breakthrough

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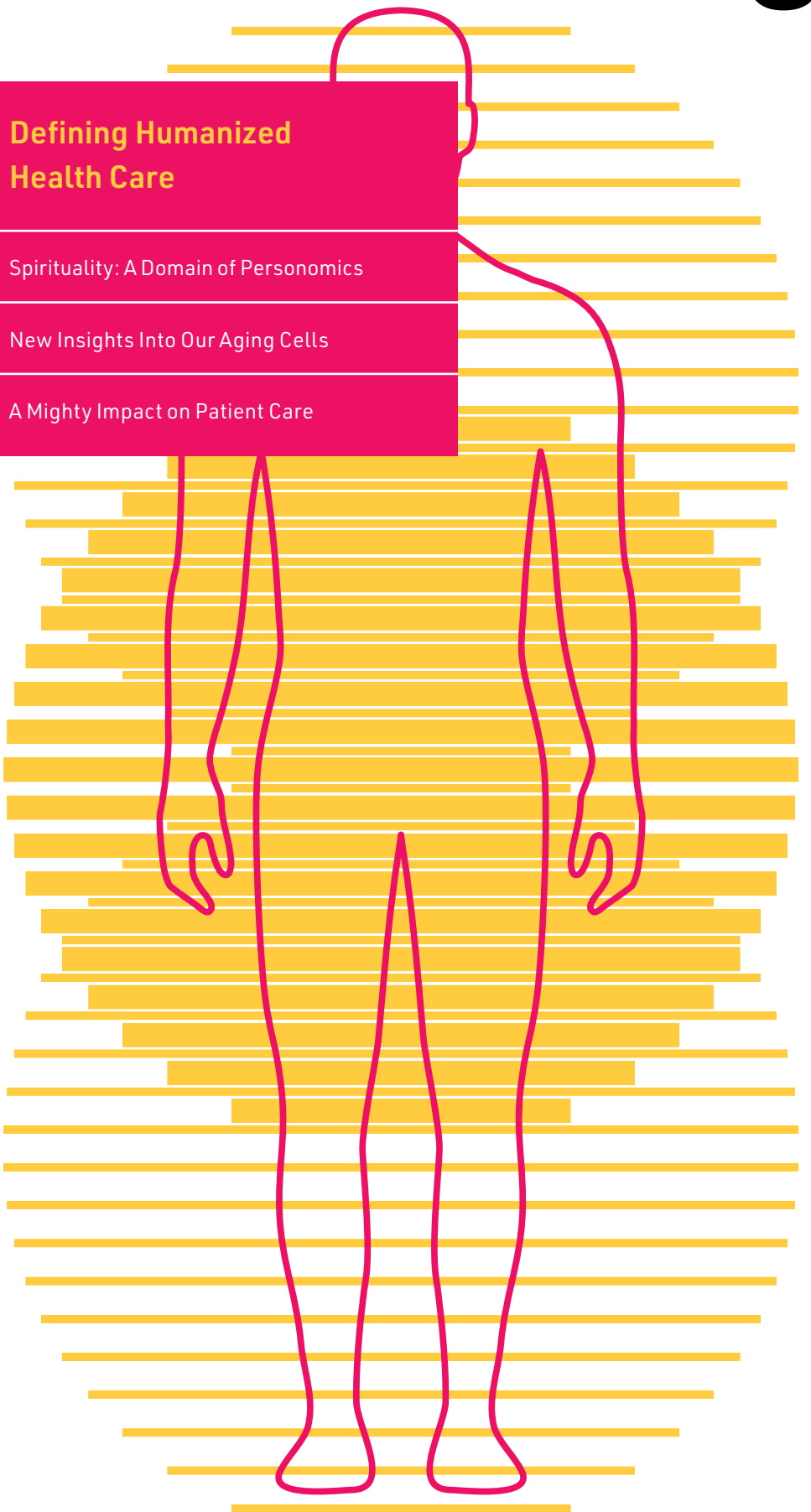


Medicine is a public trust

THE JOHNS HOPKINS CENTER FOR INNOVATIVE MEDICINE

breakthrough

In this issue

David B. Hellmann, M.D., M.A.C.P.
Aliki Perroti Professor of Medicine

SO MUCH AT STAKE

The Center for Innovative Medicine was founded with a critical mission: to make medicine a better public trust.

Just what does it mean to be a public trust? I think renowned physician and public health expert Steven Schroeder may have said it best in his seminal 1989 paper: "Medicine is entrusted by society to improve the health of the public through education, patient care and research. In return, medicine receives significant public funding, respect and autonomy."

Today, we are living through an extraordinary season in our nation, with so much at stake in federal funding for biomedical research. It's critical that we re-commit to this core principle of making medicine a better public trust, and that we share our efforts with everyone who will listen — notably our elected leaders and citizenry. As physician-scientists, I'm convinced we could all do a better job of *communicating* our work and its life-saving impact to the public, and of *offering gratitude* for the taxpayer funding and philanthropic support that makes that work possible.

Both efforts — communicating and saying "thanks!" — have always been key to CIM's *Breakthrough* magazine and this issue is no exception. You'll find compelling articles that describe ways CIM-funded faculty and staff are humanizing medicine — through impact grants that improve patient care (p. 12), research aimed at quantifying humanized health care (p. 2) and advocacy to equip physicians to be better listeners (p. 8). The throughline of every article in the issue? This life-changing work wouldn't be possible without the generous support of CIM's donors.

And wait — there's more! The extraordinary generosity of our donors has now made it possible for CIM to launch an ambitious new funding initiative through the Department of Medicine. Over the next year, thanks to significant funding from CIM donors, the Department of Medicine will be offering 12 *"CIM/Next Generation Scholar Awards"* to support the success of outstanding early-career faculty who are innovators in research, education and clinical care. Each CIM/Next Generation Scholar will be eligible to receive up to $240,000 of funding over three years.

