

Aequanimitas



A twice-yearly newsletter for current and former Johns Hopkins Medicine housestaff and friends

Spring 2018

A Mission to Reinvigorate Bedside Medicine

Ask any Osler alum to share high points from his or her residency, and you're bound to hear about a poignant patient interaction on the wards—or perhaps a story about an instructor who demonstrated precisely how to detect a heart murmur.

But in recent years, with greater reliance on scans and more time needed to update the electronic medical record, residents are spending less time at the bedside. And, increasingly, says **Brian Garibaldi**, associate program director for the Osler Medical Residency Training Program, rounds have moved to the hallway or conference room to discuss patients while looking at data on a computer screen.

Johns Hopkins residents spend an average of eight minutes per patient per day—as little as 12 percent of their time—in direct contact with patients on the wards, found a 2011 study by **Lauren Block, Leonard Feldman, Timothy Niessen** and other Johns Hopkins physicians. And a 2017 study that includes Garibaldi, Niessen, hospitalist and instructor **Gigi Liu** and Osler Medical Residency Training Program Director **Sanjay Desai**, looked at Johns Hopkins Hospital residents' experience and revealed weakened clinical skills.

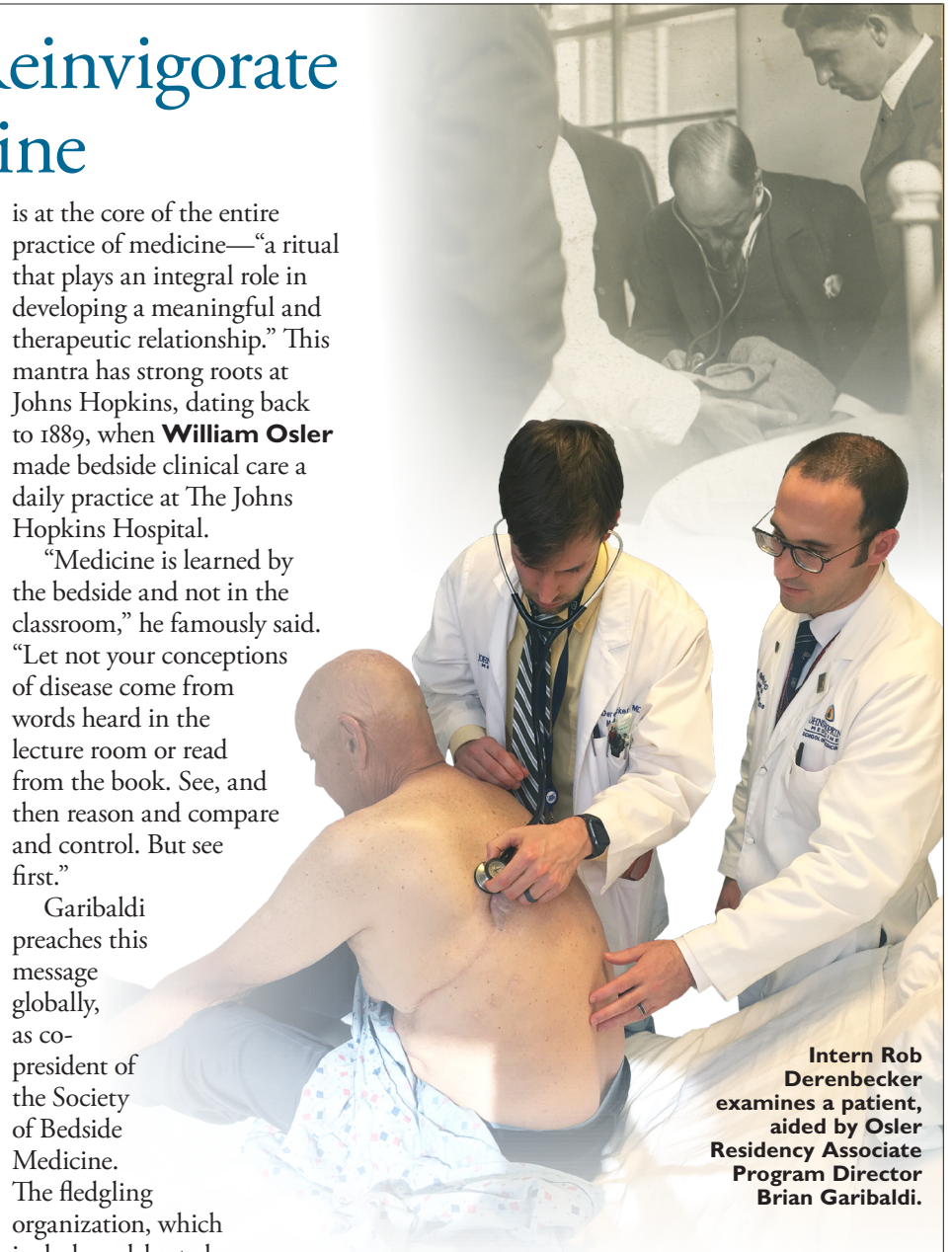
There's growing concern that physical exam skills have begun to erode, says Garibaldi. That interface between doctor and patient, he notes,

