

breakthrough

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A Shared Passion to
Humanize Medicine

Urology's Giant Shares His Path to Discovery

Nursing: A Critical Thread

Transforming Treatment for
Autoimmune Diseases



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David B. Hellmann, M.D., M.A.C.P.
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ACHIEVING 'ESCAPE VELOCITY'

As a high school physics student, I remember being gobsmacked by the idea of “escape velocity.” For those who haven’t cracked a physics textbook in a while, here’s a quick refresher: If you want to leave Earth to travel to the moon or to orbit our fine planet, you can’t do it by traveling at 500 mph, or 1,000 mph or even 10,000 mph. Escaping Earth’s gravitational pull requires reaching escape velocity — which scientists have measured to be a whopping 25,000 mph.

That’s indeed a dramatic acceleration. But then, breaking loose from Earth’s gravitational hold is itself a dramatic undertaking.

With this issue of *Breakthrough*, it struck me that escape velocity offers an apt metaphor for the transformational undertakings of CIM and its people. Consider the visionary work of **Mary Catherine Beach** and **Scott Wright**, who are bringing together standout clinicians from all across Johns Hopkins to build a community of scholars who are passionate about humanizing medicine (p. 2). A recent addition to that community is the first nurse CIM scholar: **Martha Abshire Saylor**, whose research focuses on caregiver health. Martha’s arrival represents a crucial moment in CIM’s mission to humanize medicine, acknowledging that to achieve escape velocity, we can’t focus only on the doctor-patient relationship. As she notes: “Humanizing medicine is nursing. Enacting innovation in health care will only happen if nurses are engaged and in leadership positions — from conception to implementation” (p. 12).

In the immunology lab, rheumatologist **Max Konig** is pursuing high-risk, high-reward research — applying gene therapy techniques that have worked so well in blood cancer to autoimmune disorders like lupus — that may very well revolutionize treatments for a host of autoimmune diseases (p. 10). Max isn’t taking small, incremental steps in his scientific approach. He is thinking big to take giant leaps — to catch that escape velocity that will catapult patient care to new realms. In that quest, he is standing on the shoulders of Hopkins giants like urologist **Patrick Walsh**, whose innovations in nerve-sparing prostatectomy forever changed the course of prostate cancer care for men the world over (p. 6).

I hope you enjoy reading about the compelling work of these and other CIM faculty members — including cardiologist **Tom Traill**, whose leadership is bringing fascinating new perspectives to our CIM Seminars (p. 16) — in the pages that follow. With your support, we can continue our ambitious efforts to catch the escape velocity that will allow us to shed the limitations of our contemporary health care system and catapult to a new orbit in patient care.

David B. Hellmann, M.D.

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A Shared Passion to Humanize Medicine

Led by internists Mary Catherine Beach and Scott Wright, dozens of top clinicians from across Johns Hopkins gathered in September to begin building a community committed to making humanizing medicine “priority A1.”

Urology’s Giant Shares His Path to Discovery

Patrick Walsh forever changed the grim outlook for men with prostate cancer when he developed the nerve-sparing radical prostatectomy. He shares how listening to a patient proved key to his seminal breakthrough.

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Transforming Treatment for Autoimmune Diseases

Rheumatologist Max Konig is capitalizing on cellular therapy approaches used in treating cancer to develop precision treatments for devastating autoimmune diseases.

Nursing: A Critical Thread

Martha Abshire Saylor, the first nurse CIM Scholar, is excited to bring other nurses into the work of the Initiative for Humanizing Medicine. “Enacting innovation in health care will only happen if nurses are engaged and in leadership positions — from conception to implementation,” she says.

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A Shared Passion to Humanize Medicine

On a picture-perfect early September afternoon, against a backdrop of rolling cornfields, dozens of Johns Hopkins' most compassionate health care professionals gathered outdoors at Folly Farms, the Baltimore County home of **Stephanie Cooper Greenberg**, chair of

CIM's International Advisory Board, and husband, Erwin, for the annual CIM retreat.

Their first order of business? To answer this prompt: *Humanizing medicine is important to me because...*



One by one, doctors and other clinicians from a wide variety of disciplines and perspectives took the mic and shared personal — and very moving — responses. A sampling:

“Because I truly believe that in order to heal someone, we have to know them.”

“Because I see how enthusiastic and bright medical students are when they enter medicine, and I want to make sure that doesn’t burn out.”

“Because I believe it’s the foundation of solving health inequities. It’s the thing that can cut through all of the noise and remind us of who we are serving and who they are loved by.”

“Because contrary to popular belief, technical expertise is absolutely not enough if we want to provide great care, or even good care, for our patients and communities.”

“Because the training environment has become patient-proximate and not patient-centered. The road back goes through connecting with our patients, and connecting with each other, at the bedside.”

For internists **Mary Catherine Beach** and **Scott Wright**, who planned the retreat and are key leaders of CIM's new **Initiative for Humanizing Medicine (IHM)**, the heartfelt insights were welcome evidence that the IHM is an idea whose time has definitely come.

“To listen to everyone enthusiastically provide their reasons for why humanizing medicine was important to them, and to have those responses be so different and personal ... That was a turning point for me, to go from, ‘I think this is a good idea’ to, ‘Wow, this is going to be a reality!’” says Beach, who is a co-director of the IHM and a **Mary and David Gallo CIM Scholar**.

Says Wright, who is director of CIM's **Miller Coulson Academy of Clinical Excellence** and the **Anne G. and G. Thomas Miller Professor of Medicine**: “To a person — and there was great diversity in terms of where they work and what they do — each

“There is a real risk that the importance of knowing the patient as a person will be determined as something with low return on investment — and it will be lost from medicine entirely. If that happens, it would be a deep and grievous loss.”

Cynthia Rand

attendee asserted that humanizing medicine is at the core of medicine and is truly important to them. What's more, they want to be working with colleagues who have this as priority A1.” He adds, “Hearing and seeing the passion people feel about this was exciting and invigorating — and it gives us confidence that this is going to be a great initiative.”