This funding comes at a critical time and meets an urgent need.
To all of our donors: Thank you. Our gratitude knows no bounds.

David B. Hellmann, M.D.

on the web

If you'd like to learn more about the Johns Hopkins Center for Innovative Medicine, please visit our website: hopkinscim.org

Defining Humanized Health Care

Leaders of CIM's *Center for Humanizing Medicine* (CHM) are on an ambitious mission: to create nothing less than a national model for humanized health care.

Key to that effort? Systematically defining what it means for health care to be humanizing in order to guide improvements – at Johns Hopkins and across the nation – to ensure that every patient is treated with dignity and respect, and receives compassionate care.

"Apart from articles on hospital design, health care literature rarely mentions how it can be more 'humanizing.' This presents an opportunity to define a term that reframes our thinking and makes new solutions imaginable," notes **Scott Wright**, co-director of the CHM and co-author of a new study that has done just that.

The bold quest to define — and create objective measures for — a previously uncharted aspect of health care is not new for Wright, who is the *Anne Gaines and G. Thomas Miller Professor of Medicine*.

In 2008, Wright was among a quartet of CIM scholars (supported in their work by *Sarah Miller Coulson*) who developed rigorous measures for clinical excellence in a landmark paper that appeared in *Mayo Clinic Proceedings*. Their work formed the basis for CIM's *Miller Coulson Academy of Clinical Excellence* — which now includes more than 100 Johns Hopkins faculty members — and has set the standards for great doctoring at hospitals around the country.

With this new research effort, Wright and his collaborators have built a big tent, bringing together perspectives from a broad variety of players: patients and caregivers; physicians and nurses; health care researchers, administrators, educators and learners; and health care policymakers and finance experts.

Taking a broadly inclusive, holistic approach to defining humanized care is crucial, notes study co-author **Sean Tackett**, international medical education director for the Division of General Internal Medicine at Johns Hopkins Bayview Medical Center.

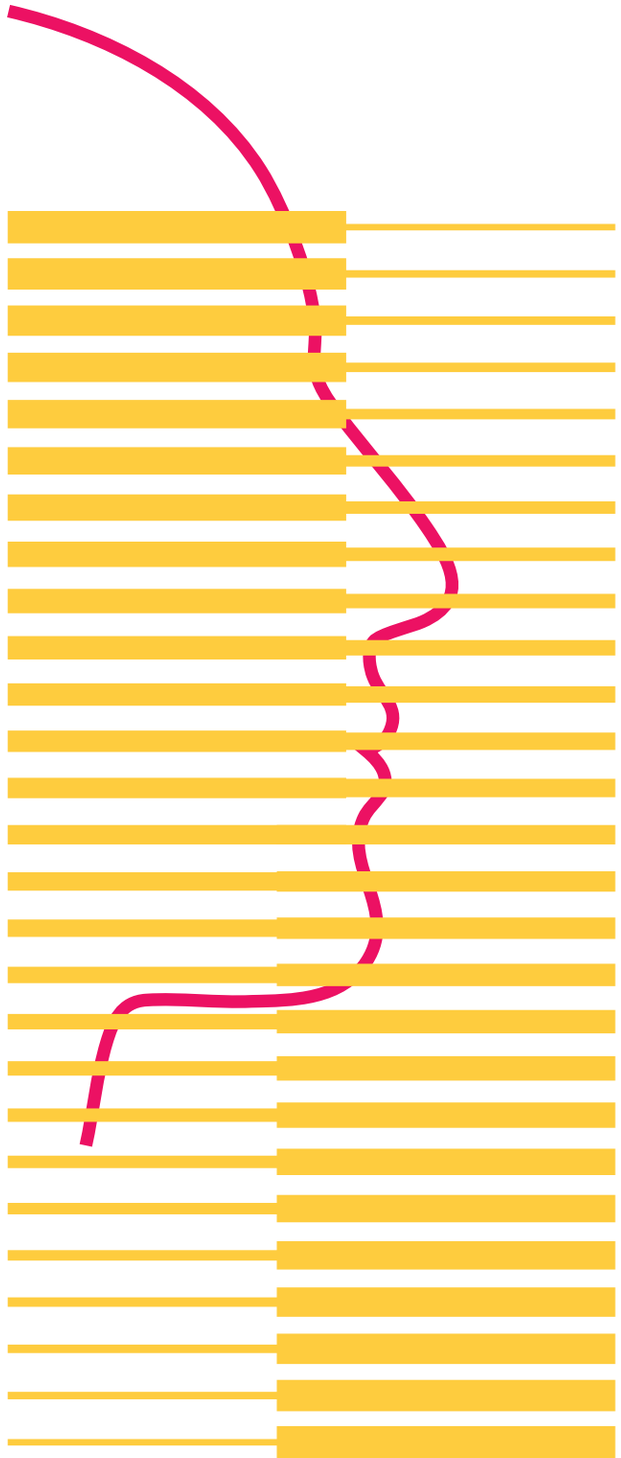
"Right now, measurement efforts are so fragmented," says Tackett. Physician groups look at quality metrics on heart failure or pneumonia, for example, while the Office of Well-Being focuses on burnout among health care providers. Other hospital leaders examine employee engagement, and still others concentrate on patient satisfaction.

"All of these measures should be connected, and for our study we conceptualized them as being connected," says Tackett. "Our goal is to integrate all of these different measures rather than have them compete with each other. That way we can arrive at solutions that are better for everyone."

To do that, the research team turned to a tool known as "group concept mapping" to brainstorm and gather ideas from 63 individuals at five hospitals across the Johns Hopkins health care system. Nearly all who participated wore multiple hats in providing their perspectives (physician/educator/caregiver, for example, or nurse/patient/administrator). Most respondents, some 63%, indicated they could represent the patient perspective.

