine, chief of rheumatology and director of the Medical College of Wisconsin Arthritis Institute, and Lawrence Ryan, MD, GME '75, FEL '77, professor emeritus of medicine (rheumatology), were invited to author a review article in the June 2016 issue of the *New England Journal of Medicine* which reflects more than 40 years of research

on CPPD disease conducted at the Medical College of Wisconsin.

"Why do we study CPPD disease and arthritis in general? As people live longer, healthier lives, rates of CPPD disease and arthritis will rise and become even greater threats to independence," Dr. Ryan says. "Plus, these maladies hurt!"

One contributing factor to CPPD disease's lack of exposure is the thorny issue of its name. Since it was first described in 1962, the disease has had

Raising Awareness of an Underdiagnosed Disease

a number of nomenclature changes, including the popular name of “pseudo-gout,” which was coined due to clinical similarity of one form of CPPD disease to gout. It subsequently was noted by Daniel McCarty, MD, former chair of medicine at MCW, that the crystals were composed of calcium pyrophosphate rather than uric acid. In 2011, experts from the European League Against Rheumatism recommended that specialists use the term “CPPD disease” and categorized clinical involvement as either acute or chronic arthritis.

“Looking back, the naming issue makes sense from a historical progression, but it also has been a major problem in the field,” Dr. Rosenthal shares. “We have to agree on uniform naming criteria so that we are all talking about the same thing.”

In the early stages of this disease, calcium pyrophosphate crystals develop inside cartilage. Once present, these crystals begin to damage cartilage tissue by inducing inflammation, along with other harmful changes. Untreated CPPD disease may lead to severe, painful attacks or chronic pain and inflammation. Over time, joints may degenerate or break down, resulting in long-term disability.

The crystals themselves are the key to diagnosis, and researchers have shown that their presence can be most accurately assessed in the fluid inside the arthritic joint, known as synovial fluid.

“Identifying these crystals with a microscope requires patience and experience, and our field needs to get better at it,” Dr. Rosenthal remarks.

“It feels like a completely different world in medicine and rheumatology than when I started, and it has been incredible to watch how these fields have transformed over time.”

– Dr. Lawrence M. Ryan

“Our best estimate is that between four and seven percent of adults in the US and Europe have CPPD disease, so it appears to be a relatively common disease that we are not consistently diagnosing,” Dr. Ryan adds.

Once diagnosed, treatment of the acute form of CPPD disease focuses on reducing inflammation until symptoms stop – which can be a matter of weeks or months. Symptoms are particularly persistent in the chronic form, and strategies to reduce inflammation and pain can improve quality of life, but they also must be balanced against side effects. In contrast to gout, which has long-term therapies to reduce urate crystal formation, no drug has yet been proven to remove calcium

pyrophosphate crystals or reduce their formation in CPPD disease.

“We’re looking for better treatments,” Dr. Rosenthal comments. “Rather than targeting systemic inflammation, we’d like to focus on preventing or dissolving the crystals.”

In addition to committing themselves to uncovering new potential treatments for CPPD disease and other forms of arthritis, Drs. Ryan and Rosenthal have dedicated their careers to treating patients and mentoring promising rheumatologists. After blazing a trail as MCW’s first rheumatology fellow and Wisconsin’s first rheumatology trainee, Dr. Ryan served as chief of rheumatology at MCW for more than 20 years – receiving the institution’s highest honor in 1999: the *Distinguished Service Award*.

“It feels like a completely different world in medicine and rheumatology

than when I started, and it has been incredible to watch how these fields have transformed over time,” Dr. Ryan states. When he had the opportunity to speak at the Commencement Ceremony for the MCW Medical School Class of 1999, he asked the graduates to recall all of the family members, friends and other mentors who had helped them along the way. Dr. Ryan recommended that the graduates return these many favors by assisting other promising physicians and scientists. “While we both feel passionately about CPPD disease, I am most grateful for Dr. Ryan’s dedication as a mentor, colleague and friend,” Dr. Rosenthal says. “He has had a huge influence on my career.”

Another pivotal experience came when Dr. Rosenthal was selected in 2013 to participate in the Hedwig van Ameringen Executive Leadership in Academic Medicine® (ELAM) program, run by Drexel University College of Medicine, which focuses on helping senior women faculty members at academic medical centers enhance their leadership skills. “It was a great opportunity to gain further education into the nuts and bolts of how academic medical centers operate,” Dr. Rosenthal shares. “The best part was developing a new network of aspirational women leaders across the nation.”

Dr. Rosenthal is poised to continue what Dr. Ryan and his contemporaries began more than 40 years ago by treating arthritis in all its forms – while also leading research into better therapies for CPPD disease. “With age being the biggest risk factor for CPPD disease, and an aging population on the horizon, this research is more important than ever,” Dr. Rosenthal notes. ■

– GREG CALHOUN

Preserving Fertility



Bridging Oncology and Reproductive Medicine to Help Preserve Fertility Before and After Cancer Treatment

The pathway to parenthood often contains more bumps or routes than anticipated. The Froedtert & the Medical College of Wisconsin Reproductive Medicine Center, however, as one of the few fertility programs in the region offering complete onsite fertility evaluation and treatment services for men and women, can make that journey a bit smoother. Its physicians are reproductive endocrinology and infertility specialists and urologists specifically trained in female- and male-factor fertility concerns.

The team consists of three infertility experts, a urologist, a genetics counselor, two embryologists, two andrologists (who treat the male reproductive system), specialized nurses and support staff.

A burgeoning area of research and interest is oncofertility, a subfield that bridges oncology and reproductive medicine to explore and expand options for the reproductive future of cancer survivors. While chemotherapy, radiation and surgery can effectively treat cancer, these treatments also may affect a woman's and man's fertility. The F&MCW Reproductive Medicine Center is at the forefront of this new area.

"My goal when talking and meeting with patients recently diagnosed with cancer is to inform and educate them," says Katherine (Kate) Schoyer, MD, assistant professor of obstetrics and gynecology at MCW. "There is a benefit to knowing one's options and hearing that these treatments don't have to end hopes of having a family."

The process begins quickly with collaboration at the Center. Once a patient is diagnosed, the doctors immediately work with oncologists at Froedtert Hospital and Children's Hospital of Wisconsin to determine if the patient is well enough and cleared physically to undergo fertility treatment, as well as the patient's timeframe.

"The Center is staffed seven days a week, and we make every effort to accom-

modate schedules to get the treatments done during the patient's window of opportunity," notes Dr. Schoyer. "The team truly understands that time is of the essence, and mobilizes to do whatever is needed."

Today, those with cancer and other diseases have many options to preserve fertility – before and after treatment. New techniques are providing hope for preserving or restoring fertility, and the team works together to determine the best way to treat each patient's unique situation. "Our Center emphasizes the use of egg, sperm and embryo freezing as the most reliable means of preserving fertility. We also recognize and review with our patients a multitude of other options for having a family," Dr. Schoyer shares.

"Our strongest asset is collaboration. Patients get the opinion of not one, but multiple experts who will recommend the safest, most effective and cost-efficient means of having a family," adds Dr. Schoyer. "Our Center is an example of open dialogue and partnership across campuses."

One patient, Virginia Kashian, was diagnosed with breast cancer in early spring 2016.

"We were planning to start trying to become pregnant again in May. The timing was perfect for a sibling to our four-year-old son and for my

job," says Kashian. "A diagnosis of breast cancer, however, was not in our plan."

After meeting with the staff at the Reproductive Medicine Center, Kashian felt hopeful for the first time after her diagnosis. "What stuck with me after our meeting was Dr. Schoyer reassuring us that 'whatever choice you make is right for you.' It took the pressure off, and reminded me that love and hope will be at the center of this decision."

Kashian opted for egg retrieval, and, as a result, now has 16 cryopreserved embryos stored at the Center.

"Seeing the positive results and having the team cheer each time a viable egg lit up on the screen was a happy thing to look forward to," Kashian shares. "It took my mind off going through the cancer treatment plan. I am pleased with my decision and experience and look to the future with hope, thanks to all the staff at the Center."

"Together, the whole team is pulling for success for every patient," says Dr. Schoyer. "We all truly care, and worry about each patient. We are there every step of the way and celebrate successes together. The pathway to parenthood is not the same for every person. It's up to us to give patients options and help them choose their route. We give them hope." ■

– HOLLY BOTSFORD

"We were planning to start trying to become pregnant again in May. The timing was perfect for a sibling to our four-year-old son and for my job. A diagnosis of breast cancer, however, was not in our plan."

– Virginia Kashian, patient



Dalums Support Research, Student Experiences

Philanthropy, prayer and pleasant happenstance are deeply rooted in the sunken rose garden at the lake home of Tom and Maripat Dalum in Hartland, Wis. It is there the Dalums, longtime supporters of the Medical College of Wisconsin (MCW), have continued to nurture their mutual philosophy of giving back by offering the use of their garden for charitable events.

"I think it was part of our Christian upbringing, that you should be thankful for what you have and use your talents and give back in ways that you can," says Maripat.

"Our philosophy, which we've discussed with our children, is 'learn, earn and return,' and they've started giving, too."

The Dalums' ability to match financial capacity with their philanthropic philosophy took many years. Maripat chose to forgo her career as an occupational therapist to raise their children – Joe, Marikris, Amy and Judie – on a tight budget. At the same time, she did a lot of volunteering for various organizations.

In 1964, Tom began working for Dalum's Utility Equipment Company, the business his father, CE "Pete" Dalum, started in 1955 with just four employees in a bedroom office at the family home. After his father died in 1979, Tom became president and CEO, and the company expanded. By the time it was sold, Tom had started another business of his own and bought additional companies.

The use of a rose garden in their philanthropic endeavors came in a roundabout way and with plenty of praying from Maripat. An arthritic knee convinced her that they needed to move from their two-story to a house with bedrooms on the main level, and she suggested they try to live on a lake. Their search for a lake home ultimately stretched to two years. "I started saying a prayer: Lord, help us to find the place that's right for us," says Maripat, "and when it's right, I know I shouldn't ask for a sign, but could there be a rose somewhere on the property?"