Cynthia Rand, Mary and David Gallo CIM Scholar and IHM senior adviser, struck a serious note when she rose to elaborate on her own response to the prompt. “We are at a tipping point with the commoditization of health care,” she said. “There is a real risk that the importance of knowing the patient as a person will be determined as something with low return on investment — and it will be lost from medicine entirely. If that happens,” she said, “it would be a deep and grievous loss.”

A SCHOLARLY COMMUNITY

Of course, Rand, Wright and Beach are all optimistic that such a loss will be averted at Johns Hopkins because of the groundswell of support for clinical excellence among Johns Hopkins physicians, nurses and other clinicians.

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“The Miller Coulson Academy has been laying the groundwork for clinical excellence over the last 10 to 15 years. With all we have learned, this will really help us as we build – and dream about – what this Initiative for Humanizing Medicine can be.”

Scott Wright

Wright, who was instrumental in the launch of the Miller Coulson Academy in 2008, has seen it grow to now include more than 100 members (see listing on p. 20 with fall 2023 inductees). The Miller Coulson Academy broke new ground by demonstrating that clinical excellence could be measured in a

clear and consistent way. By developing a truly rigorous process for measuring excellence in clinical care, CIM really made a mark — at Johns Hopkins and on the national level, Wright notes. One prime example: the recent establishment of a new promotion track at Johns Hopkins Medicine for faculty members who excel at patient care.

“The Miller Coulson Academy has been laying the groundwork for clinical excellence over the last 10 to 15 years,” says Wright, a **Mary and David Gallo CIM Scholar**. “With all we have learned, this will really help us as we build – and dream about – what this Initiative for Humanizing Medicine can be.”

Moving forward, Beach says, the mission will be “to create and support an intellectual scholarly community,” through which those who attended the retreat — and others at Johns Hopkins who are committed to humanizing medicine — can find like-minded collaborators for research and education projects aimed at advancing truly patient- and family-centered care.

Wright notes that just as the Miller Coulson Academy was successful in bringing people together to do things they couldn’t do by themselves, such as CLOSLER.ORG (see article on p. 9), so will the Initiative for Humanizing Medicine succeed in uniting clinicians with shared missions who might not otherwise have ever met or worked together.

“We know that bringing people together in teams results in greater creativity,” he says. “We’re hoping for some wonderfully spontaneous collaborations.”

BUILDING A PIPELINE

In addition to expanding opportunities for networking and collaboration, Beach is excited about cultivating the pool of mentors for a rapidly growing group of medical school students, trainees and early-career faculty members who are passionate about pursuing projects that are focused on humanizing medicine.

Beach herself is already mentoring a notable number of mentees and mentee teams. Just a few examples:

- Medical student Priyanka Fernandes is examining how stigmatizing language in medical records impacts the quality of care for maternity patients, while medical student Akanksha Suresh is investigating the best practices for humanizing patients through personalized language in medical records.
- In rheumatology, postdoctoral fellow Kamini Kuchinad is exploring how physicians can best communicate with — and support — patients who have symptoms that are medically unexplained.
- In otolaryngology, Professor Emily Boss is looking at how surgeons can most effectively communicate with and support parents as they make decisions about elective surgery for their children.

And that’s just the tip of the iceberg, says Beach, adding, “I love working with all of these passionate, committed physicians and students, and we’ve got so many projects going across many different disciplines: public health, medicine, engineering, the Armstrong Institute for Patient Safety and Quality...”

Importantly, she notes that seed funding provided by the IHM has already enabled many of her mentees to conduct the early research needed to attract much larger grants from the National Institutes of Health (NIH) and other external funders.

The pilot data that Boss collected, for example, laid the foundation for a recent NIH RO1 grant award of \$3.2 million, as well as \$425,000 in separate NIH funding. All told, Beach and those she mentors have garnered nearly \$8 million in external funding just in the past few years to advance research central to humanizing medicine.

“By supporting medical students and other early-career trainees with funding to conduct projects they are really excited about, we are building a pipeline of young researchers who will go on to do big things in humanizing medicine. This does a lot of good downstream.”

Mary Catherine Beach

“There is another beautiful thing about these small grants awarded through CIM,” says Beach. “By supporting medical students and other early-career trainees with funding to conduct projects they are really excited about, we are building a pipeline of young researchers who will go on to do big things in humanizing medicine. This does a lot of good downstream.” ■



A Giant in Urology Shares His Path to Discovery

When **Patrick Walsh** arrived at Johns Hopkins 50 years ago as a young surgeon, prostate cancer often carried a death sentence. This was the era before prostate-specific antigen (PSA) blood testing, which today is widely used to screen for prostate cancer early on, when it is still treatable. Even patients who had potentially curable disease were rarely treated with curative intent, as radiation therapy had not yet sufficiently advanced. Surgery – the radical prostatectomy pioneered in the early 1900s by Johns Hopkins' own Hugh Hampton Young – was widely considered worse than the disease itself.

That's because 100% of men who underwent a radical prostatectomy became impotent, Walsh explains. Roughly 25% experienced severe urinary incontinence. Few surgeons even wanted to undertake the surgery because of the massive bleeding that occurred when operating.

In the early 1980s, Walsh forever changed the grim outlook for men the world over when he developed a surgical approach that became known as nerve-sparing radical prostatectomy. The technique allowed surgeons to excise the cancer while preserving a man's potency and urinary continence. After completing the first purposeful such surgery on April 26, 1982, Walsh would go on to refine his technique while performing nerve-sparing surgeries on thousands of men at Johns Hopkins and beyond over the next three decades, even as he led Johns Hopkins' Brady Urological Institute and edited the book known as the "bible" of urology, *Campbell's Urology*. In 2012, it was renamed *Campbell-Walsh Urology* in his honor.

Now University Distinguished Service Professor of Urology Emeritus, Walsh recently spoke about his path of discovery in an inspiring CIM Seminar titled, "How Listening to a Patient Transformed the Care of Men with Prostate Cancer." As Walsh tells it, his breakthrough discovery hinged on a series of seeming coincidences – which he, as a man of deep Christian faith, attributes to divine providence. While it's impossible to capture the full scope of Walsh's talk in the short space available, a few highlights stand out.

In the early 1980s, Walsh forever changed the grim outlook for men the world over when he developed a surgical approach that became known as nerve-sparing radical prostatectomy.