"Both Sean and I have worked before with group concept mapping, and it's very effective for bringing together perspectives from a wide variety of people," says Wright, the CHM's *Mary Gallo CIM Scholar*. "In defining humanized health care, it's so important to hear different voices."

All the participants were surveyed to respond to the prompt, *"One thing that can be done to more fully humanize health care experiences is..."* and then were



"In defining humanized health care, it's so important to hear different voices."

Scott Wright

given the opportunity to provide up to 20 ideas. Once all the responses were in, the research team reviewed them for consistency, then recruited small groups of participants to sort the ideas into piles based on concept similarity.

Finally, the researchers used a software program to create a "concept map" that features eight domains — pillars central to defining the critical elements of humanized health care.

"One of the things that came through loud and clear was the importance of clinicians giving time and attention to patients and making authentic connections with them," says Tackett. Domain 1 includes elements such as listening without judgment or interruption, remaining present and undistracted, and attending to patients' feelings and beliefs.

Wright notes that the concept map from the study, slated to appear in *Mayo Clinic Proceedings*, "can have immediate application to health care quality improvement and research."

"At the *Center for Humanizing Medicine*, we are already applying this framework," says Wright. "We are identifying relevant existing measures that are currently being collected and analyzed in silos at Johns Hopkins Medicine and we are looking for opportunities to integrate them and to determine what is not being measured."

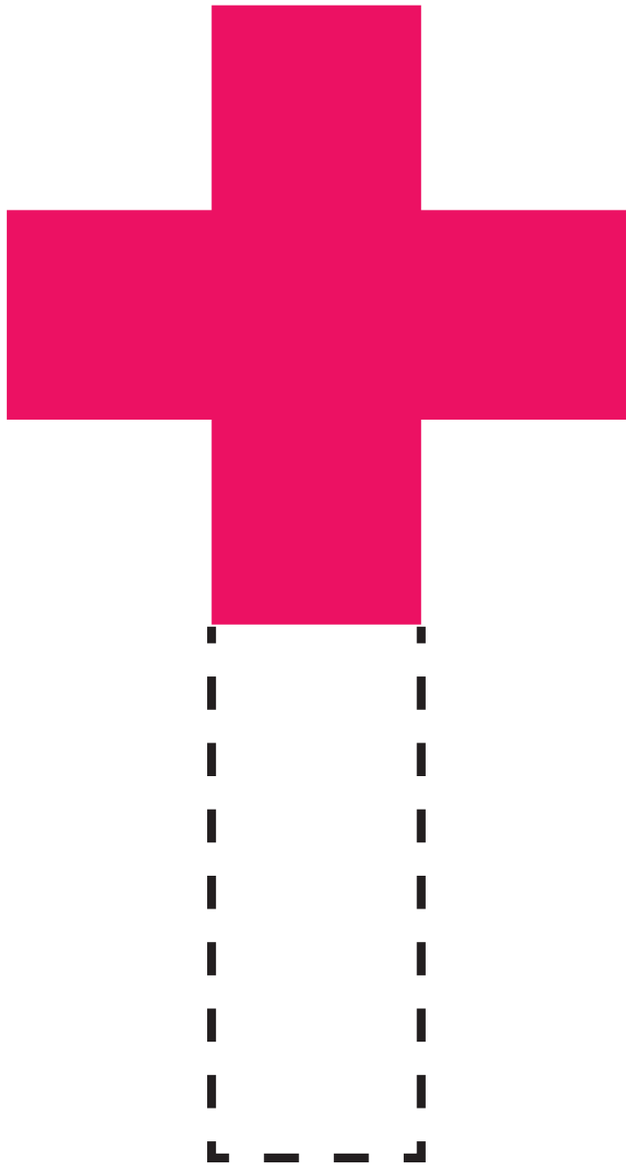
The goal, Wright says: "to develop a composite measure or dashboard that tracks humanizing health care at individual, unit and organizational levels."

Wright and Tackett observe that today's health systems tend to focus on technology or the financial bottom line, and they seem to forget that human experiences have always been the heart of health care. "Our hope," says Wright, "is that this work will re-orient systems to recognize this fact, support the humanity in health care, and make it more humanizing." ■

Spirituality: A Distinct Domain of Personomics

Physician and philosopher **Daniel Sulmasy**, who completed his residency training and postdoctoral fellowship at Johns Hopkins, lived for nearly 27 years as a Franciscan friar. Over the course of his impactful career, Sulmasy has devoted much of his energy to writing about problems in medical ethics, specifically exploring the connections between spirituality and medicine.

Last spring, he authored a perspectives essay that appeared in *The New England Journal of Medicine* that resonated with many at CIM – particularly cardiologist **Roy Ziegelstein**, who coined the term "personomics" in a widely cited editorial in the *Journal of the American Medical Association* a decade ago. The premise of personomics: In the rush to embrace the high-tech advances of precision medicine, too many doctors can lose sight of the individual patient's unique life experiences.



"Dr. Sulmasy has written a masterful article about a very important aspect of personomics, describing how a patient's spiritual and religious beliefs, practices and community are critical elements of the 'personome' that health care providers must understand and appreciate to take optimal care of the patient," says Ziegelstein, vice dean for education and the *Sarah Miller Coulson and Frank L. Coulson, Jr. Professor of Medicine*.

"As originally described, personomics includes the psychological, social, cultural, behavioral and economic factors that influence health and disease," continues Ziegelstein. "With respect to spirituality, I might have previously said, 'It's in there!' as in the Prego spaghetti sauce commercial from 40 years ago. However, this article brilliantly highlights why spirituality should be considered a distinct domain of uniqueness — as stated in the article — 'for people of all religions and of no religion.'"