No rose emerged until Maripat revisited a lake property she thought they'd lost to another bidder. There, to her surprise, was a rose garden previously hidden by snow. When the deal with the other bidders fell through, Maripat and

"Our philosophy, which we've discussed with our children, is 'learn, earn and return,' and they've started giving, too."

– Maripat Dalum

Tom had their lake property. There, they've held events to benefit juvenile diabetes research and between 15 and 20 charitable organizations.

The Dalums' community philanthropy runs side-by-side with their support of student financial aid, cancer research and endowed research funds for Parkinson's disease and arthritis at MCW.

Tom and Maripat also provide annual funding for an MCW medical student to attend a week at the Summer Institute for Medical Students program at the Betty Ford Center. The summer of 2016's participant, Chelsea Kiehl (Class of 2019), was immersed in the daily life of patients in treatment at the Center in Rancho Mirage, California.

The "patient buddy" assigned to Chelsea was a 21-year-old college graduate. "I'd never have thought that my buddy had a heroin addiction, upon first impression," she shares. "This young adult was so bright and talented. The experience opened my eyes to the types of people who can be fighting with addiction. I can never thank the Dalums enough for the opportunity to participate in such a life-changing experience."

As part of the program, Chelsea met with the Dalums to report on her experience and "absolutely loved meeting them."

Tom notes, "I think the students come back with an understanding that there are people who really can't control addiction, that it's a disease, that they don't know how to cope, that people were genetically born different."

That perspective on addiction led to Tom and Maripat's creation in 2015 of the Dalum Scholar in Addiction Research, a program that empowers a bright MCW student in the neurosciences to explore innovative approaches to addiction treatment.

The Dalums believe that their investment in MCW, especially endowments, provide a long-lasting benefit of research and education unique to the institution. "We've been so blessed," says Maripat, "and whatever talents and gifts God gives you should be shared." ■ – JOHN BURLINGHAM

Photo courtesy of Jay Westhauser



Tom and Maripat Dalum provided funding for medical student Chelsea Kiehl to attend a week at the 2016 Summer Institute for Medical Students program at the Betty Ford Center.

CHELSEA KIEHL, MCW CLASS OF 2019

Summer Institute for Medical Students participant at the Betty Ford Center

Chelsea Kiehl, an Army Health Professions Scholarship Program recipient, is an Army reservist. Commissioned as a 2nd Lieutenant in autumn 2015, Chelsea will switch to active duty once her residency begins. Her interest in military psychiatry was her motivation for applying to this program.

Residency preference: Walter Reed National Military Medical Center in Bethesda, MD.

Potential specialties: pediatric, adolescent or adult psychiatry and perhaps family medicine.



For more, visit mcw.edu/thedalums

SUMMER INSTITUTE FOR MEDICAL STUDENTS (SIMS)

Chelsea Kiehl shares SIMS highlights:

- lectures by recovered addicts previously involved in the program
- group therapy with in-patient women (ages 22-75) with addictions spanning many different substances
- observations of businessmen in treatment discussing their addiction and recovery with medical professionals
- children and family program "which hit close to home for me as someone who is exploring her role as a pediatrician in addiction medicine"
- interacting with other medical students who share a passion for addiction medicine and learning from their experiences



Warrior Partnership

Benefits Veterans, Medical Students Alike

One afternoon in 2011, three MCW second-year medical students, two veterans and a faculty member met and hashed out a plan to launch the Warrior Partnership, a program they hoped would benefit students and veterans alike. Little did they know how much each group would eventually gain from this effort.

The Warrior Partnership, led by Michael McBride, MD '92, FEL '97, assistant professor of psychiatry and behavioral medicine at MCW, brings veterans and medical students together for mutual benefit: the veterans open up about their experiences and leverage them to teach the students how to care for other veterans, and the students learn how to integrate the unique needs of this population into their care. Now in its fifth year, the partnership has grown from several Vietnam veteran volunteers to about 25 volunteers who served in World War II, Korea, Vietnam, Operation Desert Storm, Operation Iraqi Freedom and Afghanistan.

The volunteer veterans visit MCW's

Milwaukee campus once a semester to meet with students during four sessions. At each session, the vets discuss their experience during pre-deployment (life before joining the service), their deployment and post-deployment (what it is like to return home to a new world). Students share their medical school and training experiences. Through this dialogue, students become comfortable communicating and interacting with veterans and learning about their unique healthcare needs. The veterans learn how to be more open and comfortable talking to healthcare providers, and help the students expand their knowledge.

"Through this group, my eyes were opened to the fact that the war is not the biggest challenge in life faced by vets," says second-year student Chelsea Kiehl – and one of the Warrior Partnership's current student leaders. "Most of their difficulties and hardships started when they returned home. Whether it be addiction, depression or post-traumatic stress disorder, for most of our veterans in the pro-

gram, the effects of combat are amplified in the civilian life rather than treated and supported sufficiently."

An unanticipated bonus from the program is the strong bond formed between the veterans and the students who participate.

"Not only has this experience provided me with invaluable information as a future physician, but the group also provided me with a second family," adds Kiehl, who is attending MCW on a military scholarship. "The first veteran I was paired with in my group was my first salute at my commissioning ceremony, and has become a role model and mentor. My medical school experience would be drastically different without the men and women who give their time to the Warrior Partnership."

Dr. McBride, a psychiatrist at the Clement J. Zablocki VA Medical Center and commander in the United States Navy, was part of the original group that met to plan the Warrior Partnership. Another member of that group was Vietnam veteran Michael Orban, who says he had specific reasons for wanting to start a group like this in Milwaukee.





Photos courtesy of Jeff Zmania

MCW-Milwaukee medical students meet each semester with veterans who share their experiences, which helps the students better understand the unique healthcare needs of veterans.

“I had worked with veterans for about 15 years before, and many told me they weren’t able to communicate or connect with their physicians,” Orban shares. “We wanted to come up with a way to help veterans play a role in their healthcare and help them feel more comfortable talking with physicians.”

Robert Lyons served with the US Army infantry in Afghanistan and currently works at Dryhootch, a coffee shop that offers veterans free access to peer mentor support and information about available healthcare and support. He learned about the Partnership from other veterans who come to Dryhootch, and says that after having participated in the program for two semesters, he plans to continue returning to MCW.

“Veterans can be interesting and unique, and our culture and experiences can be difficult to relate to, and it is important for upcoming physicians to understand this,” Lyons says. “The Warrior Partnership is a great opportunity for me to share my experiences and hopefully make another veteran’s healthcare easier down the road.”

Monica Stout, MD ‘15, a family practice resident in the Fox Valley Residency program, was one of the

three original MCW students who helped launch the Warrior Partnership; she says the Partnership helped her to better understand how to incorporate the unique experiences of the veterans into their care.

“Every patient comes to us with a story and narrative, and we need to let them tell it,” Dr. Stout notes. “This is especially true with veterans who suffer from PTSD and don’t like to admit anything is wrong. We need to let them open up and share through their narrative instead of through the regular

medical assessment.”

Nicholas Jelacic, a second-year MCW medical student and one of the three current student leaders, shares that the experience has been very educational for him as well.

“One of the things people rarely learn in high school and college courses are the problems veterans face when they return home and try to assimilate back into society,” says Jelacic, who attends MCW on a military scholarship. “The Warrior Partnership allows medical students to ask questions they may be too scared to ask of veterans they don’t know. This allows us to identify aspects of medical care that we can improve on to make the veteran medical experience more enjoyable and worthwhile.”

Other Warrior Partnership leaders include Gregory Burek, MD, a third-year psychiatry resident and Marine Corps infantry veteran, and Gretchen Floan, a second-year medical student. Active and retired military comprise about 10 percent of the nation’s adult population, and more than 65 percent of American physicians receive at least some of their professional training in Veterans Administration (VA) hospitals. Most physicians will provide care for veterans and their families at some point during their professional careers. ■ – TONY BRAZA

Commitment Starts at the Top

MCW’s commitment to veterans starts at the top. Despite his rigorous and hectic schedule, John R. Raymond, Sr., MD, MCW president and CEO and a practicing nephrologist, spends up to one month each summer at the Zablocki VA Medical Center seeing patients with chronic renal failure, providing consultations, assisting with dialysis and tending to acutely ill patients.

In addition to supporting the Warrior Partnership and Dryhootch, the Medical College of Wisconsin has a robust commitment to helping veterans through patient care and research. MCW has 112 faculty, 59 staff and three post-doctoral fellows from 13 departments and the Office of Research working at the Zablocki VA. Approximately \$9 million in research is conducted by MCW faculty at the VA, and all of the physicians there are MCW faculty.

(l-r) The Warrior Partnership is led by Dr. Michael McBride, assistant professor of psychiatry and behavioral medicine. Medical students listen to a veteran discuss his experiences and healthcare needs.



For more, visit mcw.edu/warriorpartnership



“ If your clinical work goes well, it makes you feel good on your drive home from the hospital. But when your research goes well, it makes you feel good from one Christmas to the next.

– Dr. Shekar N. Kurpad



“We’re in the Hope Business”

Clinical Trials: Translating Research to Benefit Patients

By Maureen Remmel • Sara L. Wilkins

Twenty-two-year-old Lucas Lindner of Eden, Wis., was on a routine trip to the grocery store one Sunday morning in May 2016 when a deer unexpectedly jumped into the path of his car, causing a serious accident. In mere minutes, Lindner went from having an active life as a technical college student and manager for McDonald’s to total paralysis below the site of his C5-C6 cervical spinal cord injury.