KEY MOMENTS IN PATRICK WALSH'S PATH TO DISCOVERY

I listened to my patient when he told me following surgery that he was sexually potent – and I wondered why.

Intent on improving the "problem with bleeding" in prostate surgery during the late 1970s and early 1980s, Walsh zeroed in on the anatomy of the veins surrounding the prostate by using the operating room as his anatomy lab. At this point, he explains, the veins that caused the bleeding had never been charted, the location of the nerves responsible for erection was unknown and the muscles for urinary control were incorrectly identified.

Walsh was able to identify a common trunk of veins over the urethra. This led to a technique that reduced blood loss dramatically, providing a safer and more thorough prostate cancer operation. Soon after using this technique, Walsh says, a patient returning for follow-up from prostate cancer surgery announced that he was fully potent.

How could that be? "At that time, everyone believed that the nerves that controlled erectile function ran through the prostate, and it would be impossible to preserve potency," he recalls. "But from this one patient, I knew that this was not true. But where were the nerves? The answer was not available in any textbook."

I invited an older, lonely-looking man who was a total stranger to dinner – and I met with that "lonely stranger" four years later and 4,000 miles away in Leiden, the Netherlands.

Within weeks of that momentous patient encounter, Walsh attended an international urological conference with his wife. At dinner one night, he noticed an older man about to be seated alone. "For the first and only time in my life, I went up to a total stranger and asked if he would like to join us for dinner, and I asked why he was in town," Walsh recalls.

The man was Pieter Donker, chair of urology at the University of Leiden in the Netherlands, and the trio had a wonderful dinner together. Four years passed – a time during which Walsh continued to investigate the nerve mystery evoked by his potent patient. Donker was retired at this point, but his successor invited Walsh to attend a surgical congress in Leiden. On the last day, Walsh's 43rd birthday, "My host told me that Dr. Donker appreciated my kindness a few years earlier and wanted to return the favor by taking me to see the windmill museum in Leiden."

When the two met up, Donker mentioned that in retirement, he was working in an anatomy lab. Walsh suggested they abandon the museum tour and go to the lab instead, where Donker was dissecting nerves to the bladder in a stillborn baby. Once there, "when I asked about the location of the nerves responsible for erections," says Walsh, "he said he had never looked." The two got to work. "Three hours later, there they were, outside the prostate."

CONTINUED ON PAGE 8

Returning to Johns Hopkins, Walsh in 1981 found that there were vessels located in the exact site where the nerves were present in the fetal dissections. “I speculated that these vessels might provide the scaffolding for these microscopic nerves and could be used as the macroscopic landmark to identify them in the operating room,” he explains. Using that technique, Walsh performed that first nerve-sparing radical prostatectomy on a 52-year-old man in April 1982. The patient would go on to live a normal life, cancer-free.

Over the next decade, radical prostatectomy became the most common form of treatment for localized prostate cancer in the United States.

I continued to listen to my patients.

Between 1982 and January 2011, when Walsh performed his last surgery, he completed nerve-sparing prostatectomies on 4,569 patients. “I spoke to every one of those patients every three months in the first year after their surgeries — that was more than 18,000 telephone conversations,” he says. Those conversations were crucial in guiding him to further refine his surgical technique and improve quality of life measures, Walsh says. “I made 28 changes over those 29 years.”

At the time Walsh stopped operating, 93% of his patients who underwent nerve-sparing prostatectomies reported being potent at 18-month follow-up. And 95% had total urinary control.

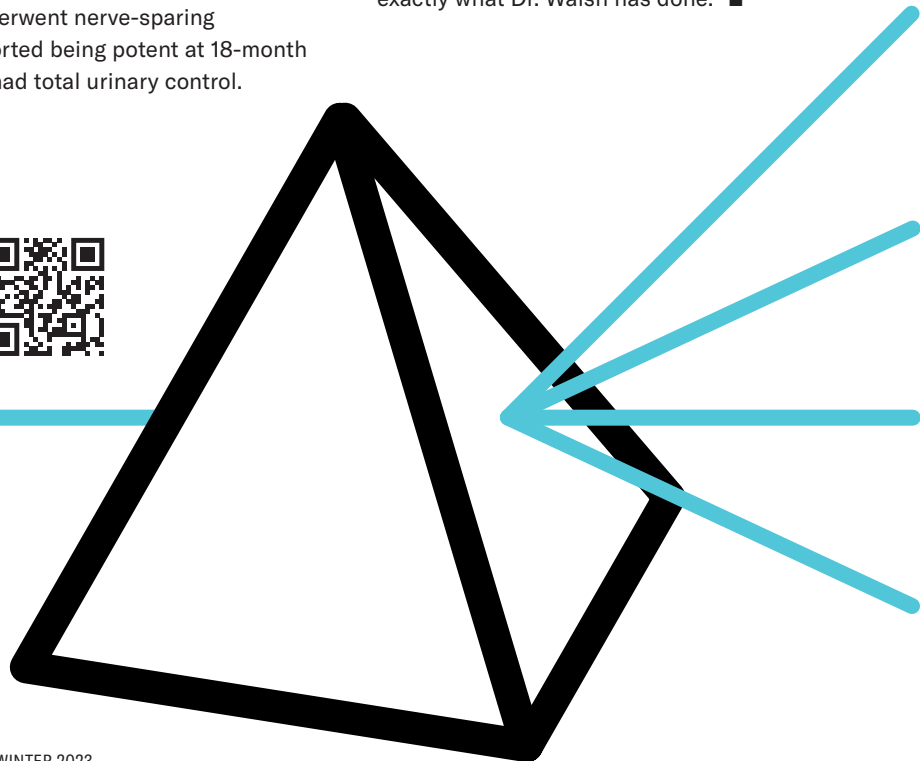
At the time Walsh stopped operating, 93% of his patients who underwent nerve-sparing prostatectomies reported being potent at 18-month follow-up. And 95% had total urinary control.

“These results were far, far different from when I began my journey,” he says.

For CIM Director **David Hellmann**, Walsh’s careerlong, patient-centered approach to discovery and patient care provides a perfect case study for the importance of humanizing medicine.

