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

New Medical Education Pathway Builds Mentoring Skills

hen **Sanjay Desai** (Osler, 2003) was an assistant chief of service at The Johns Hopkins Hospital, he realized he had a passion for medical education. "But I didn't have the skills to build an academic career," he recalls. "I had to learn them myself."

A decade later, the director of the Osler Medical Residency Program and the Department of Medicine's vice chair for education has found a way to nurture trainees' interest in teaching the next generation of doctors: a new medical education pathway. "The goal is to identify potential mentors and develop skills early in their career," says Desai, a national leader in medical education and specialist in pulmonary and critical care.

The Pathways Program, which debuted in 2015, provides formal opportunities to explore specialized programs using curricula with coursework, hands-on experience and individualized mentorship. Other pathways available to residents include physician-scientist, global health and patient safety. All four programs begin during the second year of the internal medicine residency.

What sets the medical education pathway apart is that it's the first of these pathways to become available to residents who matched in the Johns Hopkins Bayview Medical Center internal medicine residency program. "Including these trainees," says Desai, "means we're leveraging the experts and resources across our campuses and doubling the potential pool of future leaders in graduate medical education."

By the end of the medical education pathway, residents will have a portfolio showing proficiency in teaching curriculum development, medical education and research.

"Becoming a medical educator requires learning how to develop scholarship including curriculum design, skills assessment, survey creation," says Desai, "as well as teaching using newer modalities, such as social media."

In other words, the pathway will teach residents how to advance medical education and teach

effectively. That could involve creating modules that practice how to identify a rare condition, for example, or how to share difficult news with a patient.

Co-directing the new pathway are **Natasha Chida** and **Paul O'Rourke**. Both physicians say they're eager to contribute their experience and insights to inspire others to advance medical education.

"We're excited to have a lasting impact," says Chida, who completed her internal medicine residency and chief residency at the University of Miami/Jackson Memorial Hospital, followed by an infectious disease fellowship at Johns Hopkins. "No matter what future path residents choose, they have the chance to become part of a community of educators who help others build training skills."

PHYSICIAN-SCIENTIST PATHWAY

GLOBAL HEALTH

PATIENT SAFETY PATHWAY

NEW MEDICAL EDUCATION PATHWAY

PATHWAY

As a fellow, Chida focused on building her medical education skills, including curriculum development, educational scholarship and teaching skills. She worked closely with her

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Sanjay's Section



Sir William Osler's mantra to "listen to patients because they tell you the diagnosis" remains a basic tenet in our training program. Yet practicing it has become increasingly difficult. Sadly, our research has shown trainees spend as little as 12% of their time in direct patient contact, likely a source for high physician burnout rates.

Fortunately, there's new hope, as efforts continue nationwide to reinvigorate residency training and improve well-being. We were delighted to receive \$1.8 million to innovate residency training, as one of eight grants from the American Medical Association's \$15 million "Reimagine Residency" initiative.

With a diverse, expert team from the internal medicine programs at Johns Hopkins (Osler and Bayview), Stanford and the University of Alabama at Birmingham, we're poised to help improve this issue.

We believe that to have real impact, we must rigorously gather evidence and test hypotheses. So, we will establish a Graduate Medical Education Laboratory that measures relevant variables in our learning environment. We'll see which affect well-being and clinical skills, then develop interventions to improve them.

Our goal is to create a sustainable and scalable laboratory which measures resident behaviors, rotations, use and more. These large-scale data will be combined with data on resident experiences, well-being and standardized assessments of clinical skills.

Ultimately, we hope to identify and inform the design of the optimal learning environment — one that is evidence-based to reduce burnout and improve clinical skills effectively, and one that can be replicated nationally.

We look forward to sharing our progress with you in the years ahead.

Sanjay Desai, Director Johns Hopkins Osler Medical Residency

New Medical Education Pathway (from page 1)

mentor, **Michael Melia**, to examine internal medicine residents' understanding of tuberculosis diagnostics and to create an objective assessment framework to evaluate residents' competency in core subspecialty topics.

Now, Chida is an associate director of the Infectious Disease Fellowship Program, working alongside Melia, who directs the program. She and Melia have launched a comprehensive longitudinal curriculum for the ID fellowship, which has been well received by trainees and faculty alike. The curriculum also reviews professional development topics that are important for early career planning.

O'Rourke will lead the pathway on the Johns Hopkins Bayview campus. As a resident in internal medicine at the University of Pennsylvania, O'Rourke was part of the initial Medical Education Pathway at Penn and helped to design a "Midnight Curriculum" for residents who were working nights. It featured short teaching scripts on over 25 core internal medicine clinical topics. "The idea," he explains, "was that a senior resident could deliver a 30-minute lesson at midnight to interns in the hospital." It has since been incorporated into Penn's residency program.