Flight for Life airlifted Lindner to Froedtert Hospital, where, upon awaking several days later, he was able only to shrug his shoulders, use his biceps in a crude fashion, wriggle his wrists and bring his hands to his mouth, according to his surgeon, Shekar N. Kurpad, MD, FEL ’01, PhD, interim chair and professor of neurosurgery at the Medical College of Wisconsin (MCW), and director of the Froedtert & the Medical College of Wisconsin’s Spinal Cord Injury Center. Lindner could not master fine motor skills such as writing, holding small items, buttoning clothes, eating or using a computer keyboard. He was despondent, noting that “everything I was working on in my life was lost.”

Dr. Kurpad, however, had reason to offer hope. Lindner was a candidate for a new clinical trial based on 15 years of Dr. Kurpad’s research into cellular transplantation for spinal cord injury. The timing was ideal, as the surgery – injection of stem cells (cells with the potential to

develop into many different types of cells in the body) into the spinal cord – needed to be conducted within 30 days of the injury (once the inflammation had lessened). Lindner was to be the first patient in this exciting clinical trial undertaken by Dr. Kurpad and his team of Froedtert & the Medical College of Wisconsin healthcare providers, and built on a solid foundation of MCW’s bench research. But would it restore Lindner’s ability to live a more independent life?

The Power of Clinical Research

The National Institutes of Health (NIH) defines a clinical trial as a “research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of those interventions on health-related biomedical or behavioral outcomes.”

Academic medical centers such as MCW conduct large-scale, country-wide, multi-institutional studies as well as smaller specialized, earlier phase and complex trials. Every year, MCW researchers and physician scientists conduct more than 1,000 cancer and non-cancer clinical trials at partner hospital and clinical locations across southeast Wisconsin. MCW’s halls are filled with faculty and staff committed to serving as an indispensable source for life-changing knowledge and medical

advancement. Curiosity pushes them to investigate and seek answers for those important, yet elusive, scientific and medical questions.

“As we come across newer diseases or gain new understanding of how disease processes work, we want to test if our understanding is correct and determine what would work in treating or curing that condition. A clinical trial is a great way to answer those important questions,” says Amit Gode, MD, MPH, administrative director of the MCW Clinical Trials Office, which provides centralized clinical research resources for the conducting of clinical trials in a safe, efficient, cost-effective and compliant manner.

Types of Clinical Trials

There are two primary types of clinical trials: interventional and observational. Interventional clinical trials test the safety and effectiveness of a drug, therapy or investigational treatment. Observational clinical trials consist of the observation and monitoring of participants and their health over a period of time. This type of trial can provide important data to advance the understanding of a disease and potential ways to treat it. In addition, healthy participants are needed for clinical trials so researchers can compare their study results to the results of people with the disease or illness being studied.

Before a clinical trial can begin, the principal investigator (PI) must set clear



Three-year-old Joel Chmielewski (pictured here with his mother, Kay) has been participating in a clinical trial that adds two additional medications to his conventional leukemia therapy. Diagnosed at 16 months, Joel is in remission and completing treatment to prevent the cancer's recurrence. Photo courtesy of Jay Westhauser

Philanthropy Drives Search For New Treatments

The Triumph Fund, established by the family of the late John Hovel, raises funds to support training, education and research projects for the MCW Clinical Trials Office. Since 2013, the family has raised approximately \$165,000. Recently, their fundraising efforts supported a clinical trial by Meena Bedi, MD, GME '13, to study sarcoma, a type of cancer that grows in connective tissues.

guidelines for the clinical trial protocol. She/he must identify the question or aim of the research, why it is important or relevant, and what research is already available to help answer the question or aim. In addition, timeframes should be established, along with indicators for success. A rigorous and clearly defined patient safety plan also is included in the protocol.

Other key components of the protocol include background on the condition and the PI's hypothesis; an exact proposal of the trial; quantifiable data and detailed explanations of the risks associated with participation; details on how data will be collected and stored; and overall safety information regarding the treatment or procedure.

Clinical Trial Participation

Clinical trials vary in size and scope, involving a few patients to a few thousand. Clinical trials can be conducted locally, regionally and even globally, and last several months to several years. Each trial has eligibility criteria as well as exclusion criteria for participation. This rigorous set of criteria is not designed to create barriers to participation, but rather to ensure that the scientific questions posed are accurately answered. Typically, the more serious or well-known the disease, the greater the participation rate. In addition, individuals who may have exhausted their standard clinical options may turn to clinical trials as a possibility for treatment.

Prior to participation, patients or volunteers are informed of their rights and risks, as well as assured that their privacy is protected. Known as "Informed Consent," this is an exhaustive process to

provide transparency and education to participants. Clinical trial participants can withdraw their participation at any time throughout the trial.

Clinical Trial Funding

Clinical trials are funded by many sources including grants from the federal government (such as the NIH, Department of Defense and Department of Veterans Affairs), private organizations and individual philanthropy, or sponsored by industry – such as pharmaceutical or medical device companies. At MCW, additional clinical trial funding may be provided by the institution itself, the Advancing a Healthier Wisconsin Endowment, donors or the Clinical & Translational Science Institute of Southeast Wisconsin (CTSI).

The Role of the IRB

Institutional Review Boards (IRBs) are institutions that work with investigators to protect the rights, welfare and privacy of individuals who participate in clinical trials; IRBs also ensure researchers are behaving ethically and with good scientific principles. The IRB must thoroughly review and approve each clinical trial and its protocol, considering necessity, ethics and patient privacy before the trial can begin. All IRBs must follow federal guidelines and respective state laws in their review of clinical trials. Members of IRBs can include researchers, physicians, clergy, ethicists, individuals from the community and others.

Cancer Clinical Trials at MCW

Achieving National Cancer Institute (NCI) designation is a priority for the

From Bench to Bedside

PRE-CLINICAL TESTING

4+ YEARS



LABORATORY STUDIES



APPROVED PROTOCOL



ANIMAL TESTING

8+ YEARS

PHASE 1



20-80 PATIENTS

Collect information to determine safety, side effects and how the drug is metabolized/excreted.

Obtain preliminary data in people with safety concerns in short-term

MCW Cancer Center, and expanding the clinical trials enterprise has been a critical component in that quest. NCI designation recognizes excellence in cancer research, opens doors to expanded research funding and related economic benefits and jobs, and brings the most advanced cancer care to patients.

To strengthen its program, in 2010 the MCW Cancer Center recruited two critical leaders: Ming You, MD, PhD, as director, and James Thomas, MD '91, GME '95, PhD '89, as director of the Adult Cancer Clinical Trials Office (ACCTO). Both individuals recognized that a more comprehensive clinical trials effort was needed at Froedtert & the Medical College of Wisconsin. "We weren't broad or deep enough, both for NCI designation and for our community," notes Dr. Thomas, who also is a professor of medicine (hematology/oncology). "Every department had its own little shop for clinical trials, and we needed to make a centralized office to bring together the people and technology necessary to build a robust and all-encompassing program."

Following a year of planning, in January 2012 the Clinical Trials Office began using OnCore clinical trial management software and created an educator position to develop standard operating procedures and training manuals. Today, the MCW Cancer Center boasts more than 70 staff members and 100 physicians who are actively engaged in cancer research. "Building the infrastructure has allowed

us to become more competitive with pharmaceutical companies, which in turn gives us access to patients and clinical trials. We are now conducting clinical trials where our faculty approach pharma companies, but also where we develop the compound and bring it directly to patients," Dr. Thomas adds.

Dr. Thomas acknowledges the significant impact of the Nicholas Family Foundation Cancer Translational Research Unit (TRU) of the CTSI on clinical trials, which provides an optimal clinical research environment for both research participants and translational investigators through access to space, resources and the expertise of research support personnel. "The TRU has helped us

double the number of cancer clinical trials in the past four years, triple the number of patients and dramatically improve the number of early phase and investigator-initiated clinical trials," he says. Currently, the ACCTO is running nearly 220 cancer clinical trials.

"In conjunction with the CTSI, we need to continue to grow both our faculty and our patients in order to support more cancer clinical trials," Dr. Thomas shares. "Trials are getting more complicated, and some are not just disease-based any more. Watson will help coordinate accessibility so we can get our patients into clinical trials here and elsewhere around the country," he says, referring to IBM's cognitive computer technology that will match cancer patients with

thousands of clinical trials nationwide. F&MCW's Cancer Network will be one of only two academic institutions in the US pioneering the use of Watson for clinical trial matching – which is slated to occur in mid-to-late 2017.

"I want fewer people to have their lives shortened by cancer, and the only way we can improve this is through clinical research. I firmly believe we are in the hope business," Dr. Thomas adds.

Pediatric Cancer Clinical Trials

The Pediatric Cancer Clinical Trials Office (PCCTO) was created in 2009 through a five-year, \$5 million infrastructure investment from the MACC (Midwest Athletes Against Childhood Cancer) Fund, which supported staff, a translational component (the tissue bank at Children's Hospital of Wisconsin) and the development of a database. The PCCTO now comprises 14 individuals with the expertise needed to run all phases of clinical trials. "We took advantage of this tremendous opportunity afforded by the MACC Fund to expand clinical research, as we had excellent clinical care providers and wonderful patients – but no infrastructure," says Michael Kelly, MD, PhD, associate professor of pediatrics (hematology/oncology) at MCW, director of the PCCTO and director of the Cancer Program at Children's Hospital of Wisconsin. The PCCTO is administered through the hospital and staffed with pediatric cancer specialists from the MCW Cancer Center.

The PCCTO undertakes three different types of clinical trials: treatment trials (exploring whether a treatment or device is safe and effective for humans), registry

"I want fewer people to have their lives shortened by cancer, and the only way we can improve this is through clinical research."

– Dr. James Thomas

CLINICAL RESEARCH

PHASE 2



100s

OF PATIENTS

Primary data on drug efficacy who have a certain disease. continues to be evaluated and side effects are studied.

PHASE 3



1000s

OF PATIENTS

Gather more information about safety and effectiveness, different populations and dosages and drug interactions.