Says Hellmann: “It illuminates that listening to patients is important not only because patients value it and it rejuvenates physicians and nurses, but when coupled with clinical excellence and deep scientific curiosity, listening to patients can drive dramatic discoveries and innovation — and change the way medicine is practiced for the better. That is exactly what Dr. Walsh has done.” ■

Watch
Patrick’s Walsh’s
presentation
in its entirety:



CLINICAL EXCELLENCE

CLOSLER.ORG: Where the 'Magic' Happens

Launched in 2018 by CIM’s **Miller Coulson Academy of Clinical Excellence** to bring today’s doctors “closer to Osler” — with essays, articles and poetry that stimulate reflection about providing exceptional care to patients — the **CLOSLER** site has made its mark among clinicians the world over.

“The success of CLOSLER has exceeded my wildest expectations,” says **Scott Wright**, director of the Miller Coulson Academy. “We now have articles coming in from far and wide — from students, medical residents, faculty members, nurses, pharmacists and more. They share brilliant insights and moving stories about communicating more effectively with patients and providing truly humanistic care. And we have gained a huge following from around the globe.”

“We now have articles coming in from far and wide — from students, medical residents, faculty members, nurses, pharmacists and more. They share brilliant insights and moving stories about communicating more effectively with patients and providing truly humanistic care.”

Scott Wright



“We’ve been consistent in publishing a new piece every day, Monday through Friday. That’s a lot in five years!” adds managing editor **Gretchen Miller**.

Last year, in response to growing interest in the humanities in medicine, CLOSLER launched a new forum for “creative arts in medicine.” In one recent entry, a young doctor focused on countering burnout through music, offering a lamplit performance on a seven-stringed Indian classical musical instrument. In another, a medical student from Johns Hopkins shared her passion for pottery and discussed how it allows her to connect more deeply with her work.

Most recently, CLOSLER added a podcast to its mix: *The Making of a Clinician*, the brainchild of three premed students who are serving as CLOSLER interns, which has explored themes such as LGBTQ voices in medicine and White Coats for Black Lives.

“It’s really been a joy to see CLOSLER expand and evolve,” says Wright. “The site has made the Hopkins name synonymous with clinical excellence. CLOSLER is showing that this is where the ‘magic’ happens.” ■

To read more, visit: closler.org

Transforming Treatment for Autoimmune Diseases

When CIM Director **David Hellmann** describes the research mission of Johns Hopkins rheumatologist **Max Konig**, he uses an analogy drawn from the movies – Clint Eastwood’s *Dirty Harry* character, who sets out to clean up a corrupt San Francisco police department by taking out the handful of “bad cops” who are ruining the entire system.

“Our immune system is like the police system of our body, and when we encounter autoimmune diseases, it’s due to a few ‘bad cops’ attacking the normal citizens in our body,” says Hellmann. “Just as Clint Eastwood selectively goes after each of the bad cops, leaving the good cops in place to protect us, so Dr. Max Konig is working to develop precision therapies that will leave the ‘good cops’ unharmed, allowing patients to escape the complications that are so common with current therapies for autoimmune disease.”

Konig, an assistant professor who completed his residency training at Harvard and advanced training in rheumatology at Johns Hopkins before joining the faculty, is now at the leading edge of a promising new line of investigation. He is capitalizing on cellular therapy approaches that have become the standard of care in treating cancer to develop precision treatments for devastating autoimmune diseases like lupus, rheumatoid arthritis and antiphospholipid syndrome, which is implicated in heart disease, stroke and pregnancy loss.

“Although we are at the very edge of the journey,” says Konig, “there is a sense of enormous potential to use

engineered cell therapies to create tailored solutions to prevent, control and cure autoimmune diseases.”

He is motivated by a sense of urgency, since existing treatments for autoimmune diseases carry potentially toxic side effects that can be debilitating and even deadly. That’s because only a tiny percentage of cells drive autoimmune disease, “but as rheumatologists, we currently have to use an armamentarium of drugs to ‘burn down the whole forest’ to get control of that very small population,” he explains. The impact on patients of this toxicity? A high risk of infection, poor response to vaccines and treatment-related deaths.

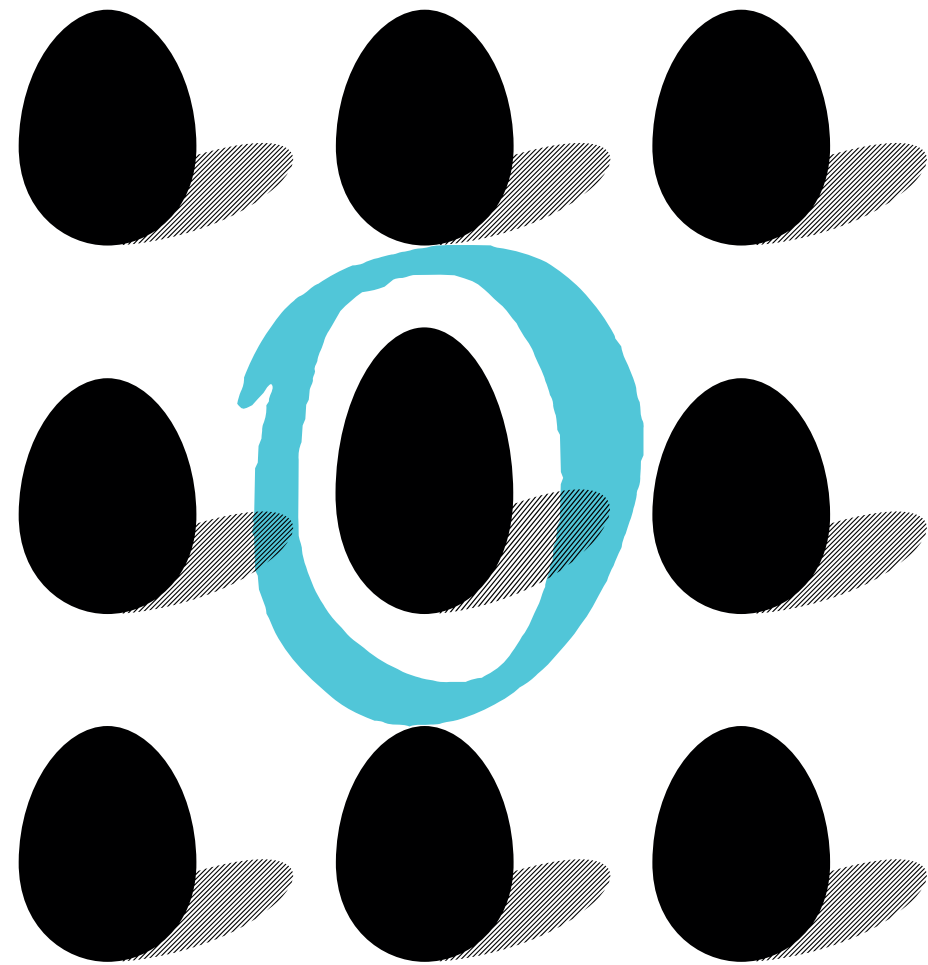
“Although we are at the very edge of the journey, there is a sense of enormous potential to use engineered cell therapies to create tailored solutions to prevent, control and cure autoimmune diseases.”