is at the core of the entire practice of medicine—"a ritual that plays an integral role in developing a meaningful and therapeutic relationship." This mantra has strong roots at Johns Hopkins, dating back to 1889, when **William Osler** made bedside clinical care a daily practice at The Johns Hopkins Hospital.

"Medicine is learned by the bedside and not in the classroom," he famously said. "Let not your conceptions of disease come from words heard in the lecture room or read from the book. See, and then reason and compare and control. But see first."

Garibaldi preaches this message globally, as co-president of the Society of Bedside Medicine. The fledgling organization, which includes celebrated author and Stanford University Professor of Medicine **Abraham Verghese**, as part of its

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Intern Rob Derenbecker examines a patient, aided by Osler Residency Associate Program Director Brian Garibaldi.

"Medicine is learned at the bedside, and not in the classroom... See, and then reason and compare and control. But see first."

—Sir William Osler

Sanjay's Section



Lately, we've been thinking a lot about our program culture. It is often easier to live in a hall of mirrors, where we surround ourselves with like-minded peers. But this creates a barrier to ensuring that we stay relevant and best support the next generation of MDs.

I believe that a careful examination of culture is essential to keep us at the leading edge of education. In part, it's important because we see interpretation and acceptance of symbols and traditions differently today than before. It is also motivated by hearing our residents describe current processes (such as coming in at 5 a.m. to prepare for work rounds) as "the way we do it on the O." This is not how I did it. In fact, most of their descriptions don't resemble how I did many tasks 20 years ago. I've discovered that the greatest positive and negative impact of a three-year residency is short-term institutional memory.

Over time, the program adopted new processes and traditions to promote our core values. It also embraced other traditions organically, without attention to values. I believe that one of our most important traditions is to not be encumbered by tradition.

In this spirit, we're conducting a careful examination of ourselves. We will strengthen the traditions that support our values, and we will abandon those that do not. We will keep you updated on this process and welcome any thoughts you may have. I can be reached at sanjaydesai@jhmi.edu.

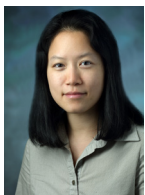
Sanjay Desai, Director
Osler Medical Training Program

A Mission to Reinvigorate Bedside Medicine (from page 1)

advisory council, fosters a culture of bedside teaching, improved physical exam skills and stronger patient interactions.

"These encounters can also provide meaningful experiences," says Garibaldi, "serving as an antidote to rising rates of burnout."

At the same time, such interactions, says Niessen, bolster Johns Hopkins's mission to promote the "joy of medicine."



"There's a beautiful synergy ... We all learn from each other, but also from patients."

—Gigi Liu

Hospitalist and instructor

"Nobody went into medicine to sit in a team room at a bank of computers, endlessly clicking through templated notes, interrupted to triage pages," adds Niessen. "We chose medicine so we could build relationships with people while sorting out their stories, using our observations to make sense of their ailments and formulate plans to help patients feel better."

But these days, many internal medicine residency programs lack physical examination curricula, says Garibaldi. Instead, they rely on individual attending doctors to provide instruction, which can prove valuable but has variable results. So, he and his colleagues have crafted an intervention called Advancing Bedside Cardiopulmonary Examination Skills (ACE). Complementing this bedside curriculum is a midweek session called Mornings with the Masters, in which an experienced clinician joins the team to model physical exam techniques and bedside interactions. The 2017 study showed that ACE can improve attitudes, confidence and skill.

Yet for all of its limitations, technology is not the enemy, says Liu, who performs "point-of-care" (POC) ultrasounds and other guided procedures at the bedside alongside residents. "There's a beautiful synergy between the two pieces," she says.

On a recent morning, residents paid close attention as Liu and Niessen performed targeted physical examination maneuvers and POC ultrasound on a patient. Given his complaints of shortness of breath and

swollen legs, Liu told residents, the patient likely had cardiac problems.

First, each member of the team used a stethoscope, checking for suspicious noises. Then Liu and Niessen conducted the ultrasound. The test revealed a severe mitral valve problem.