Sulmasy is currently the inaugural André Hellegers Professor of Biomedical Ethics and director of the Kennedy Institute of Ethics at Georgetown University, with co-appointments in the Departments of Philosophy and Medicine. In December, he expanded upon insights from his article for a rapt group of attendees of a Johns Hopkins CIM Seminar. Among his central points:

Physicians play a key role in spiritual care. By inquiring about patients' spiritual needs, they demonstrate respect for them as whole persons and strengthen the patient–physician relationship.

Doctors may be the only team members who uncover spiritual struggles or negative forms of coping that can interfere with a patient's well-being, notes Sulmasy. He suggests following a "FICA" framework. This involves inquiring about the patient's *faith* and spiritual beliefs; the *importance* of religion and spirituality in their lives; whether they belong to a spiritual *community* that could serve as a resource for them; and how patients would like to see spirituality *addressed* in relation to their medical care.

"It's useful to make such assessments part of the routine social history, so that this knowledge can later be applied in patient care," he writes.

Inquiry and engagement with the patient should be tailored to the specifics of the case: the seriousness of the medical condition, the setting, the patient's level of distress, and their openness to spiritual conversation.

For patients with serious illness, physicians can start by asking about spiritual or religious beliefs and then broaden with more spiritual questions: "What are your deepest hopes? What sense, if any, can you make of this?" Following the patient's lead, the questions can become more specific: "Are you at peace? Do you realize you are still valued and cherished, no matter how sick you are?" If the conversation becomes too complex, Sulmasy counsels doctors to step back and ask if a chaplain could stop by to continue the conversation.

Physicians may believe that if they don't share the patient's faith, they shouldn't ask about spirituality or religion lest they make a mistake, offend the patient or seem disingenuous. But the deepest spiritual questions are applicable not only across all faiths but also to people who practice no religion.

"Buddhists and Christians, for instance, respond differently to human suffering," he writes, "but the suffering that accompanies illness or injury is a universal aspect of the human predicament." ■

CIM Seminars are recorded and available for viewing on the CIM website: www.hopkinscim.org/cim-seminars/

New Insights Into Our Aging Cells

In his Johns Hopkins lab, cell biologist **Hiromi Sesaki** focuses on the biology of the "mighty mitochondria," the powerhouse of the cell that turns energy from food into the energy that the cell can use. He's found that the behavior of the membrane-bound organelle plays an important role in the aging process of our cells — which is vital to his investigations within the CIM-supported *Human Aging Project* as the *2022 Karen and Ethan Leder CIM Human Aging Project (HAP) Scholar*.

Most recently, Sesaki and colleague **Miho Iijima**, a fellow Johns Hopkins cell biologist, published an influential paper in the journal *Nature* that showed how a group of proteins linked to Parkinson's disease and amyotrophic lateral sclerosis (ALS) act as "guardians" of mitochondria.

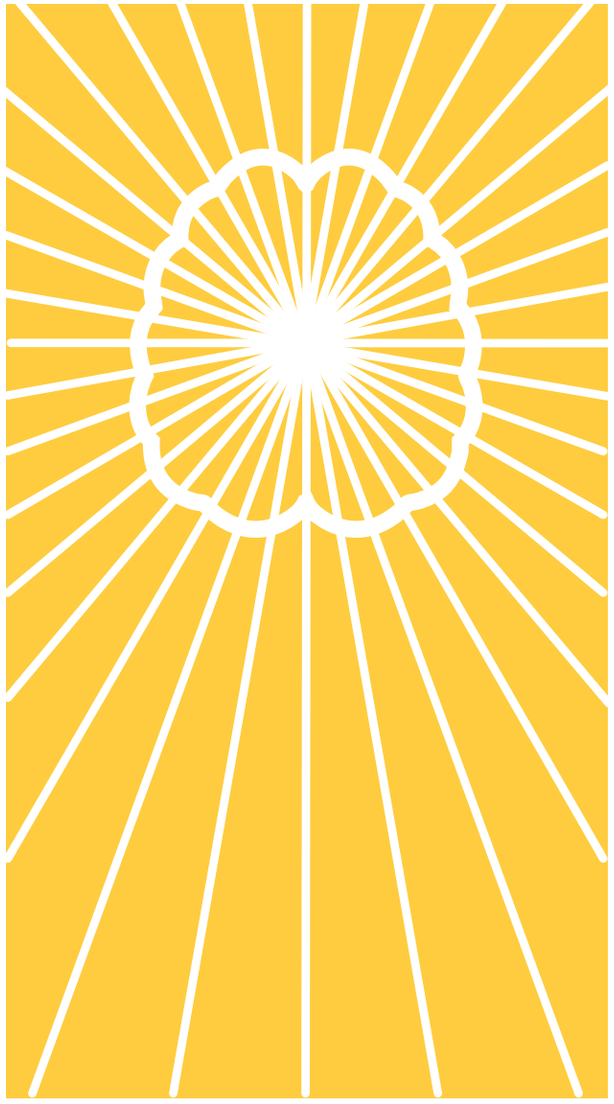
Sesaki says, "These findings should advance our understanding of the development of Parkinson's disease" — insights that could be key to improving life for the 1 million people in the United States who live with this neurodegenerative condition, which increases in incidence with age. Among the takeaways of the scientists' study:

SIZE MATTERS
Mitochondria must be neither too big nor too small to work well, Sesaki notes, adding that scientists have long known that when mitochondria are stressed too much or are damaged beyond repair, they stop fusing, become smaller and degrade. With damaged mitochondria, cells are not as well-equipped to make energy. In the brain, stressed cells can cause neurodegeneration and neuroinflammation.

PROTEINS ARE KEY
One way cells respond to mitochondria size-control issues caused by stress or damage is by turning on the activities of several proteins. Two of the proteins, called Parkin and PINK1, hang around the mitochondria's membrane and work as a pair to enable the mitochondria to fuse or degrade. Abnormalities in the genes for Parkin and PINK1 are associated with the onset of Parkinson's disease in humans. Another protein linked to ALS, OMA1, is also known to stop mitochondria from fusing upon stress.