Max Konig

Konig is building on advances in CAR T-cell therapy, a type of immunotherapy that is increasingly being used to treat patients with B cell-driven blood cancers, including lymphoma, leukemia and multiple myeloma. Simply explained, the treatment involves collecting a patient’s “killer” T cells, then reengineering those cells to recognize and attack the cancer by binding to proteins, or antigens, on the cancer cells’ surface. Different types of cancer have different antigens, so each type of CAR T-cell therapy is made to fight a specific kind of cancer antigen.

After being reengineered, the cells are allowed to multiply and then infused back into the patient to do their cancer-fighting work.

“It’s remarkable that this works – that CAR T cells can actually cure blood cancers,” says Konig. “This is no simple feat. In order to cure a cancer, you need to get rid of every single last cell or the cancer will come back.”



The success of CAR T treatment has led Konig and others to wonder: “If we have such a unique and incredibly powerful tool to cure B cell cancers, could it be applied to treat B cell-driven autoimmune diseases?” He and others believe the answer is “yes.”

“We are on the verge of the next step in treating autoimmune diseases, one that will bring us into a new era of cell engineering and cellular therapies,” says Konig, “where all of a sudden we have the tools to design really tailored solutions.”

He points to early clinical trials in Germany in five young adults with moderate to severe lupus who had not responded to existing treatments. After undergoing B cell-targeted CAR T treatment (which eliminates good and bad B cells alike), “all these patients were in complete clinical and immunological disease remission,” he says. Other researchers have taken a similar strategy and produced similarly encouraging remission outcomes in patients with MS spectrum disease and myositis.

In his lab at Johns Hopkins, Konig and his colleagues in the Ludwig Center, part of the Kimmel Cancer Center, are furthering this strategy by developing and using a new generation of T cell therapy approaches – such as CRISPR-based engineering of chimeric autoantigen-T cell receptors – to reprogram a patient’s T cells so they can selectively target self-reactive immune cells while safeguarding normal immune populations.

“These precision therapies have the potential to transform the lives of patients living with autoimmune and rheumatic diseases by providing new tailored treatments that can control autoimmunity without increasing the risk of infection that is common to all existing treatments,” Konig notes.

The “hope message” Konig is eager to share? “I really think engineered cellular therapies will enable a future where we can treat, prevent and cure autoimmune diseases.” ■

Nurses: A Critical Thread

“Where are all the nurses?”

That was the question that **Mary Ousley** whispered to her sister **Dana Case**, a fellow nurse, soon after they joined the International Advisory Board of the Center for Innovative Medicine. The two had looked around the table at the other board members and seen only physicians.

“I am in awe of the work that CIM does and of the impressive group of individuals who pursue its mission — but isn’t health care about teamwork?” asks Ousley, whose distinguished career as a national champion of health care quality for senior living and long-term care patients has earned her many accolades.

Once their observation was brought to CIM Director David Hellmann, Ousley says, he quickly began bringing nurses into CIM’s fold, by tapping into the insights and expertise of a variety of nursing experts at different points and for different projects. Now, the nursing profession has achieved a new level of visibility and far-reaching impact at CIM with the establishment of the first nurse **CIM Scholar**. The scholarship’s funder? None other than Ousley.

“Humanizing medicine is nursing. The holistic perspective we bring as nurses is about humanizing the patient experience, about including the patient’s entire family, about sitting with emotion.”

Abshire Saylor

Martha Abshire Saylor, an assistant professor at the Johns Hopkins University School of Nursing, has been selected to receive the **CIM Scholar** support. Abshire Saylor, who has clinical experience in cardiac and critical care, has done research aimed at helping patients better manage heart failure. Her most recent research project, “HERoIC,” focuses on the caregivers of patients with heart failure. Her goal: to determine whether providing holistic support for caregivers can improve the quality of life for both patients and those who care for them.

It is that focus on valuing the individual, and on improving the individual’s experience of health care, that drew Ousley to support Abshire Saylor and her work. “Martha’s approach ties in so well to CIM’s mission to humanize medicine,” Ousley says. “So much of humanizing medicine is just listening. And nowhere is this needed more than with older individuals, who so many times are just written off because of their age.

“From what I have learned in my career, if we value the individual and everything about the individual through to their very last breath, then that is some of the most noble work we can do.”

Abshire Saylor says she is deeply grateful for Ousley’s support and honored to be the first nurse CIM Scholar.

“Nurses make up the largest proportion of licensed providers in our health care system,” Abshire Saylor notes. “Enacting innovation in health care will only happen if nurses are engaged and in leadership positions — from conception to implementation. We need to work as a team from the very beginning. That’s a root belief for me,” she says.

As nurse leader, Abshire Saylor says she is particularly well-positioned to advance the efforts of CIM’s new **Initiative for Humanizing Medicine (IHM)**. “Humanizing medicine is nursing,” she says. “The holistic perspective we bring as nurses is about humanizing the patient experience, about including the patient’s entire family, about sitting with emotion.”

Abshire Saylor will meet with nurses and nursing leaders across Johns Hopkins to raise awareness around the Initiative for Humanizing Medicine and to encourage nurses to apply for grant funding from the IHM to pursue patient- or family-focused projects.