"The strength of adding ultrasound at the bedside is that residents have just seen and heard and felt all these findings," says Niessen. "When we combine visual findings from the ultrasound with audio (murmurs) and tactile findings (palpations)," adds Liu, "it's the most powerful diagnostic and educational tool."

And there's a bonus, she says: "Patients actually enjoy these exchanges. In the process, they gain a better understanding of their diseases and become more motivated to get better. We end up managing their disease together." Despite the greater time commitment, says Garibaldi, trainees have valued this approach.

As the school of medicine marks its 125th year, efforts to revive—and refine—the art of doctoring in the William Osler tradition continue to take hold. "With incredible institutional support, we're going to lead how we do the physical exam in the 21st century," says Garibaldi. "We continually think of ways to enrich the experience." ■

Learn more about how the Osler Residency Program is working to strengthen bedside medicine skills: bit.ly/bedsidephysdiagresearch. Learn more about ACE: bedsidemedicine.org.

Mutual Teaching Moments

One day during bedside teaching rounds, school of medicine assistant professor **Timothy**

Niessen watched intern **John Woller** suddenly become animated. The patient had Marfan syndrome, and Woller, while examining the patient's eyes, observed iridodonesis, or "dancing" of the iris. It's a sign of total or partial dislocation of the lens—not uncommon in patients with Marfan syndrome. But Niessen had never heard of it.

"It's heartening when our interns become this excited about the physical exam, and that we are all there to learn together," says Niessen. "I like to think our work in bedside presence encourages them to learn about and present these kinds of findings, though I think it's just as much a testament to the caliber of the Osler residents."



Beyond the Dome

Anna Hemnes, associate professor, Department of Medicine,
Vanderbilt University School of Medicine

In 1999, when Anna Hemnes was an Osler intern, a patient in her 40s was admitted to the hospital for pulmonary hypertension. Her racing pulse—even while at rest—caused chronic fatigue, swelling and chest pain. As a result, she was mostly bedbound.

Then, one day, with the help of an attending physician, Hemnes began administering intravenous epoprostenol, which brought some relief. Two days later, the patient was well enough to return home.

That experience, says Hemnes, ignited an interest in pulmonary medicine. She was also inspired by a physiology course given by **Charles Wiener**, then program director of the Osler Medical Residency Training Program. “I used every opportunity I could to learn more about the lungs,” Hemnes says.

A Boston native, Hemnes says she knew by age 10 that she wanted to become a doctor. She was the first in her family to chart that path, just as her parents were the first in their families to attend college.

Hemnes earned a Bachelor of Arts in biology and anthropology from Columbia University in 1995 and graduated from the Johns Hopkins School of Medicine in 1999. She stayed at Hopkins for her pulmonary fellowship and served for a year as assistant chief of service for the Thayer Firm.

While in medical school, Hemnes met and later married **Jacob Schwarz**, who matched in neurosurgery at Johns Hopkins. In 2008, Hemnes completed advanced training in pulmonary vascular disease at Vanderbilt University, where she and her husband now practice.

Hemnes’ research focuses on the pathobiology of pulmonary vascular disease. Her laboratory investigates how the right ventricle hypertrophies and fails, due to the load stress of pulmonary hypertension—and the influence of gender and metabolic disease on this phenotype. She’s also interested in the noninvasive diagnosis and evaluation of pulmonary vascular disease, ranging from pulmonary embolism to pulmonary arterial and venous hypertension.

Hemnes and her husband live in Nashville, Tennessee, with their twin 11-year-old girls and 9-year-old son. They recently hosted an Osler reunion, as part of Osler on the Road events.

How has your Osler training informed your career at Vanderbilt?

It exposed me to pulmonary hypertension—this rare disease that I enjoy studying, an interest that Hopkins nurtured through encouraging my early research ideas and interaction with experienced physicians on the cutting edge of the field. It also taught me the value of hard work and advocating for patients. And it inspired a passion for lifelong learning that motivated me to pursue a career in science. During that time at Hopkins, there was a collective expectation of excellence and a tremendous work ethic that pushed us to be the best physicians that we could. Now I see the impact of those early experiences as I pursue my translational research career. I get to make new discoveries in the lab and bring these

findings back to patients through clinical trials and observational studies. Vanderbilt is one of the best academic centers in the country for doing this kind of research. To me, being able to perform this type of research on a disease I care deeply about is about as good as a physician’s career gets.

What do you love most about your job?

That every day is different. There’s always something new to learn and pursue. Very occasionally, you even get to discover something. A couple of years ago, we found out that patients with some forms of pulmonary hypertension have lipid accumulation in their heart. Now we’ve created models to understand why this happens and how systemic metabolic



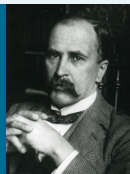
disease affects the heart and pulmonary hypertension. It’s rewarding work, as it ultimately affects patient care and could lead to a cure.