A DOUBLE KNOCKOUT IS DAMAGING
Previous studies have shown in mouse studies that when conditions in cells are normal, removing, or "knocking out," any one of the genes that encode the Parkin, PINK1 and OMA1 proteins causes no abnormalities in mice or their mitochondria. Sesaki and Iijima wondered: What happens when *two* of the proteins are knocked out? By knocking out PINK1 and OMA1, the duo found that the double-knockout mice were small and had movement problems, along with excessively fused, oversized mitochondria in their neurons when compared to mice with normal versions of the genes. However, if only one gene is knocked out, the other genes still regulate mitochondrial fusion and mice show no signs of mitochondrial enlargement or dysfunction.

FUSION IS "DOUBLE-LOCKED"
Based on their studies of genetically engineered mice with 18 variations of normal and knockout combinations of the three genes, along with others, Sesaki and Iijima now believe that mitochondrial fusion is "double-locked." That's because mitochondria have two membranes, so that turning off only one of the genes may disable one membrane but not both, and mitochondria can still fuse and remain somewhat healthy. "Working in tandem, Parkin-PINK1 and OMA1 act as guardians of mitochondria, ensuring that the organelles maintain their normal size and function," Iijima notes.



LEAKS LEAD TO INFLAMMATION
The scientists also measured mitochondria's main product — energy in the form of adenosine triphosphate (ATP) — and found no change, suggesting that mitochondrial energy production is not affected. They discovered that when mitochondria got too big, their mitochondrial DNA leaked out into the cytosol, the fluid that fills up the space inside cells. This triggered an increase in the release of interferons, proteins that spark an inflammatory immune response.

What's next: Sesaki and his colleagues plan to advance this work by studying more precisely how mitochondrial DNA leaks out of the organelle when it gets too large. They also want to identify which cell types respond to neuronal mitochondrial DNA release to induce innate immune responses.

"Ultimately," says Sesaki, "our hope is that by discovering new insights about how Parkinson's disease develops, we can open the door to therapeutic drug targets." ■

Walston Honored

Jeremy Walston, director of the *Human Aging Project (HAP)*, was honored this spring with the 2025 Dean's Distinguished Mentoring Award. Walston, who is the Raymond and Anna Lublin Professor of Geriatric Medicine and Gerontology, is internationally known for his research on frailty and the biological characteristics that promote resiliency and healthy aging.

At the April 25 award presentation, CIM Director David Hellmann gave the keynote lecture: "The Alchemy of Johns Hopkins and the Magic of Mentoring." Noting that Walston's leadership has been key to the creation and growth of the HAP, Hellmann says, "I felt so privileged to deliver the keynote lecture at this important event that recognized Jeremy Walston's wide-reaching impact. Over the course of his extraordinary career, he has mentored numerous individuals who have gone on to establish independent eminent careers in academic medicine."

"Ultimately, our hope is that by discovering new insights about how Parkinson's disease develops, we can open the door to therapeutic drug targets."

Hiromi Sesaki

Listening Builds Trust

Johns Hopkins Professor of Medicine **Mary Catherine Beach**, who has been on a careerlong quest to improve communication between clinicians and patients, has had a revelation of late.

"Looking back on nearly 50 years of research and educational literature on communication in health care, I realized that virtually all the focus has been on how physicians should talk to their patients — not on how they should listen to them," says Beach, who is co-director of CIM's *Center for Humanizing Medicine (CHM)* and a *Mary Gallo CIM Scholar*.

Filling that gap in knowledge is crucial, Beach notes, citing a recent national survey measuring what patients look for when determining whether a doctor is trustworthy. "Some variation of, 'the doctor listened to me' turned out to be the most important predictor of building trust," she says.

Patient trust isn't just an abstract concept. Real harms can result when trust between patient and doctor isn't there, she notes, including misdiagnosis or delays in diagnosis, ineffective treatment, unnecessary tests, psychological distress, medical errors and poor patient outcomes.

So Beach is actively sharing and advocating for the skills required for effective listening — first at a *CIM Seminar* last fall and more recently in February with a Grand Rounds presentation to hundreds of Johns Hopkins faculty, medical students and trainees. She's grouped these skills into three main components:

1: 'Epistemic Reciprocity'

This is a fancy term that simply means maintaining the belief that each participant in a conversation has "something important and valuable to say," explains Beach. "It's about sharing power. It's about whose knowledge counts."

In too many clinician-patient encounters, she says, a patient's concerns go unheard or unaddressed — or even worse, are brushed off. "This phenomenon of being made to feel like you're histrionic or exaggerating has been termed 'medical gaslighting,'" Beach says, "and there are inequities by race and gender as to who gets taken seriously."

For clinicians committed to listening better, a good start is to begin each patient encounter with curiosity and a sincere interest in what the patient has to say.

2: Overcoming Barriers to Careful Listening

It's important to pay attention so we can understand what patients are saying, Beach says. But that's not easy. "In general, people don't listen carefully enough to each other; instead our mind is focused on what we are going to say in response," she says.

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Mary Catherine Beach

For doctors, there are additional barriers to effective listening: relentless pressure to see more patients, the time-consuming electronic health record that needs to be updated, environmental noise, lack of sleep and general stress.

"On top of all that, as clinicians we need to listen with multiple ears and on multiple levels," Beach says. "When a patient asks, 'Do I need to take this medication for the rest of my life?' is it an emotionally neutral question? Or are they concerned at a fundamental level that they are moving from being a healthy person to being an unhealthy person? We need to find a way to listen and understand on deeper levels, and to pay attention to emotional cues — but that's difficult to do."

3: Communicating You Have Heard and Understand

There are nonverbal ways clinicians can indicate they are paying attention, such as making eye contact, Beach notes. "And if we need to be on the computer, we can just acknowledge it directly. We might say something like, 'I am going to type while you talk to make sure I get everything down.'"