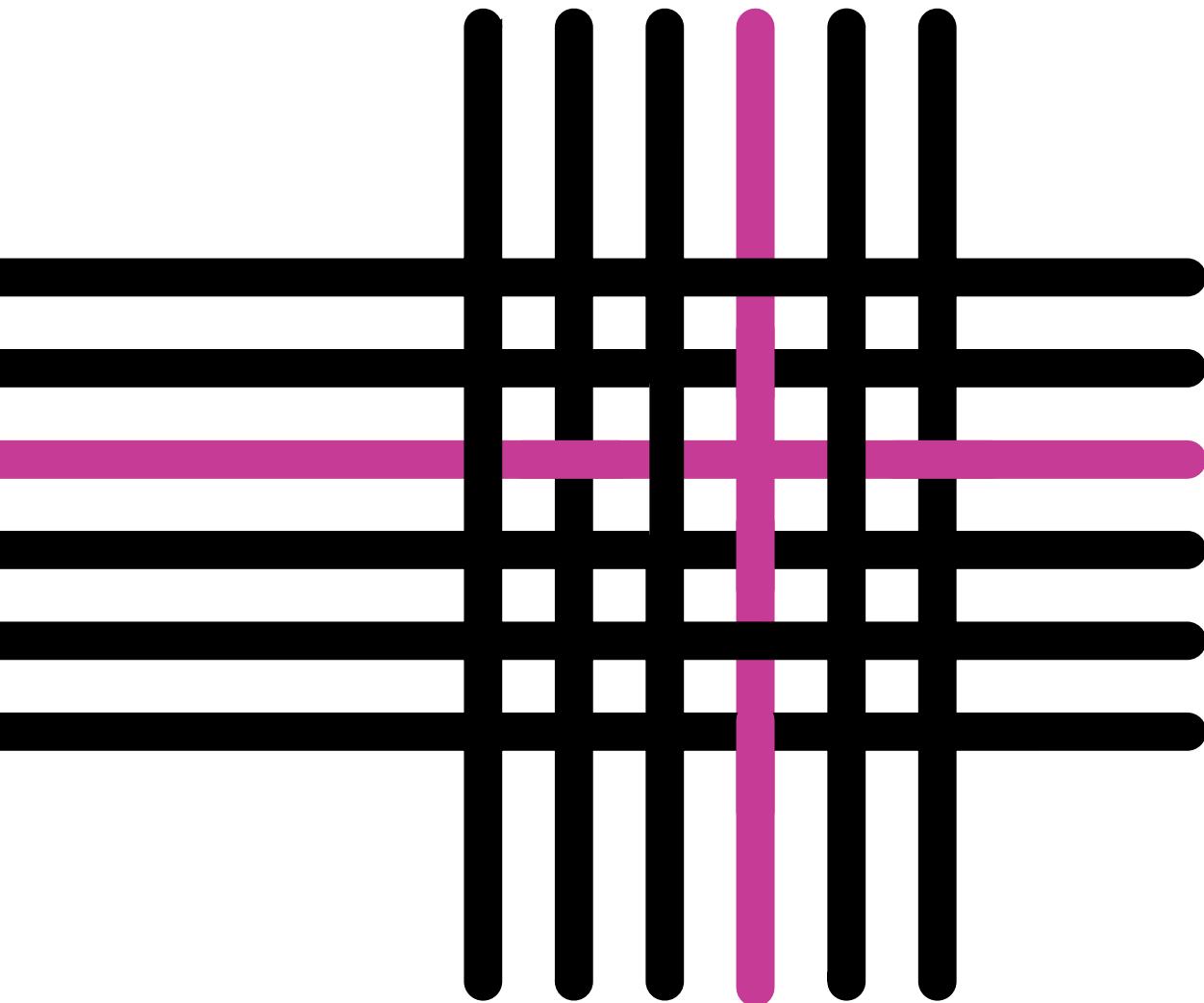
“The CIM Scholar funding will also benefit my own research,” says Abshire Saylor. “It gives me thinking and working space that will really advance my work involving caregivers.”

As hospital length of stay has grown shorter, driven largely by financial pressures from insurers, “we are depending on families more and more to help transition patients out of the hospital and back home” — work that involves navigating medication changes, making meals, helping loved ones shower and dress, and transporting them to appointments, she says. With chronic diseases like heart failure and dementia, caregiving really has no end point.

“Until now, most of the emphasis with caregivers has involved teaching them to provide care to the patient,” says Abshire Saylor. “What’s been missing, and what projects like HERoIC are addressing, is a focus on providing support for caregivers themselves.”

Ousley says she is thrilled to see nursing gain a prominent new seat at the CIM table and that Abshire Saylor is the ideal candidate to forge partnerships with physicians and others on the health care team to improve the patient experience.

“I have been excited about everything CIM has done during years I have served on the board,” says Ousley. “But nothing has excited me more than the Initiative for Humanizing Medicine.” ■