PHASE 4

Gather additional information about risks, benefits and ideal use.

PHASE 5

Additional trials may be conducted to determine better dosing guidelines, new formulations, effects on different populations or new indications.

FDA APPROVAL



TOTAL



Sources: US Food & Drug Administration; smrc.org

“ I’m reaching a point where I can do everything I wanted to do, and I’m still seeing signs of improvement.

– Lucas Lindner



trials (using observational methods to collect uniform data on specified outcomes in a population defined by a particular disease) and supportive care trials (looking at ways to improve quality of life for cancer patients and survivors).

Dr. Kelly shares that there are more than 150 different types of pediatric cancers, and while most are more aggressive than adult cancers, the incidence is

lower. Thus, there is a need to cooperate with other cancer centers around the country in order to build evidence by studying a large enough subset of patients to determine the best treatments. The main source of this collaboration is the Children’s Oncology Group (COG), an NCI-supported clinical trials group of more than 250 institutions that comprise the world’s largest organization devoted exclusively to pediatric cancer research. MCW’s PCCTO draws patients from southeast Wisconsin, northern Illinois and the Upper Peninsula of Michigan. More than 90 percent of patients are on one clinical trial, and greater than 70 percent are on multiple clinical trials (compared to about 10 percent of adults on clinical trials). During the past five years, the PCCTO has ranked consistently among the top 15 institutions in the COG by total enrollment of pediatric patients in clinical trials.

“We’ve been able to develop new therapies over the years by recruiting faculty with clinical trial expertise,” Dr. Kelly explains. For example, MACC Fund Professor Jeffrey Medin, PhD, is focused on immunotherapies (prevention or treatment of diseases with substances that stimulate the immune response) for pediatric cancers. Michael Burke, MD, is the principal investigator (PI) on two clinical trials for relapsed leukemia. And Julie-An Talano, MD, and Monika Thakar, MD, each are PIs on clinical trials centered on post-hematopoietic stem cell transplantation. “This clearly is a differentiator for MCW. Only a handful of institutions in the COG possess teams that work on discovery through implementation and clinical trials around certain diseases – as we do,” Dr. Kelly adds.

“We have two examples of groups focused on discovery-to-clinical implementation for pediatric cancers: the high-risk hematologic malignancy group and the neuro-oncology group. These groups comprise clinical and lab scientists who work together to write grants, publish and recruit top talent,” Dr. Kelly

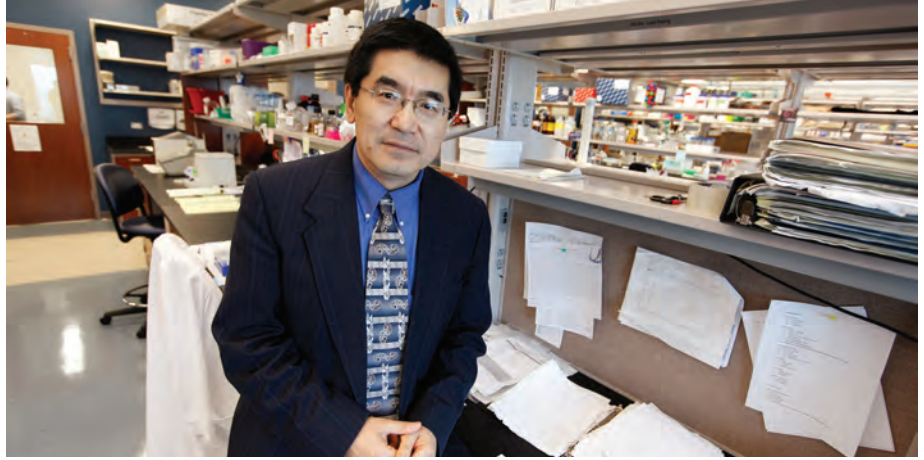
explains. "In addition, we are working toward a discovery-to-implementation model across our campus, focused on adolescents and young adults with cancer. Our pediatric oncologists collaborate with medical oncologists and clinical and bench researchers. This cross-campus approach is made possible by the geography of the Milwaukee Regional Medical Center, which is a tremendous benefit to our community and our patients."

From the Bench to the Bedside

In 2001, Dr. Kurpad received the prestigious *William P. Van Wagenen Fellowship* from the American Association of Neurological Surgeons, which provides support to a post-neurosurgical resident for foreign travel for scientific enrichment prior to beginning a career in neurological surgery. This award allowed him to become a guest scientist in the department of neuroscience at the Karolinska Institute in Stockholm, Sweden, where he studied under Lars Olson, PhD, a noted professor of neurobiology, from August 2001 to June 2002. There, Dr. Kurpad learned about a promising novel approach to treat spinal cord injury through the use of stem cells. He returned to the US as assistant professor of neurosurgery at MCW, where he was asked to establish a stem cell research lab that would be supported by extramural funding. The lab received its first grant in 2006 and has been funded extramurally for the past decade.

In the early years of his research, Dr. Kurpad's lab showed that it was important to genetically modify stem cells prior to transplantation in spinal cord injury, to both confer the desired neurological recovery as well as prevent potential serious side effects. This concept was ultimately shown by others to work in human stem cells, particularly the cell line used in the clinical trial. In early experiments, stem cells were cultured, propagated and chemically treated, then injected into rats with spinal cord injury to compare with a control group of healthy rats. The team performed tissue studies of the spinal cords of the rats, looking for markers that would demonstrate desired changes in the nerve cells.

MCW's IMAGINE MORE DINNER
Featuring Dr. Shekar Kurpad • June 15, 2017
see page 29 for more information



Ming You, MD, PhD, was recruited in 2010 as director of the Medical College of Wisconsin Cancer Center.

This process alone required more than two years of preliminary study, as substantive data was needed to demonstrate that the engineered cells were capable of making myelin (the fatty sheath around nerve cells essential for conducting electrical signals) and stimulating growth. According to Dr. Kurpad, restoring as little as five to 10 percent of nerve function in the spinal cord can allow useful nerve impulses from the brain to propagate through the spinal cord and result in useful motor and sensory function.

Dr. Kurpad's research was published over the years in numerous prestigious journals and reported at national and international conferences. A similar concept in human cells was researched by California-based Asterias Biotherapeutics. The company wanted to conduct clinical trials by developing a line of engineered human stem cells in a similar fashion to the laboratory work to treat acute spinal cord injury. The timing of Lindner's auto accident in spring 2016 coincided with the launch of Asterias's novel clinical trial, which is being undertaken at a small number of hospitals around the country. Lindner, as one of Dr. Kurpad's first participants in the trial, underwent a procedure in which more than 10 million stem cells were injected into his spinal cord at the site of the injury. He was the first national recipient of this dose of cells (two of the first three such procedures were done at MCW).

Less than three months later, Lindner was able to use his arms and fingers to perform the fine motor actions he needs to feed and dress himself – and perhaps

most importantly, to type on a keyboard. He continues to recover function and movement, and is focusing on gaining strength and dexterity. "I'm reaching a point where I can do everything I wanted to do, and I'm still seeing signs of improvement," he shares some eight months after surgery.

According to Dr. Kurpad, seven patients so far across the country now have participated in this particular clinical trial – and all have shown progress three to four months post-surgery. "For a person like me, who has a high-intensity surgical job, if your clinical work goes well, it makes you feel good on your drive home from the hospital. But when your research goes well, it makes you feel good from one Christmas to the next," he says.

Dr. Kurpad is quick to point out that at any given time, MCW is undertaking two to three neurochemical clinical trials (which will have an effect on the functioning of the nervous system). "We have a very good reputation nationally, and many companies come to us before going to other institutions. That's because we have the

referral base of patients, and our processes are very rigorous." He also cites the strong interaction among clinical and surgical staff, research labs, nurses and more. "At least seven different departments are involved before a stem cell is injected. This is a true representation of what Froedtert & the Medical College of Wisconsin is all about. We're like a well-oiled machine, and I am especially proud that so many disparate teams can come together to benefit our patients," he says. ■

"We've been able to develop new therapies over the years by recruiting faculty with clinical trial expertise."

– Dr. Michael Kelly



For more, visit mcw.edu/mcwmag/clinicaltrials



Healthcare Dinner Honors Sarah and Jeff Joerres

Building a stronger Milwaukee is at the heart of what drives Jeff and Sarah Geenen Joerres, MD '87, GME '91, to make a difference – and that includes an extensive family commitment to the Medical College of Wisconsin (MCW) and its Digestive Disease Center (DDC).

The Joerreses received MCW's *Warren P. Knowles Humanitarian Award* at the 2016 Froedtert and the Medical College of Wisconsin Healthcare Dinner on November 17 for their commitment to health-related issues and for their dedication to public service and education – hallmarks of the career of former Governor Knowles. The Healthcare Dinner, now in its 23rd year, benefits research at MCW's Digestive Disease Center. "The DDC is a true asset to the Milwaukee community, and we are lucky to have it here," Dr. Joerres remarked at the Dinner.

Dr. Joerres was introduced to the challenges of digestive disease in her



youth, as her father, Joseph E. Geenen, MD '60, GME '65, FEL '67, was a professor and physician in the division of gastroenterology at MCW and its predecessor institution (the Marquette University School of Medicine) from 1966-1992. Today, he serves as clinical professor of medicine at MCW and has been a member of the board of trustees since 2005. Dr. Geenen was honored as *Alumnus of the Year* in May 2000. Additionally, her brother, Daniel Geenen, received his MD from MCW in 1989 and completed his residency at MCW in internal medicine in 1992.

The Geenen Family, too, believes in philanthropic support for academic medicine, endowing the Joseph E. Geenen Chair in Gastroenterology, held by Reza Shaker, MD, FEL '88, chief of gastroenterology and hepatology, senior associate dean for clinical and translational

research, and director of the Digestive Disease Center. "When I was a budding medical student at MCW, I used to love watching ERCPs (endoscopic retrograde cholangiopancreatographies) being performed at the DDC," Dr. Joerres shared at the Healthcare Dinner. "Dr. Shaker was a Fellow there at the time, so it's very special that he now holds the Geenen Chair and is director of the Center," she said. Another of the Geenen Family's gifts to MCW was earmarked to support the Office of Alumni Relations.