Talk about the work-life balance.

I think it’s really hard to keep up with a busy work schedule and maintain our family priorities. My research requires a lot of travel, so I depend on my husband a lot for child care. Without that and additional support, I wouldn’t be able to manage. It’s sometimes hard to meet all the expectations I put on myself. The big challenge for women in medicine is deciding what’s most important to you and letting go of the other stuff. A good night’s sleep is also important. I’ve taken up running, early in the morning, often with other women doctors, which serves as a good community for support—and exercise. I really like living in Nashville. No more commute—we live 1.5 miles from Vanderbilt.

How would you advise Johns Hopkins internal medicine trainees to persevere?

Although some days may be challenging, three years go by so quickly. So try to enjoy your co-residents and patients and the honor of being an Osler resident while you’re there—because you are part of a tremendous legacy. ■



Support the Osler Fund for Scholarship

By investing in the future of our young doctors, we continue the legacy of William Osler to prepare and inspire the next generation of leaders. Your contribution supports educational opportunities for current residents to enhance their training—experiences that might not otherwise be possible. If you are interested in supporting our housestaff, contact Carly Frank at 410-550-4098 or cfrank23@jhmi.edu. Thank you for your continued support. To make a gift online, please visit our website at bit.ly/oslerfundforscholarship.

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Save the Date

CELEBRATING
Johns Hopkins
SCHOOL OF MEDICINE



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WHERE TRADITION
MEETS INNOVATION

SCHOOL OF MEDICINE
125TH ANNIVERSARY WEEKEND

**Osler Housestaff Alumni
Cocktail reception:**

Thursday, May 31
7 to 9 p.m.,
Bar Vasquez

1425 ALICEANNA ST., BALTIMORE, MD 21231

Valet parking, cocktails and light bites

To learn more, contact
Carly Frank, cfrank23@jhmi.edu

Class Notes

These students matched to begin Osler medical training in July:

Fatimah Alkhunaizi
Columbia University

Kassandra Allbright*
University of Pittsburgh

Aditya Ashok
Harvard University

Maria Bellantoni
(Urban Health)
Uniformed Services

Tatiana Berger
Boston University

Colin Blumenthal
Case Western Reserve University

Anthony Bowen*
Einstein School of Medicine

Meredith Bowen*
(Preliminary)
Emory University

Martha Brucato*
(Med-Peds)
The Johns Hopkins University

Adam Brownstein
Yale University

Nora Burdis
Washington University

Kristi Chakrabarti*
University of Maryland

Erin Chew
Baylor University

Michael Cole*
The Johns Hopkins University

Amanda Copenhaver
University of South Florida (Morsani)

Thomas Das
University of Texas SW

Eamon Duffy
Yale University

Richard Ferraro
Cornell University

Robert Flick, III
University of Colorado

Julie Gonzalez
(Med-Peds)
Harvard University

Saurav Halder*
Harvard University

Amanda Hesselton (Med-Peds)
Loyola University Chicago

Alan Jacobsen
National University of Ireland

Heather Kagan
Temple University

Hannah Kaizer
University of Maryland

Kavin Kanthasamy
Baylor University

Samuel Kim
Cornell University

Kaleb Lambeth
University of Texas

Bernard Landry-Wegener
Louisiana State University

Anna LaVigne
(Preliminary)
The Johns Hopkins University

Angela Liu
Case Western Reserve University

Paul Loeser (Med-Peds)
Vanderbilt University

Ting-Jia Lorigiano
Dartmouth University

Angela Ma
The Johns Hopkins University

Rebecca Meredith
Drexel University

Rachel Mittelstaedt
The Johns Hopkins University

Tuyet Nguyen
(Urban Health)
The Johns Hopkins University

Daria Nikolaeva*
The Johns Hopkins University

Eunice Paul Rajamanickam
Medical College of Wisconsin

Andrew Pellatt
Tulane University

Talia Robledo-Gil
(Urban Health)
Yale University

Aparna Sajja
George Washington University

Lea Selitsky
(Urban Health)
Wayne State University

Andi Shahu
Yale University

Evelyn Song
Penn State University

Amanda Su
Cornell University

Rachel Thakore
(Preliminary)
Brown University

Rohit Thummalapalli
Harvard University

Evangelia Valilis
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Bibin Varghese
Baylor University

Yuxuan Wang*
The Johns Hopkins University

Morgan Whitaker
Arizona University

*Ph.D.



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