Then there is the all-important reflection, which signals you understand the *facts* ("So this has been going on for six months"), are able to express an *emotional* response ("That sounds awful"), and acknowledge how the situation is impacting the patient's *identity* or *sense of self* ("You've always been so active; this must have really changed your life.")

For Beach, helping fellow clinicians to develop strong listening skills is an important key to advancing the mission of the CHM — "that is, to ensure that every patient is treated with dignity and respect and gets compassionate care." ■

Learning from the Greats

While CIM's *Center for Humanizing Medicine (CHM)* is still in its early years, its work is already making an impact. The center has earned significant financial support through more than $11 million in funding over the next five years (primarily from the NIH and CIM supporter *Mary Gallo*). These grants support multidisciplinary projects spanning Johns Hopkins' schools of medicine, nursing, public health and business.

Most of those research projects are led by Beach, who actively mentors other faculty members, trainees and medical students in research aimed at improving doctor-patient communication and ensuring respect for all patients.

She and CHM co-director Scott Wright, a fellow *Mary Gallo CIM Scholar*, will soon embark on new research aimed at identifying the "secret sauce" of doctors who provide humanistic health care.

To do that, they are training their lens on physicians in CIM's *Miller Coulson Academy of Clinical Excellence*, which Wright helped establish and directs. The 100 or so Johns Hopkins doctors who have been inducted into the academy since it was launched in 2008 are renowned for being the "best of the best" in providing patient care, notes Wright, holder of the *Anne Gaines and G. Thomas Miller Professorship*.

In one project, Beach and Wright will analyze the extensive applications that are submitted for doctors to be considered for induction into the Miller Coulson Academy. That application includes a personal statement, as well as recommendations from the doctor's patients and peers, offering a window into varying perspectives on what defines clinical excellence and humanized care.

In another project, the duo have developed a plan to collect and analyze recorded conversations between Miller Coulson Academy doctors and their patients. "Until now, much of the research on doctor-patient communication has focused on what doctors get wrong," says Beach. "We want to take an opposite strategy: These are clinically excellent doctors — what are they getting *right*?"

Bringing Back Joy to Medicine

Practicing cardiologist **Shiv Rao**, who gave the *2025 Miller Lecture* in May, is the CEO and founder of Abridge, an artificial intelligence-fueled system that is generating tremendous excitement among early adopters at Johns Hopkins and at hospitals across the country for its potential to humanize medicine.

Abridge uses generative AI to turn doctor-patient conversations into structured clinical notes that integrate in real time with electronic medical records. That relieves clinicians of the need to have their attention glued to the computer screen — rather than the patient — as they type in the seemingly endless stream of information required by today's electronic systems. And patients can use an Abridge app on their phones to record their health care encounters, which creates a transcript that pulls out the most important points of the conversation for review later.

"Shiv Rao has revolutionized medicine by redefining both the patient experience and the provider experience," says visionary Johns Hopkins radiologist **Elliot Fishman**, creator of the conversation series "Leading Change: Perspectives from Outside of Medicine" (see box). "It is a Renaissance man like Shiv — who has the computer background from Carnegie Mellon, medical training from the University of Pittsburgh as a practicing cardiologist and the humanity of learning from his father — who recognized that the most critical problem in medicine was the loss of humanity. All of that is changing and Shiv is leading a team at Abridge that is redefining our practices," says Fishman, holder of the *Elliot K. Fishman Professorship in Radiology*.

Abridge is now being used by physicians at more than 100 health systems across the United States, including Memorial Sloan Kettering Cancer Center, Mayo Clinic, Duke Health and Johns Hopkins, where doctors praise it for reducing their administrative burden and allowing them to return their attention to patients.

"As a rheumatologist dealing with complex diseases, I rely strongly on the patient interview," says Johns Hopkins rheumatologist **Lisa Christopher**, an Abridge user.

"Connecting with patients, taking an accurate history, and reassuring the patient that they are being heard is one of my favorite parts of being a physician."

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Lisa Christopher

Christopher is also part of Hopkins' Colleges Advisory Program, where she teaches first-year medical students the art and practice of medical interviewing skills. "In recent years, I felt it was a bit disingenuous to model the medical interview for students like it was conversational with good eye contact. The reality was that I was frequently looking at a computer screen, badly typing, and hoping to try to maintain some kind of normal relationship with the patient that seemed genuine," says Christopher, director of the Johns Hopkins Myositis Center. Abridge, she says "has brought back joy in medicine." "It gives me back my natural communication style, as it allows me to look at my patient just like the 'old days' where I could appreciate the dialogue, eye contact and all of which makes human interaction such an important part of medical interviewing," says the rheumatologist. "While there are still some growing pains, this digital scribe program has changed the way that I practice medicine for the better." Rao has said he was inspired to create Abridge by his own experience (both as a physician and with his wife, as patients) as well as by that of his physician father, who had to retire early from medicine because "he just couldn't type fast enough."

Rao's lecture at Johns Hopkins in May marked the 22nd year of the annual Miller Lecture. Over the years, Miller Lecture speakers have varied — from authors to physicians, from poets to economists — but all have touched on a common theme: the crucial importance humanism holds for health and medicine.

The impactful series would not be possible, notes **CIM Director David Hellmann**, without the generosity of the Miller family — the late *Mr. G. Thomas Miller* and *Mrs. Anne G. Miller*, and their daughters and sons-in-law, *Mrs. Sarah Miller Coulson* and the late *Mr. Frank L. Coulson Jr.* and *Mrs. Leslie Anne Miller* and *Mr. Richard Brown Worley*. ■

Visionary Conversations

Radiologist Elliot Fishman is the creator of "Leading Change: Perspectives from Outside of Medicine," an annual conversation series in which he brings to Johns Hopkins an array of big thinkers. Last May, he led the series from California, in a talk aimed at exploring ways to improve the patient experience: "Jensen Huang and Elliot Fishman in Conversation with Ed Catmull."