Jeff Joerres, who retired from ManpowerGroup as executive chairman in December 2015, served on the MCW board from 2003-2009, and holds the work of the Digestive Disease Center dear to his heart. Early in his marriage he suffered from a serious gastrointestinal illness which had stumped physicians, but was diagnosed as *Campylobacter* by an

WARREN P. KNOWLES HUMANITARIAN AWARD

Created to honor former Wisconsin Governor Warren P. Knowles, founding member of the Digestive Disease Center Advisory Board. The Award honors individuals with a commitment to health-related issues and whose work reflects dedication to public service and education.

PAST AWARD WINNERS

- 2015: Sue and Curt Culver
- 2014: Paul Purcell
- 2013: Patti and Jack McKeithan
- 2012: Ann and Jon Hammes
- 2011: Michael Grebe

“Educational endeavors are especially important to us, and a great clinical and teaching institution such as MCW is particularly valuable to the Milwaukee area.”

— Dr. Sarah Geenen Joerres



Photos courtesy of John Ciciora

Former President George W. Bush, special guest at the 2016 Healthcare Dinner, answers questions on a variety of topics posed by MCW president and CEO John R. Raymond, Sr., MD.

MCW Fellow in gastroenterology. Joerres credits the differentiation of MCW’s learning environment for recognizing the need to culture the bacteria in order to identify and treat the disease. “The work that is done at MCW can alleviate the pain and anxiety of digestive disease, and the DDC enables much of these efforts to move forward toward a cure,” he noted at the Healthcare Dinner.

Dr. Joerres was medical director in the St. Luke’s Rehabilitation Unit at Sheboygan (Wis.) Memorial Hospital following her residency at MCW in physical medicine and rehabilitation. After the birth of their fourth child, Dr. Joerres left private practice to dedicate her time to her family and volunteer causes.

“Froedtert and the Medical College of Wisconsin physicians have had a real

impact in the community, and we want to support them,” Dr. Joerres says. “Educational endeavors are especially important to us, and a great clinical and teaching institution such as MCW is particularly valuable to the Milwaukee area. Building a strong community takes a lot of strong work and continuous effort, and Jeff and I are honored to do our small part.”

“We moved to downtown Milwaukee four years ago, and love feeling the energy of the city,” Jeff Joerres remarked at the Dinner. “We wanted to get more deeply involved, which we are doing, in part, through our support of educational endeavors including role modeling. In fact, role modeling is one of the most important elements in building a strong community, and we are fortunate to have great role models – both sets of our

parents – right here with us tonight,” he added.

The 2016 Healthcare Dinner, held at the Pfister Hotel in Milwaukee, featured former President George W. Bush as a special guest speaker. In a discussion moderated by MCW president and CEO John R. Raymond, Sr., MD, Mr. Bush shared his thoughts on a wide variety of topics including post-presidency life, his strong family ties, the importance of continuing to support healthcare initiatives, reflections on certain highlights of his years in office, and his vision for the future of our country.

The Dinner was attended by more than 600 individuals and raised approximately \$220,000 for digestive disease research. ■

— SARA L. WILKINS

Cystic fibrosis patient Amy Remillard, 45, shown here holding a photo of herself receiving medical treatment as a teenager, has transitioned from pediatric care at Children's Hospital of Wisconsin to adult care at Froedtert & the Medical College of Wisconsin with the help of dedicated MCW physicians such as Julie Biller, MD, and other healthcare providers.





Transitioning From Pediatric to Adult Care

For 26 years, Amy Remillard has seen Julie Biller, MD, for her cystic fibrosis – first as a teenager at Children’s Hospital of Wisconsin (Children’s) and later at the Adult Cystic Fibrosis Program at Froedtert & the Medical College of Wisconsin (F&MCW). Dr. Biller and her colleagues have helped Remillard through the transition into adult care, a lung transplant and many challenges in between.

“The connection the doctors and nurses make with their patients is paramount in helping patients become independent,” says 45-year-old Remillard of Waukesha, Wis. “The pulmonary staff invests knowledge and resources to guide us to become independent adults, and provide the tools for us to find our inner strength.”

Thanks to new and improved treatments, ever more children are surviving serious conditions ranging from cystic fibrosis to congenital heart disease to cancer. As these children grow up, they must navigate the transition from pediatric to adult care and into programs that understand their complex medical histories and how these might impact their health as adults. To that end, physicians at MCW have created programs designed to meet those patients’ special needs.

Collaboration is key to the success of the Cystic Fibrosis Center, which includes the pediatric program at Children’s and adult program at Froedtert. Both programs work as a team, meeting monthly and producing joint newsletters and patient/family education. The Center has won two national quality care awards in the past decade and now is working on a quality improvement initiative to enhance transition care. “Transitioning to adult care starts with the diagnosis,” explains Dr. Biller, the Center’s co-director and professor of medicine at MCW. “The transition is taking children who do not have capacity to care for themselves and turning them into young adults who can gradually take on care of their chronic health problems. The handoff – when patients go from

pediatric to adult care – is the last part of the transition.”

The Center regularly assesses children’s understanding of their diseases and medications, provides education and encourages patients to get more involved as they get older. The transition work often continues even after not-quite-independent young adults enter adult care.

Pediatric cancer survivors also need the right support as they grow into adulthood. The Next Steps Survivor Clinic at Children’s MACC Fund Center for Cancer and Blood Disorders usually sees patients up to age 30. “These are typically complex patients who have a fairly high incidence of complications later in life,” says Michael Kelly, MD, PhD, associate professor of pediatrics at MCW and director of the Cancer Program at Children’s. “Two-thirds of adult survivors of pediatric cancer have complications that interfere with daily living and can affect their ability to do well in school and in jobs.” When it’s time to transition to adult care, Next Steps helps patients find the right primary care provider and connect with other community resources. “We also provide those physicians and nurse practitioners who are ultimately going to care for our patients with guidelines for chronic care and surveillance,” Dr. Kelly says.

Pediatric Cancer Survivors Also Need the Right Support as They Grow Into Adulthood

To provide the best care for the growing population of adults living with congenital heart defects, Children’s and F&MCW created the Wisconsin Adult Congenital Heart Disease Program (WAtCH) in 2004, which now is among the top-10 busiest adult congenital heart programs in the nation. Knowing that some teens don’t understand the basics of their heart defects, WAtCH connects with young adults early in their lives. “It’s critical to ensure a smooth transition before young adults get busy with college and first jobs,” says program director Michael Earing, MD, professor of pediatrics at MCW. “It’s really important that anyone who has had congenital heart disease as a child continues to get regular care every one to two years.” ■

– NICOLE ETTER



» continued from page 5

From Grad Students to Faculty Members

of cell biology, neurobiology and anatomy after rotations. It made it fun to come to work every day because we could discuss our experiments and help each other solve problems.”

The opening of MCW-Central Wisconsin led to a unique opportunity for Dr. Patitucci to apply her anatomy skills and love of the classroom.

“I really liked the MCW family atmosphere, and it was just such an exciting prospect to be involved in launching a new medical school campus, as well as to run an anatomy lab,” she says. This was not her first time choosing to leap at the chance to help build something new. During her time as an MCW technician, Dr. Patitucci helped a research lab determine protocols and processes for providing clinical testing services. She also was Dr. Ebert’s first graduate student, and thrived on helping build physical and digital research infrastructure to acquire and store their shared experimental data.

Dr. Patitucci joined MCW-Central Wisconsin’s faculty on June 1, 2016, and is enjoying guiding its first class of students through their anatomy training. “A unique aspect of MCW-Central Wisconsin is the small class size, which allows me to more easily adapt to individual learning styles and incorporate activities like a prosecution, in which I dissect a body donor while students observe and ask questions.”

For Dr. Kriegel, graduate school classes and lab rotations were a time to dive deeply into a lifelong interest in physiology. “For as long as I can remember, I have been captivated by learning how our bodies work. Rather than memorizing facts, graduate school helped me explore physiology at completely new depths and allowed me to start to see gaps in scientific understanding – and how I might be able to help fill them in,” she shares.

A particular series of experiments conducted for Dr. Kriegel’s dissertation project remain vivid in her memory due to the

influence they had on her future investigations. She was looking into cardiac samples from rats and had tested them for messenger RNA (mRNA), which are molecules created by an enzyme that reads the genetic information contained in DNA. This mRNA travels to another part of the cell to be decoded as the blueprint for new proteins.

“When I compared mRNA results to actual protein levels, I saw a mismatch between the types and amount of proteins that I had hypothesized based on expectations from the mRNA analysis. It became very clear that there were intermediate steps in the process of genes becoming expressed as proteins,” Dr. Kriegel notes.

She conducted a postdoctoral fellowship with Mingyu Liang, PhD, professor of physiology and MCW Eminent Scholar, to continue investigating those intermediate steps – which include the binding of microRNA (smaller non-coding RNA molecules which, when attached to mRNA, modify how mRNA are interpreted or prevent them from serving as protein instruction manuals altogether, known as “silencing”).

Dr. Kriegel joined MCW’s faculty in 2012. “I felt like MCW was the right choice. It was where I matured as a scientist. I knew I liked the way people thought about solving problems, and I felt like the physiology department had what I wanted in terms of collective expertise, collaborative spirit and elite infrastructure. You have to have the right tools to answer big scientific questions,” she recollects.

After Dr. O’Meara earned her PhD, she moved to Boston and completed a postdoctoral fellowship at Brigham and Women’s Hospital and Harvard Medical School. The lab she joined there focused on heart regeneration. “We know that some organisms,

such as the zebrafish, can regenerate damaged heart tissue throughout their life cycle, and others, like mice, have strong regenerative capabilities shortly after birth. The central goal of the sub-discipline is to understand how cardiac regeneration works in order to find methods to stimulate the human heart to conduct some its own repairs after a heart attack,” she says.