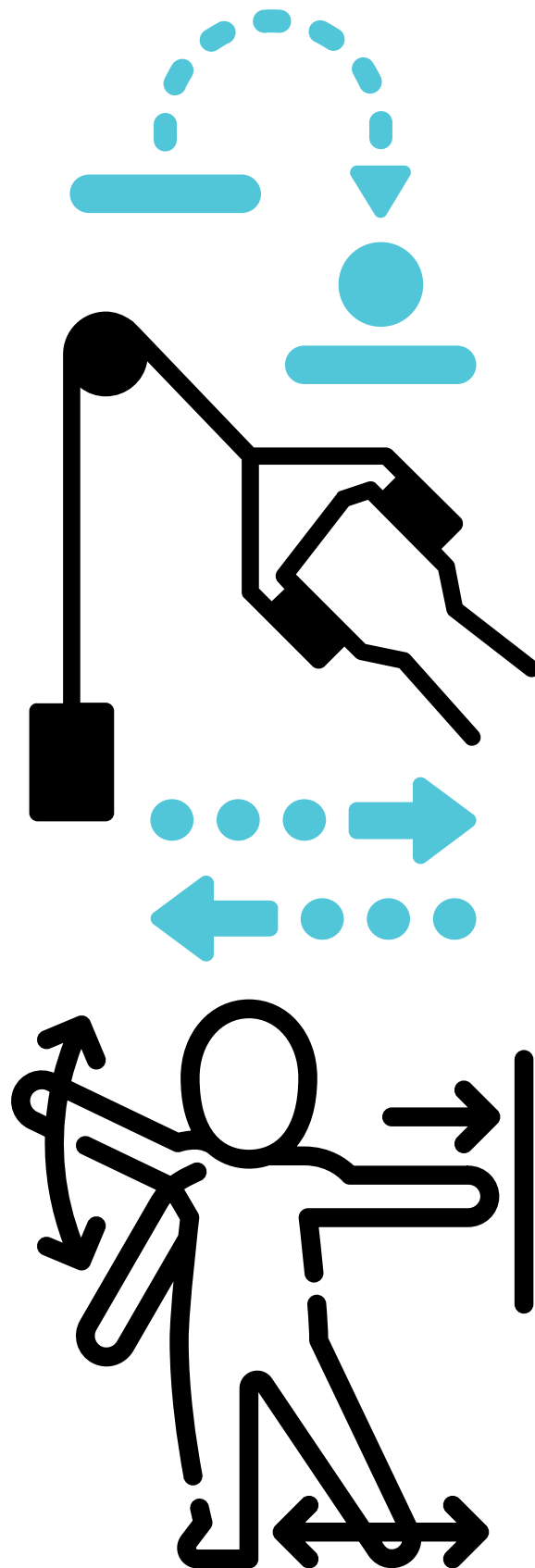
A Hub for Engineering at Bayview

For years, the gymnasium in the Mason F. Lord Building on the Johns Hopkins Bayview Medical Center campus served as a popular spot for faculty members, staff and trainees to stay active – shooting some hoops or taking a fitness class.

Soon, the 10,000-square-foot space will have a new but related mission: It will serve as a hub for collaborative research aimed at keeping older adults active and living independently at home for as long as possible.

The new center, part of the **Johns Hopkins Human Aging Project (HAP)**, marks the first time that engineering students and faculty members from Johns Hopkins' Homewood campus will have a dedicated research home for collaboration with clinicians and researchers at Johns Hopkins Bayview, a campus with a rich array of geriatrics-related clinics, centers and labs.

“The new space offers an exciting opportunity for our engineers to work together with clinicians, nurses, older adults and their caregivers to come up with technology-driven solutions to some of the biggest challenges older people face, such as social isolation or mobility issues,” says **Najim Dehak**, an associate professor of electrical and computer engineering and the 2021 **Whiting School of Engineering/HAP Scholar**. “We aim to leverage technology to extend the time that older adults can remain living safely and independently at home.”



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Najim Dehak

With its plentiful conference rooms, labs and offices, the space will provide a new home for engineers affiliated with the Johns Hopkins Artificial Intelligence & Technology Collaboratory for Aging Research (AITC) — which was established in November 2021 with \$20 million in funding from the National Institute on Aging — and for multidisciplinary teams working within the Gerotech Incubator Program.

The Gerotech teams bring together engineering students with nursing doctoral students, medical residents, business students and faculty mentors to tackle an aging challenge, develop a prototype solution and — in some cases — move the product through to commercialization.

“One important element of the new space is a model apartment that will have many of the features of home,” says Dehak. “It will be here that we can bring older adults and their caregivers to conduct clinical tests of devices that have been developed through the AITC and by Gerotech teams.” Technological solutions for healthier aging will run the gamut, Dehak says, from robotic social companions to sensors that promote deeper sleep for better brain health.

“It will be wonderful to have space for older adults to try out and test wearable devices and sensors that are being developed to monitor their health,” says Dehak, who is a leader of the technology core of the Johns Hopkins University Claude D. Pepper Older Americans Independence Center at Johns Hopkins Bayview, which was launched in 2003 and recently received a five-year renewal of federal funding.

“Our vision for the CIM-supported Human Aging Project is a future where aging is not a barrier to living a fulfilling and independent life,” says HAP Director **Jeremy Walston**, the **Salisbury Family Foundation CIM/HAP Scholar**. “By forging important new collaborations with engineers, we can tap into technology to develop the tools and resources older people need to age in place safely and comfortably. This new space will provide a critical hub to make that happen.”

The Human Aging Project has already attracted more than \$60 million in funding, and 11 faculty members are now supported in their work as HAP scholars. Nine of those HAP scholars have been funded through CIM, Walston notes.

“Our goal is not only to help older adults live longer, healthier and independent lives but also to extend the reach of our discoveries to everyone,” notes **Ed Schlesinger**, dean of the Whiting School of Engineering.

“The advances our students and faculty are making in artificial intelligence and sensor technology are enabling ‘smart,’ connected homes, and the user-friendly interfaces they’re developing for human language technology make it easier for older adults to benefit from these advances,” Schlesinger says.

“We are excited to see our engineers find a new home at Johns Hopkins Bayview and to further extend our partnership with Johns Hopkins Medicine — and I am confident that their collaboration with clinicians, patients and caregivers will result in practical new solutions that will improve the quality of life for older adults the world over.” ■

Speaking of Healing

If you're like most fans of the Center for Innovative Medicine, you've got a recurring event on your calendar you aim not to miss: the **CIM Seminars**, which unfold on Tuesday afternoons at 4 p.m. via Zoom. Each session features a keynote speaker invited by CIM Director **David Hellmann** to share highlights of his or her current work on fascinating topics ranging from humanities in medicine to artificial intelligence and early detection of cancer.

This academic year, Hellmann invited the newest **CIM Scholar**, Johns Hopkins cardiologist **Thomas Traill**, to act as a co-planner for the CIM Seminars. A professor of medicine, Traill is former associate director of the Osler Medical Housestaff Training Program for residents.

"Tom is a brilliant and thoughtful cardiologist with deep interest and knowledge of the history of medicine," says Hellmann. "I'm thrilled that he will be planning and hosting about half of the year's seminars, focusing on the important theme of healing."

In the Q&A that follows, Traill talks about his vision for the CIM Seminars and, more broadly, why it's so important in today's health care milieu not to lose sight of the human side of medicine.

Could you share a bit about your thematic vision for the seminars you planned — and how that ties into CIM's ongoing mission to humanize medicine?