Catmull is co-founder of Pixar Studios and longtime president of Pixar, while Huang is president and CEO of NVIDIA, the world's largest semiconductor company.

Nvidia has provided venture capital funding to Abridge and is currently collaborating with the company to use NVIDIA's computer resources, foundation models and expertise in efficiently deploying AI systems to bolster its work. NVIDIA's computing power is supporting the company's research and helping it scale a multilingual clinical conversation platform across the entire U.S. health care system.

A Mighty Impact on Patient Care

In an activity room at the Child and Adolescent Psychiatry Day Hospital, a group of young patients gazes at a large poster. Fantastical artwork by Kevin Peterson depicts a little girl with red hair and a blue dress strolling purposefully down a graffiti-filled urban street. Improbably, she is accompanied by a raccoon and a black bear.

The young people share their observations about the artwork over the course of a guided discussion — which utilizes Visual Thinking Strategies (VTS) — led by pediatric psychiatrist **Leslie Miller** and adolescent psychiatry fellow **Cami Burruss**:

"With all that graffiti and the boarded-up buildings, I wonder if they're safe."

"Maybe they are headed to the forest."

"I think they are looking out for each other."

Miller and Burruss were aware that Johns Hopkins psychiatrist **Meg Chisolm** had found success using VTS with medical school learners to strengthen skills like observation, critical thinking and communication, vital for providing humanistic health care. The two adolescent psychiatrists believed VTS could also hold big benefits for children and adolescents coping with significant mental health issues.

So they applied for an impact grant (formerly microgrant) from CIM's *Center for Humanizing Medicine (CHM)* and used the $1,500 they received to pursue training in VTS and to make laminated posters of different pieces of art and photography.

The duo's idea was just one of 25 projects funded by the IHM in 2024 — and already many are bearing fruit, says **Martha Abshire Saylor**, *Mary Ousley CIM Scholar*.

"We were floored by the response when we announced the program last year. We received close to 100 applications from across The Johns Hopkins Hospital, Bayview Medical Center and Suburban Hospital!" says Abshire Saylor. "We are thrilled with the implementation of this first batch of grants. The point of this program is to make a small but mighty impact in improving patient care — and that's just what is happening."

She mentions a monthly "Spa Day" in the Medical Intensive Care Unit, for example, in which a nursing team wheels around a cart loaded with scented lotions and other care products used to lift the spirits of very sick patients through a little pampering. Or the tote bags stocked with sidewalk chalk, bubbles, a Frisbee and a jump rope, which are distributed to adolescents with HIV to encourage them to have fun and stay active. Or "buzzy bees" — small devices that convey a vibration on the skin aimed at distracting pediatric patients who are getting injections. "The pediatric nurses are very excited to use them," says Abshire Saylor, who is CIM's first nurse scholar.

For their part, Burruss and Miller have been heartened to see how the VTS art education groups they lead have helped young patients, including those suffering from social anxiety, to engage.

"These discussions help them with their 'tolerance for ambiguity,' since there is no right or wrong answer, and on identifying affect through nonverbal expression and perspective-taking as they identify with different characters and viewpoints," says Miller. "These are all skills that are critical in mental health treatment."

Adds Burruss, "There have been a number of times that we've shared with staff how a particular patient did a great job of participating and they are so surprised, saying, 'Really? This person has never spoken up in a single group session!'"

"The goal is to make these creative efforts to improve patient care sustainable, so that the work can live on and even grow once the grant ends."

Martha Abshire Saylor

The duo, who started with weekly sessions last September at the outpatient day hospital have since expanded to the Bayview campus, where they now lead VTS group discussions through the adolescent Intensive Outpatient Program. Psychiatric staff members at both clinics, buoyed by the participation they've seen in young patients, are now eager to get trained in VTS themselves so that they can lead discussions and expand the reach of the effort.

That's exactly the kind of outcome that Abshire Saylor and other leaders of the CHM are hoping for with the impact grants.

"The goal is to make these creative efforts to improve patient care sustainable, so that the work can live on and even grow once the grant ends," she says.

To further amplify the reach, Abshire Saylor is working on a research paper with **Scott Wright**, co-director of the CHM and the *Anne G. and G. Thomas Miller Professor of Medicine*. Through analyzing applications, they aim to describe and group together common "dehumanizing" problems patients experience that can be addressed through big ideas and small amounts of funding.

Seed funding through the CHM will continue. "We'll be sending out a new request for proposals later this spring, with a plan to award funding to a new batch of projects in July," says Abshire Saylor.

"Humanizing medicine is a dream," she says, "but it can become reality as frontline clinicians notice the dehumanizing problems around them and get support to make an impact on patient care." ■

A Conversation with Great Doctors

As engagement with the electronic medical record has taken time away from bedside interactions in medical education, rheumatologist **Jason Liebowitz** wanted to capture a crucial aspect of training that he sees, sadly, diminishing – the wisdom and insight gained from working with master clinicians.

"There's only so much you can gain from reading a standard textbook about clinical excellence or clinical reasoning. It doesn't really convey what you get when you have the opportunity to work in-person, one-on-one with a true master clinician," says Liebowitz, who completed his residency and fellowship training at Johns Hopkins and is now an assistant professor of medicine at Columbia University Irving Medical Center.

In an effort to convey these invaluable lessons in clinical excellence — on topics ranging from patient communication to mentorship to burnout — Liebowitz, along with Johns Hopkins rheumatologist **Philip Seo**, *Lowe Family CIM Scholar*, and Marcy Bolster of Harvard Medical School and Massachusetts General Hospital, solicited and edited a collection of 25 introspective essays from an interdisciplinary group of master clinicians who are also compelling writers. The result: *Masterclass in Medicine: Lessons from the Experts*.