During her time in Boston, Dr. O’Meara realized that she could expedite her progress by using the genetic techniques she had mastered at MCW. She returned to MCW as a faculty member in August 2016. “With the genetics expertise and infrastructure in place, MCW is the best, and maybe the only, place to do the research that I want to do,” Dr. O’Meara states. Returning to MCW also allowed her to reestablish previous collaborations, such as with Brian Link, PhD, professor of cell biology, neurobiology and anatomy, and MCW Eminent Scholar, who studies cell biology using zebrafish models.

All three MCW graduate students-

turned-MCW-faculty members credit mentorship and the institution’s research environment as key to their professional development and decisions to join MCW’s next generation of scientists.

“Everyone at MCW is happy to share knowledge and techniques,” Dr. O’Meara declares. “I feel fortunate to have had amazing mentors to look up to early in my career – in Dr. Ebert, Dr. Hoagland and our campus dean in MCW-Central Wisconsin, Dr. Lisa Dodson,” Dr. Patitucci notes. “MCW really feels like a second family to me, and the culture of collaboration helps introduce me to many aspects of science and medicine beyond what I study, which has led to new questions for my laboratory to explore,” says Dr. Kriegel. ■

– GREG CALHOUN

174
GRADUATE SCHOOL ALUMNI RECEIVED DOCTORAL DEGREES FROM 2012 TO 2016.

OF THESE ALUMNI:

91%
OBTAINED A POSITION WITHIN ONE MONTH OF GRADUATION

58%
ACCEPTED POSITIONS AS POSTDOCTORAL FELLOWS

12%
ACCEPTED POSITIONS IN INDUSTRY

7%
ACCEPTED ACADEMIC RESEARCH POSITIONS

6%
ACCEPTED TEACHING POSITIONS

Source: MCW Graduate School



ABOVE: Dr. O'Meara (r) and research technologist Dana Murphy operate a centrifuge, which is used to spin samples at high speeds to separate substances suspended in solution.

BELOW: Dr. Kriegel reviews experimental data with MCW physiology graduate student Mark Paterson.



Photos courtesy of Jay Westhauser

A Hub for Translational Research

Dr. Alison Kriegel expanded on her basic science focus by learning about clinical and translational science through participating in MCW's Clinical Research Scholars Program, a two-year guided apprenticeship model sponsored by MCW's Clinical and Translational Science Institute (CTSI).

"I was able to listen to how clinicians process problems. I found that there was a lot that I could learn from them," she recalls. "No one can be an expert in anything, so it is really important for physicians and basic scientists to work together."

Dr. Kriegel says that the training and networking opportunities hosted by the CTSI help bring together the traditionally divergent worlds of clinical practice and basic science.

"The focus of our training is often so different that we end up speaking our own professional languages, but now I can collaborate more effectively because my interactions have helped me understand their demands, their schedules and how they think about problems," she says. At MCW, Dr. Kriegel is working on translational research proposals with Jennifer Strande, MD, FEL '10, associate professor of medicine (cardiology) and Kevin Regner, MD '01, MS '11, associate professor and chief of medicine (nephrology), among others. Dr. Kriegel also uses the skills she learned in MCW's Clinical Research Scholars Program as director for the translational genetics course in the master of science degree program in clinical and translational science, which she hopes will further encourage teamwork among physicians and basic scientists within MCW's collaborative research environment.

"I believe that, at MCW, if you can dream up a project with merit, you can find the complementary expertise to help you make it happen."

Science Interest Sparked Early

Dr. Caitlin O'Meara always was interested in science, especially any class that discussed plant and animal anatomy. "I had a microscope when I was growing up, and I would look at everything to see what objects were made of, always asking the question, 'What is smaller than that?'"

Then, in middle school, her teacher assigned her to report on something prevalent in current events. "I wrote about the cloning of Dolly the sheep. Certainly, from then on, there really was no question that I would study biology," Dr. O'Meara recalls.

As an undergraduate, she experienced original research firsthand during a class field trip to study the habitats in the Okefenokee Swamp near Waycross, Georgia. After participating in MCW's Summer Program for Undergraduate Research, Dr. O'Meara chose to focus her research career in the biomedical sciences.

"I love being in the lab and appreciate that being in academic medicine allows me to always think about how my findings could be translated into future therapies that will benefit patients."

HAPPENINGS



In October 2016, the WBCS board of directors presented a \$350,000 donation to MCW. Accepting on behalf of the institution were (from second left) John R. Raymond, Sr., MD, president & CEO; Ravi P. Misra, PhD, dean of the Graduate School of Biomedical Sciences; and Hallgeir Rui, MD, PhD, WBCS Endowed Professor of Breast Cancer Research.

WBCS Prepares for 20th Anniversary Year

The WBCS (Wisconsin Breast Cancer Showhouse) was founded in 1998 as an all-volunteer organization to support early-stage breast cancer and prostate cancer research at the Medical College of Wisconsin Cancer Center.

MCW is the sole recipient of WBCS funding. The first donation received was \$42,000 – and cumulative donations since that time total nearly \$6.2 million. The majority of this money supports seed

grants for breast or prostate cancer research; researchers have leveraged these grants to raise an additional \$45.4 million in extramural funding. WBCS also provided funding for an endowment, the WBCS Chair in Breast Cancer Research, held by Hallgeir Rui, MD, PhD.

The 2017 WBCS Showhouse for a Cure will be open to the public from Saturday, June 3 through Sunday, June 18. The selected home is a beautiful historic mansion on Milwaukee's east side. A special "Now and Then" event will take place on Saturday, May 20, providing an opportunity to look back at favorite past Showhouses. ■

Wisconsin
Breast Cancer
Showhouse
June 3-18, 2017

Women in Science Lecture Series Kicks Off the 2017 Season

The April 27 lecture features speaker Cheryl A. Maurana, PhD, vice president for academic outreach, senior associate dean, and director of the Advancing a Healthier Wisconsin Endowment, and will be held at GE Healthcare from 3-5 pm. Alison Kriegel, PhD '08, is the featured speaker on May 23.

More about the Women in Science Lecture Series at mcw.edu/womeninscience. ■

Phoebe Jensen Receives Zeit Leadership Award



Phoebe Jensen, a fourth-year medical student, has been named the recipient of the 2017 *Walter Zeit Fellowship Leadership Award*. This prestigious award is presented to the senior student who

has consistently displayed superior qualities of leadership, loyalty, selfless service, initiative and compassion toward his or her peers and to MCW. It is the highest student honor bestowed by the *Walter Zeit Fellowship*, MCW's premier donor recognition society. ■

Imagine More Dinner Supports Neurosciences Research

The fifth annual Imagine More Dinner supporting research at MCW for the cause and cure of devastating neurological diseases will be held on June 15 at Discovery World in Milwaukee.

This year's event will highlight and honor the advancements of Shekar N. Kurpad, MD, FEL '01, PhD, interim chair and professor of neurosurgery, director of the Spinal Cord Injury Center and director of the spine surgery fellowship.

Also at the Dinner, the third annual *Imagine More Award for Research* – in the amount of \$25,000 – will be presented to an MCW faculty member who is undertaking research designed to transform our ability to prevent, treat or cure neurologic or psychiatric disease. Past winners are Antje Kroner-Milsch, MD, PhD (2016), and Allison Ebert, PhD (2015). Register at mcw.edu/imaginemore. ■



This year's Wisconsin Breast Cancer Showhouse is a beautiful historic mansion on Milwaukee's east side.

UPCOMING EVENTS

MARCH

» **DESERT CLASSIC WEEKEND**
GOLF ON FRIDAY AND BREWERS SPRING
TRAINING BASEBALL ON SATURDAY

DATE: MARCH 10-11, 2017

LOCATION: PHOENIX AREA

APRIL

» **PETER K. ANTARAMIAN FIVE-COURSE WINE-PAIRING DINNER FOR CANCER RESEARCH**

DATE: APRIL 30, 2017

LOCATION: CAPITAL GRILLE, MILWAUKEE

MAY

» **ALUMNI WEEKEND**
HOSTED BY MCW/MARQUETTE MEDICAL
ALUMNI ASSOCIATION

DATE: MAY 5-6, 2017

LOCATION: MILWAUKEE

JUNE

» **WBCS SHOWHOUSE FOR A CURE**

THE AREA'S TOP DESIGNERS HAVE
TRANSFORMED A HISTORIC HOME ON
MILWAUKEE'S EAST SIDE

DATE: JUNE 3-18, 2017

LOCATION: MILWAUKEE

» **HAVE A HEART MOTORCYCLE RIDE FOR THE CARDIO-VASCULAR RESEARCH CENTER**

DATE: JUNE 10, 2017

LOCATION: SUBURBAN MOTORS HARLEY-DAVISON, 139 N. MAIN ST., THIENSVILLE, WI, 10 AM-2 PM

For more information on these events, contact Peggy LeBrun, director, volunteer and event fundraising, at (414) 955-4503 or plebrun@mcw.edu.

STAY CONNECTED WITH MCW

We'd love to hear from you! We'll post your event comments and photos. Or, let us know what's coming up. Send your materials to MCWmagazine@mcw.edu.

Find us on:



ALUMNI NOTES

1970s



John C. Hagan III, MD, GME '70, edited the book, *The Science of Near-Death Experiences*, published by the University of

Missouri Press. He and his fellow contributors describe evidence-based research on near-death experiences and interview physicians who themselves have undergone near-death experiences. Dr. Hagan is a board-certified ophthalmologist and was the founder of the Midwest Eye Institute of Kansas City. He has published more than 140 scientific articles and designed several surgical instruments. Dr. Hagan also was the editor of the book, *Missouri Medicine: The Journal of the Missouri State Medical Association*.