Like CIM, I wholeheartedly subscribe to the importance of keeping medicine humanized. I also believe there are pressures that increasingly threaten that intent.

In this early 21st century, we are living in the era of molecular medicine. We read every day about the discovery of a new disease-causing molecule and the therapeutic molecule that's going to fix it. Molecular

medicine allows for extraordinary precision, stuff that would have been unbelievable even a few years ago.

But as physicians, it's forced us to move to a different level of looking at human beings, a different scale. We are looking at molecules, not organs. We are looking at molecular physiology and no longer at how the body works as a whole, how whole organs fail. This is a huge shift in the ground for all disciplines of medicine. And I believe it comes at a cost to understanding and explaining to our patients, to our ability to heal people, and to medical education.

Along those lines, the first of the talks I organized was given in September by Johns Hopkins psychologist **Kay Redfield Jamison**, who also happens to be my wife. She focused on the "wounded healer," which is a theme of her newest book, *Fires in the Dark: Healing the Unquiet Mind*. Her book explores how psychotherapy and medicine, as well as rituals, nature, religion, love and music, can all be crucial to healing. One healer Kay focuses on is Sir William Osler, who lost his beloved son, Revere, in World War I. The elder Osler's own grief and suffering shaped his ability to bring healing to others.

You'll also be bringing in the voices of some speakers from outside of medicine?

Yes, I've invited two people to speak in December who are episcopal priests. Stuart Kenworthy and David Peters have served on the front lines as Army chaplains in Iraq. They have extraordinary stories to tell about caring for people who have experienced physical trauma and moral injury: both injured soldiers and also themselves.

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"Like CIM, I wholeheartedly subscribe to the importance of keeping medicine humanized. I also believe there are pressures that increasingly threaten that intent."

Thomas Traill

On a slightly more light-hearted note, you also gave a talk that looks at how doctors are perceived by the public based on how they are portrayed in fiction and on the screen.

If you watch just a few minutes of an episode of the iconic TV series *Marcus Welby, M.D.*, which starred Robert Young and aired from 1969 to 1976, you'll find him talking about what gets him up in the morning and his affection for being a "real doctor."

Around the same time, there was *Dr. Finlay's Casebook*, the BBC series that ran from 1962 to 1971, based on the books of A.J. Cronin. Dr. Finlay was a stalwart of general practice. He comes home from World War II as a young, psychologically wounded practitioner and then devotes himself to serving patients through the newly established National Health Service.

Then, put them both up against actor Hugh Laurie, the titular star of the TV show *House* [which ran on Fox from 2004 to 2012]. House is a very interesting character. In the very first episode, he comes up with remarks like, "Everybody lies," and "Humanity is overrated." Then he pulls a diagnosis out of the air without ever seeing the patient. Other times, there are allusions to Sherlock Holmes, who would astonish people by recognizing who they were and where they'd been before they had even opened their mouths — another complicated man.

The evolution from Marcus Welby and John Finlay through to the brilliant misanthropic House sheds an interesting light on how the public sees us and how young people see the profession that they are about to enter. In interviews I've done with residency applicants, several have said they were impressed with House and wanted to be like House, at least in his positive aspects.

You have other speakers?

Yes. **Karen Swartz** in psychiatry and **Duke Cameron** in cardiac surgery, both people I have known for much of my career at Johns Hopkins and whom I admire enormously for their care of patients. Karen will be speaking about the intersection between psychiatry and public health in recognizing depression in school-age children. Duke will speak to the complex relationships we have with medical technology — the good and the not so good.

That offers a nice segue into your thoughts about the state of bedside teaching of physician trainees.

Going all the way back to William Osler, he felt passionately that people who teach medicine should be the people who are *doing* medicine. What was true then is even more true now. I worry that bedside teaching by the great clinicians — the Philip Tumultys of the world — is really threatened, as

precision medicine and expert guidelines start to dominate hospital practice and as diagnostic workups are increasingly taking place in the Emergency Department. The days of someone like Osler sitting at a patient's bedside in the wards and scratching their chin over a diagnosis are mostly gone.

"The Johns Hopkins of the future should be a place where young doctors in training can see today's generation of Oslers scratching their chins — but this will probably need to take place in the outpatient clinic, not by the bedside in the hospital."

Thomas Traill

The Johns Hopkins of the future should be a place where young doctors in training can see today's generation of Oslers scratching their chins — but this will probably need to take place in the outpatient clinic, not by the bedside in the hospital. It's in the outpatient clinics where most of today's patients are coming in undiagnosed and in need of human help. ■

Notable News

Newest Members of the Miller Coulson Academy

This fall, the Miller Coulson Academy of Clinical Excellence (MCACE) at Johns Hopkins inducted 12 new clinicians – doctors who are the “best of the best” when it comes to providing patient care.

The new class of academy members joins nearly 100 clinician members, from departments across Johns Hopkins, who are all committed to establishing initiatives and programs to advance excellence in clinical care.

The 2023 Miller Coulson Academy inductees are:

Chetan Bettegowda, M.D., Ph.D.

Departments of Neurosurgery, Oncology, and Radiation Oncology and Molecular Radiation Sciences

Youngjee Choi, M.D.

Departments of Oncology and Medicine, Division of General Internal Medicine

Nicholas Dalesio, M.D., M.P.H.

Departments of Anesthesiology and Critical Care Medicine, Otolaryngology – Head and Neck Surgery

Julia Deanehan, M.D.

Department of Pediatrics – Emergency Medicine

Ana Maria Cristina

DeJesus-Acosta, M.D.
Department of Oncology, Gastrointestinal Cancer

Marco Grados, M.D., M.P.H.

Department of Psychiatry and Behavioral Sciences, Child and Adolescent Psychiatry

Rani Hasan, M.D.

Department of Medicine, Division of Cardiology

Jennifer Katzenstein, Ph.D.

Department of Psychiatry and Behavioral Sciences, Child and Adolescent Psychiatry

Mary L. O’Connor Leppert, M.B.B.Ch.

Department of Pediatrics, Kennedy Krieger Institute

Scott Lifchez, M.D.

Departments of Plastic and Reconstructive Surgery, Orthopaedic Surgery

Jose Monroy-Trujillo, M.D.

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