Seo was Liebowitz's fellowship program director at Johns Hopkins; the two first met when Liebowitz was in his residency. Both Johns Hopkins and CIM are well-represented among the group of authors, who weave together foundational stories from their own educations and careers.

CIM Director David Hellmann opens his chapter, "Partnering with Patients," by retelling the time during his first year of residency, when he witnessed another physician pull a diagnostic rabbit out of the hat by asking the patient what the patient thought was causing the mysterious, multisystem illness that had stumped a team of doctors. The patient's suspicion — that it was the fungal infection coccidiomycosis, borne from spores found in desert sand — turned out to be true. A truck driver, the patient had picked it up after driving through the California desert, and had recently read about truckers developing Valley Fever, another term for the condition. Hellman goes on to say that partnering with patients has "helped [him] become a better healer and added immeasurable joy, satisfaction, meaning, and wonder to [his] professional life."

Roy Ziegelstein, vice dean for education at the Johns Hopkins University School of Medicine, contributed "Personomics," a chapter on the term he coined that brings together the information physicians need to know to provide individualized care — the "psychological, social, cultural, behavioral, economic and unique life circumstances," he writes. "Medicine is the most wonderful career in the world, and getting to know the patient is the most wonderful part of the practice of medicine." He recalls the moment from his first year of medical school in which the concept was born, when a pupil asked if he'd rather be a technically skilled doctor or one who knew the patient well as a human being. He realized he didn't have to choose one or the other.

"Medicine is the most wonderful career in the world, and getting to know the patient is the most wonderful part of the practice of medicine."

Roy Ziegelstein, vice dean for education, writing in *Masterclass in Medicine*

Seo points to **Suzanne Koven '86**, an associate professor of medicine at Harvard Medical School who was an assistant chief of service in the Osler Medical Residency, who explained in a recent authors chat what unites the writers of the book.

"She said what everyone had in common was the love that they have for their patients, the love that they have for learning, the love that they have for their colleagues — that all of them brought their love to the profession, and that's what drives them forward," he says. "Even though we, from the outside, think of them as masters, they are still learning eagerly from each other."

Liebowitz hopes medical students and young physicians read the book to get the kind of bedside wisdom they might be missing.

"We want someone reading this book to feel like they're having a conversation with these great doctors." ■

CIM SCHOLARS

Careers in Bloom

Spring in Baltimore offers a sense of renewal, as daffodils, tulips and hyacinths push up out of the earth, bringing a riot of color and sweet scents. At CIM, a parallel can be found in the "blooming" of two especially promising clinicians. Their commitment to humanized medicine is bringing new hope and fresh ideas to countless patients and colleagues.

The first is pulmonologist **Michelle Sharp**, the *Mary and David Gallo CIM Scholar* and *Elena and Everardo Goyanes CIM Scholar*, who has an exciting new role: as assistant director of CIM.

"Dr. Sharp is known for her extraordinary diagnostic acumen and bedside skills, which she demonstrated as a resident and fellow and now as co-director of the Johns Hopkins Sarcoidosis Center," says **CIM Director David Hellmann**. "In addition to handling operational aspects of CIM, Michelle will take the lead in planning and executing our *CIM Seminars*, which feature enlightening talks by faculty and guest speakers."

"David has asked me to think about ways to bring in the patient's voice to our CIM Seminars," says Sharp. She took a first step in answering that invitation with her own presentation last fall: "Sarcoidosis: What It Means to Heal."

Sharp delivered her talk in conversation with patient Heidi Junk, a member of the Johns Hopkins Sarcoidosis Patient Advisory Board. Junk gave a moving testimony about her 30-year "rollercoaster ride" of living with the debilitating condition. She said that the care she receives from Sharp and the sarcoidosis team at Johns Hopkins has made all the difference in the world.

"One of the most healing statements I have heard is when Dr. Sharp said to me, 'I am sorry that you're suffering,'" Junk shared. Turning to Sharp, she added, "You really listen to what my experience is and think about how together we can figure out the next best way forward. You see me as an individual and acknowledge all of the crazy stuff going on inside of me. In the past, healing was trying to go back to what I once was, before sarcoidosis came into my life. Now what I realize is that healing is moving forward. That's very empowering. And you and the multi-disciplinary team are a part of that healing process."

The second faculty member whose work has taken root and is thriving is infectious disease expert **Seun Falade-Nwulia**, director of the Johns Hopkins Center for Substance Use & Infectious Disease Care, whose efforts focus on humanizing the treatment of patients with chronic infectious diseases who are drug users.

Falade-Nwulia is the new *Susan and Steven Immelt/ Douglas Carroll CIM Scholar*. In a CIM Seminar presentation she gave in January, she noted that she was among the first medical residents at Johns Hopkins Bayview to benefit from the *Aliki Initiative*, a novel medical curriculum in patient-centered care. That experience was formative, she said.

"What I learned from the Aliki Initiative, and what has stayed with me, is that people are not diseases. People are people. They have lives and if we understand their lives, we may be better positioned to impact their health," she said.

Falade-Nwulia noted that she was particularly proud to hold a CIM Scholarship named for the late Douglas Gordon Carroll Jr., who launched the Department of Rehabilitation Medicine at Baltimore City Hospitals (which later became Johns Hopkins Bayview Medical Center) and who enjoyed a long and esteemed career at Johns Hopkins.

"Dr. Carroll was an exemplar of humanizing medicine," says Hellmann. "I know he would be very proud to have his name attached to the work of Seun."

Carroll's daughter Susan Immelt, a longtime pediatric nurse at Johns Hopkins, who together with her husband Steve Immelt funded this award, concurred. She noted that throughout her father's career, he was devoted to caring for patients who too often went overlooked. Said Immelt, "Seun is the perfect person to be this scholar." ■

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