Julian H. Lombard*, PhD '75, professor of physiology at the Medical College of Wisconsin, received a four-year, \$1.7 million grant from the NIH's

National Heart, Lung, and Blood Institute to investigate genetic factors involved with cardiovascular diseases. Dr. Lombard will investigate a specific gene, called *NRF2*, to determine its role in restoring normal function of blood vessels that are adversely affected by a high-salt diet.

1980s

Albert L. Fisher, MD '80, was elected president of the Association of American Physicians and Surgeons in September 2016. He is board-certified in family medicine and has been in private practice in Oshkosh, Wis., for 31 years.



Lois Connolly*, MD '84, GME '87, was awarded the 2016 *Distinguished Service Award* by the Wisconsin Society of Anesthesiologists (WSA). Dr. Connolly, who serves as an MCW professor of anesthesiology, has been an active member of the WSA for more than 15 years, including serving as president, member of the board of directors and legislative conference representative.



Jeffrey Whittle*, MD '84, MPH, received the 2016 *Laureate Award* from the American College of Physicians – Wisconsin Chapter. The *Laureate*

Award recognizes one member each year who demonstrates by example and conducts an abiding commitment to excellence in medical care, education, research and service to her/his community and to the American College of Physicians. Dr. Whittle is professor of medicine (general internal medicine) at MCW.

1990s



Stuart J. Wong*, MD '90, GME '93, FEL '98, received a \$2.6 million grant from the NIH's National Cancer Institute to evaluate a widely-used

Chinese herbal formula, called *Antitumor B*, as a potential cancer preventative agent for squamous cell carcinoma, the most common form of mouth cancer. Dr. Wong serves as associate professor of medicine (hematology and oncology) and otolaryngology at MCW; his co-principal investigator for the study is Ming You, MD, PhD, Joseph F. Heil, Jr. Professor of Molecular Oncogenesis, senior associate dean for cancer research, education and clinical care, and director of the MCW Cancer Center.



Arun K. Gosain, MD, GME '90, FEL '91, was named to the board of governors of the American College of Surgeons, which, with

80,000 members, is the largest organization of surgeons in the world. Dr. Gosain is division head of plastic surgery at the Ann & Robert H. Lurie Children's Hospital in Chicago.



Ronald J. Hauptman, MD '91, a gastroenterologist with Arizona Digestive Health in Phoenix, was highlighted as a "GI leader to know" by *Becker's GI and Endoscopy*.

* MCW faculty member



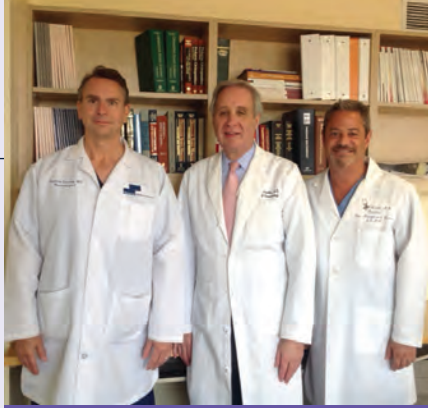
David A. Margolis*, MD, GME '92, FEL '95, was named a "Healthcare Hero" by the *Milwaukee BizTimes* in the "Physician" category,

which recognizes a physician whose performance on the job is considered exemplary by patients and peers. Dr. Margolis, who serves MCW as professor of pediatrics (hematology/oncology/BMT), associate chair and interim division chief, also is director, Children's Hospital of Wisconsin Bone Marrow Transplant Program.



Meic H. Schmidt, MD '94, GME '01, MBA, was named director of neurosurgery at Westchester Medical Center and Maria Fareri Children's Hospital in Valhalla, N.Y., and MidHudson Regional Hospital in Poughkeepsie, N.Y. Dr. Schmidt, a neurosurgeon specializing in neurosurgical spine surgery and neurooncology, also was appointed chair and professor of neurosurgery at New York Medical College in Valhalla.

Zia Agha, MD, GME '96, MS '98, was promoted to the role of chief medical officer at West Health, a national nonprofit organization based in La Jolla, Calif., focused on enabling seniors to age in place through access to high-quality health and support services. Dr. Agha joined West Health in 2014 and also serves as executive vice president of clinical research and informatics – and has additional responsibility for telehealth.



FROM OUR READERS

MCW alumni are well-represented at Steward-St. Elizabeth's Medical Center in Boston. They include (l-r): Stephen Gutting, MD '93, GME '00, chief of spine surgery; Stuart Schneller, MD '75, chief of rheumatology; and Gordon Novak, MD '93, co-director of the pain management service. Gary Robelen, MD '84 (not pictured), serves as chair of the department of anesthesiology and pain medicine.

Yahia Lodi, MD, GME '98, joined Faxton St. Luke's Healthcare's (Utica, N.Y.) medical staff in the department of medicine/interventional neurology. He previously served as neurosciences academic chair at SUNY Upstate Medical University's clinical campus in Binghamton, N.Y.



Sanjeev Pradhan, MD '98, was honored by Advocate South Suburban Hospital in Hazel Crest, Ill., on its Physician Recognition Wall, for his excellent

work in vascular and endovascular surgery – including achievements in patient satisfaction and clinical outcomes.

2000s

Darcy Murphy, MD '09, joined the Duluth (Minn.) Family Medicine Residency Program as a family medicine physician. She previously worked at Essentia Health-Hermantown (Minn.) Clinic.

2010s

Andrew Ertl, MD '10, joined Sauk Prairie (Wis.) Healthcare as an orthopaedic surgeon.

Michael E. Aberger, MD '11, joined Phoenix Urology of St. Joseph, Mo., as a urologist.

Rosanne M. Danielson, MD, FEL '12, joined Premier Gastroenterology Specialists in Dayton, Ohio, as a gastroenterologist.

Elisabeth Gibbons, MD '12, joined St. Luke's Denfeld Medical Clinic in Duluth, Minn., as a family medicine physician.



Muhammad Ali, MD, MS '13, a gastroenterologist with Gastroenterology Consultants of San Antonio (Texas), was highlighted as a "GI

leader to know" by *Becker's GI and Endoscopy*.

Michael L. Mumert, MD, FEL '14, a neurosurgeon with Springfield (Mo.) Neurological and Spine Institute, was highlighted as a "Spine surgeon leader to know" by *Becker's Spine Review*.



Maria Pechacek, MPH '15, was appointed a public health associate with the Centers for Disease Control and Prevention's Office for State, Tribal,

Local and Territorial Support. She started her assignment in Minneapolis in October 2016.

MCW MAGAZINE wants news of your accomplishments and activities. Send updates to: Medical College of Wisconsin Office of Alumni Relations 8701 Watertown Plank Road, Milwaukee, WI 53226, fax at (414) 955-6699 or email alumni@mcw.edu.

IN MEMORIAM

1950s

Bernard Kulkoski, MD '50,

of Green Bay, Wis., died on January 17, 2016, at the age of 93. As a family physician, he delivered 3,000 babies, performed thousands of surgical procedures and, for many years, made house calls. Dr. Kulkoski was a passionate private pilot who loved to fly family and friends to destinations – both national and international. Survivors include his wife, May, 10 children and many grandchildren and great-grandchildren.

John J. Frederick, MD '51, GME '58,

of Cudahy, Wis., died on October 22, 2016, at the age of 89. During his surgical career, he served as president of the Milwaukee Surgical Society and as a founding member and president of the Milwaukee Academy of Surgery. In addition to his commitment to MCW as an assistant clinical professor of surgery, Dr. Frederick and his late wife, Margaret, were members of MCW's *Walter Zeit Fellowship*. Dr. Frederick also contributed leadership to the MCW/Marquette Alumni Association, including serving as president. He is survived by 10 children, 28 grandchildren and four great-grandchildren.

Domenick S. Bruno, MD '56,

of Shorewood, Wis., died on October 10, 2016, at the age of 91. He co-founded North Shore Orthopedics in Shorewood and practiced orthopaedic surgery at Children's Hospital of Wisconsin, St. Joseph Hospital and the former St. Michael Hospital in Milwaukee. Dr. Bruno also taught many physicians and healthcare professionals through his contributions

to educational programs in hospitals in the Milwaukee area. Survivors include his wife, Barbara, five children, 13 grandchildren and four great-grandchildren.

Kenneth J. Harrington, MD '56,

of Menomonee Falls, Wis., died on December 2, 2016, at the age of 88. Dr. Harrington, who served as a physician in Menomonee Falls for more than 40 years, is survived by six children, 18 grandchildren and 13 great-grandchildren.

John C. Budicin, MD '57,

of Frankfort, Ill., died on October 28, 2016, at the age of 84. He previously practiced obstetrics and gynecology at Boulevard Medical Clinic Family Practice Physicians in Chicago Heights, Ill., which he joined as the group's first specialist in 1964. Survivors include his wife, Gloria, two children and three grandchildren.

Joseph S. Myers, MD '57,

of New Smyrna Beach, Fla., died on December 15, 2016, at the age of 85. He served in the US Navy Medical Corps for nearly 25 years, including as chief of surgery for several naval hospitals. Survivors include four children and 11 grandchildren.

John A. Puk, MD '58,

of Cedar Rapids, Iowa, died on November 7, 2016, at the age of 83. Dr. Puk, who practiced ophthalmology in Cedar Rapids for more than 35 years, is survived by seven children and 16 grandchildren.

1960s

Robert Kastelic, MD '61, GME '65,

of Elm Grove, Wis., died on January 8, 2017, at the age of 84. He ran a private

ophthalmology practice in Milwaukee and practiced at several city hospitals. Dr. Kastelic is survived by his wife, Mary, four children and five grandchildren.

Eleuterio De Guzman, MD, GME '68,

of Pewaukee, Wis., died on November 11, 2016, at the age of 87. He completed his residency in anesthesiology after serving as town doctor and deputy coroner in Wausaukee, Wis., and retired after a nearly 25-year career as an anesthesiologist in Milwaukee. Survivors include his wife, Patricia, four children and 12 grandchildren.

Richard H. Lee, MD '68,

of Peoria, Ill., died on October 9, 2016, at the age of 74. In addition to his 41-year career as a neurologist, he nurtured a passion for travel and vehicles, including ships, airplanes, trains and rockets. Dr. Lee is survived by his wife, Jane, four children and nine grandchildren.

1970s

Peter J. Holzauer, MD '72,

of Brookfield, Wis., died on January 5, 2017, at the age of 72. He practiced emergency medicine in Milwaukee for more than 40 years and was a guitarist, photographer and private pilot. He is survived by his wife, Jane, and three children.

Michael R. Fehrer, MD '76, GME '79,

of Milwaukee, died on November 28, 2016, at the age of 69. He practiced internal medicine as a staff physician at St. Joseph Hospital in Milwaukee and ran a private practice. Survivors include his wife, Lois, two children and seven grandchildren.

Special Remembrances



James M. Cerletty, MD '58, GME '64, of Brookfield, Wis., died on December 9, 2016, at the age of 83. In 1961, he joined Marquette University School of

Medicine (which later became MCW) as an assistant instructor in the department of medicine, and ultimately was promoted to professor in 1985. Dr. Cerletty served as residency program director for the department and vice chair for education for more than 40 years. During that time, he helped shape the medicine residency to reflect his commitment to excellence in diagnosis, treatment and patient communication.

Dr. Cerletty cared deeply about MCW's residents and medical students, and it was this quality that made him an exceptional mentor. Many of Dr. Cerletty's residents went on to leadership roles at MCW and beyond while maintaining their close connections with him. He retired in 2003, but then served as MCW archivist in a volunteer position until 2008.

Survivors include his wife, Susan, four children and four grandchildren.

THE JAMES M. CERLETTY, MD, ENDOWED MENTORSHIP FUND

was established to honor his many contributions to medical education. For more information, please contact Angela Nelson, senior director of development and alumni giving, at (414) 955-4708 or annelson@mcw.edu.



John P. Kampine, MD '60, PhD '65, of Brookfield, Wis., died October 14, 2016, at the age of 82. He served as chair of MCW's department of

anesthesiology from 1979 to 2005. During his distinguished career, Dr. Kampine grew the department from fewer than 25 faculty members to more than 100, as well as helped it develop into one of the top anesthesiology research departments in the country.

He published hundreds of original manuscripts and conducted seminal research, including in autonomic nervous system physiology and neuroregulatory control of the cardiovascular system. Dr. Kampine co-authored *Circulatory Physiology: The Essentials*, a textbook read widely by medical and other health professional students. Among his many honors include MCW's most prestigious recognition, the *Distinguished Service Award*; election as an honorary fellow of the Royal College of Surgeons and Anesthetists; and selection as a member of the predecessor to the National Academy of Medicine – the ranks of which include the country's most accomplished physicians and scientists in many disciplines.

Dr. Kampine is survived by his wife, Susan, five children and 10 grandchildren.

W. Dudley Johnson, MD, of Milwaukee, died October 24, 2016, at the age of 86. A pioneer in the field of heart bypass surgery, he began his career in 1965 as an assistant professor of surgery at the Marquette University School of Medicine (which later became MCW). In 1968, Dr. Johnson performed Milwaukee's first coronary artery bypass graft operation, and won the *World Health Day Award* in 1992 for his contributions to preventing heart disease and improving health. Dr. Johnson is survived by three children.

THINKING ABOUT MAKING A GIFT OR PLEDGE?



BY MAIL:

Medical College of Wisconsin
Office of Development
8701 Watertown Plank Road
Milwaukee, WI 53226-0509



ONLINE:

www.mcw.edu/giving



BY PHONE:

(414) 955-4700

Mary Horowitz, MD '80, GME '89, MS '91



Photo courtesy of Jay Westhauser

The CIBMTR is a large outcomes registry that captures clinical data on donors and recipients of hematopoietic stem cell transplants in 40 countries. It also operates, in collaboration with the National Marrow Donor Program/Be The Match, a large repository of donor-recipient biospecimens linked to its clinical data. Under Dr. Horowitz's direction, the CIBMTR has grown to a database of more than 440,000 patients and a staff of almost 200.

Dr. Horowitz also is research director for the Stem Cell Therapeutic Outcomes Database of the CW Bill Young Cell Transplantation Program and principal investigator of the Data and Coordinating Center of the National Blood and Marrow Transplant Clinical Trials Network (BMT CTN).

In 2013, Dr. Horowitz was inducted into the American Association of Physicians, and in 2014 was selected to receive the American Society of Blood and Marrow Transplantation's *Lifetime Achievement Award*. She has been continuously funded by the National Institutes of Health since 1991 and has co-authored more than 300 peer-reviewed publications. ■

— KARRI STOCK

Dr. Horowitz is the Robert A. Uihlein Professor for Hematologic Research and serves as chief of the division of hematology and oncology in MCW's department of medicine. She joined the Center for International Blood and Marrow Transplant Research's (CIBMTR) precursor organization (the International Bone Marrow Transplant Registry) in 1985, and has served as its chief scientific director since 1991.

What Drives You?

What drove me to choose a career in medicine was a desire to spend my life in a way that made a difference. But what drives me day to day is a desire to deliver on the expectations and needs of the people who depend on me – whether it is the patients I am caring for, the faculty in my division, or my research collaborators in the CIBMTR and BMT CTN. I feel a very deep sense of responsibility to ensure that I deliver excellence in all of the areas of my life.

What Has Been the Highlight of Your Career?

That is really hard to say. However, I derive a lot of satisfaction from having had a leadership role in developing a successful national clinical trials group in hematopoietic stem cell transplantation: the Blood and Marrow Transplant Clinical Trials Network (BMT CTN), which was established in 2001 and has opened more than 40 trials and enrolled more than 9,000 patients. We have done trials that would never have been completed without the Network, and which have changed practice, such as the use of maintenance therapy after autotransplants for myeloma.

What Do You Still Hope to Accomplish Over Your Career?

We are now moving into the area of (nontransplant) cellular therapy for cancer and other diseases, and we are adapting the CIBMTR research infrastructure to meet the needs of this emerging field. I hope to see us play a similar role in advancing the use and outcomes of cellular therapies as we have for transplantation – both by supporting clinical trials and by evaluating effectiveness as these therapies move into more widespread practice.

What Would You Like Your MCW Legacy to Be?

I want my legacy to be the people who come after me...I want to provide the kind of mentorship and support that will enable the next generation to be successful.

What One Piece of Advice Would You Like to Share With Your Colleagues?

Embrace change; it keeps you not only relevant, but alive.

Change Agent highlights a Medical College of Wisconsin faculty or staff member who has had significant impact on the institution's mission to be a leading innovator in transforming healthcare and advancing the health of our communities.



A MOMENT IN HISTORY

Philanthropy Helps Bring Expanded MCW Library to Medical Center Campus

The medical library has been central to the healing profession for thousands of years, with the most ancient collections recovered from excavations of the Assyrian and Babylonian civilizations. So too, throughout the nearly 125-year history of MCW and its predecessor institutions, the medical library has progressed and evolved to meet the information needs of students, staff and faculty members.

In 1913, the library within the Marquette University School of Medicine (MCW's predecessor) contained 3,000 volumes. When the library was moved to what is now the Milwaukee Regional Medical Center (MRMC) campus in 1978, the collection had grown to 90,000 volumes – bolstered in part by a generous gift of \$600,000 from the Todd Wehr Foundation (which had been announced two years earlier).

Upon his death in 1965, C. Frederick “Todd” Wehr, an executive of Wehr Steel, had left the bulk of his estate to a foundation focused on charitable religious, scientific and educational purposes. Over the past 50 years, Wehr’s philanthropic legacy has benefited many Wisconsin universities and cultural organizations, including Marquette University, Ripon College, Viterbo University and the Marcus Center for the Performing Arts in downtown Milwaukee.

With the help of the Todd Wehr Foundation, MCW’s library footprint expanded from 18,000 square feet to 44,000 square feet during the move to the MRMC campus – allowing for significant room for MCW’s collections to eventually grow to more than 200,000 volumes. In a 1978 letter to the Todd Wehr Foundation’s president, MCW library director Bessie Stein wrote, “The ultimate goal of all health professionals is improved patient care, and we in the library will do our utmost to help realize that goal.”

Also in the letter, Stein shared that she believed the Todd Wehr Library would have an increased emphasis on disseminating information and educating individuals to efficiently and effectively access the scholarly record. She also saw the library as a key resource for implementing new learning technologies. Since Stein’s retirement in 1983, the MCW Libraries (comprising



Photo courtesy of MCW Libraries



Photo courtesy of Jay Westhauser

ABOVE: Students study in the expanded Todd Wehr Library, which opened in 1978.

BELOW: Current MCW Libraries director Ellen Sayed is focused on providing access to library materials anytime, anywhere and on any device.

the central Todd Wehr Library and branch libraries at Froedtert Hospital and Children’s Hospital of Wisconsin on the MRMC campus) has realized her vision by working ever more closely with students, educators and researchers, including in support of the active learning model emphasized by MCW’s Discovery Curriculum.

“It takes additional support, effort and teamwork to do active and self-directed learning well, but the reward in increased student engagement is absolutely worth it,” says Ellen Sayed, current director of MCW Libraries. “Librarians have learned instructional design

and software, just as they have always adapted to changes in technology and the ways individuals interact with information.”

One of the most significant changes has been the sophistication of tools to store and retrieve online information. By utilizing online systems and training MCW’s faculty, staff and students in their use, MCW Libraries plans to provide access to its materials anytime, anywhere and on any device. “By focusing on building seamless systems and self-reliance, we are proactively empowering our users to find what they need – whenever and wherever they need it,” Sayed adds. ■

– GREG CALHOUN



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