O'Rourke went on to complete a general internal medicine (GIM) medical education fellowship at Johns Hopkins. A leader in the specialty nationally and at Johns Hopkins, O'Rourke launched "GIMboree" — a monthly primary care community night for residents and faculty. The event hosts GIM and geriatrics educators and includes a journal club to discuss recent evidence relevant to outpatient medicine. GIMboree helps "foster a community in which residents feel supported in their outpatient interests," says O'Rourke. Co-led by Osler resident **Deborah Freeland**, the program recently won a grant from the Accreditation

"No matter what future path residents choose, they have the chance to become part of a community of educators who help others build training skills."



—Natasha Chida

Council for Graduate Medical Education.

"We're very fortunate to have an abundance of leaders and amazing people at Hopkins and on the Bayview campus to serve as role models," O'Rourke adds. "This new pathway will provide an avenue for residents to become leaders in medical education."

For his part, Desai says he feels buoyed as more residents receive formal training in the skills needed to build an academic career in education — an opportunity he lacked. "Luckily," he says, "I learned from people I ran into along the way. I'm still learning."

10 Years Strong: The Institute for Excellence in Education

What does it take to become an academic leader, clerkship director or vice dean? For anyone interested in advancing scholarship and medical education, The Institute for Excellence in Education (IEE) has become a valuable resource. About to celebrate its 10th year, the institute promotes the school of medicine's educational mission by helping faculty members learn how to inspire and teach learners, support research and scholarship in education, provide recognition of educators, and foster a community of educators.

Joseph Cofrancesco Jr., IEE's director, has led these efforts since the institute's inception. A specialist in general internal medicine and HIV/ AIDS care, Cofrancesco says he's pleased that medical education "is finally getting the credibility it deserves." "Some people want to become clinical researchers. Some will go on to clinical education and leadership. Whatever you want out of a career in medical education, the IEE can help you get there."



Joseph Cofrancesco Jr.

Cofrancesco, who trained at Columbia University, the Albert Einstein School of Medicine and Johns Hopkins, says he's delighted to learn about the Osler Residency Program's new medical education pathway. "In the William Osler tradition, chief residents teach every day in our large educational program. We in internal medicine education need our own track. It gives us equal weight. It demonstrates the choice is a valid and important pathway."

Learn about IEE's Summer Teaching Camp: bit.ly/IEECamp

Beyond the Dome

Abner Notkins, M.D., Chief, Experimental Medicine Section, National

Institutes of Health

Growing up in New Haven, Connecticut, Abner Notkins (Marburg, 1959) didn't have to look far for role models. His father was a physician; his mother was one of the first female real estate brokers in the city and an investor. Education, curiosity and ambition were prized.

Notkins didn't disappoint. He excelled at school and took on leadership roles in extracurricular pursuits. He earned a bachelor's degree from Yale University and a medical degree from New York University/Bellevue Hospital Center.

In 1960, after completing his residency at Johns Hopkins, Notkins joined the National Institute of Dental and Craniofacial Research, a branch of the National Institutes of Health, as a public health services officer. That would be the start of a 60-year career studying the properties and function of primary autoantigens found in type 1 diabetes. Initially, Notkins focused on virology but quickly moved into molecular biology and genetics, immunology, autoimmune diseases and, more recently, genomics.

Author of more than 435 scientific papers, co-editor of five books and recipient of three patents, Notkins, 86, continues his pioneering research still today at NIH. He has received numerous national and international awards for his contributions in immunology. Notkins and his wife, Susan Woodward Notkins, an architect, live in McLean, Virginia.

When did you know you would pursue a career as a physician scientist?

When I was at Yale, I took a course called "Evolution, Culture and Behavior." It had a profound effect on my thinking. It made me realize that areas of life are not self-contained; they interact with many other areas.

Can you think of any enduring lessons you learned as a Johns Hopkins resident that have informed your career?

Yes. It's actually something that seemed trivial. When I was an intern, I did a tuberculin skin test on a patient with pulmonary symptoms. A couple days later, the attending physician noted a red spot on the patient's skin and asked me what caused it. I explained that it was a TB test. The attending thought the test was a good idea but wanted to know why nothing was recorded in the patient's chart. I told him I got too busy but planned to update it soon. The attending abruptly scolded me, saying it was irresponsible to wait a couple of days before entering clinical data into the chart. As a result of that

experience, when I moved to NIH two years later and started my own research laboratory, I kept meticulous notes. I entered the data in my lab notebook as soon as I obtained it and almost never left in the evening without making sure all the paperwork was complete. I also began emphasizing to my students the importance of doing the same.

What's it been like to serve as an NIH research scientist for six decades?

It's been more like a hobby in which I'm totally immersed. NIH allowed me to explore my own ideas, which were mostly curiosity-driven. It also allowed me to spend most of my time in the lab, interacting with fellows and colleagues who were interesting and intellectually provocative. NIH was not always Camelot, but I can't imagine a better place to do research. I have loved it.

Which viruses did you focus on?

In the beginning, I focused on the role of enzymes and viruses, such as lactate dehydrogenase (LDH) virus, which we found produced a persistent infection. I continued working on other viruses such as herpes simplex, HIV and cytomegalovirus.

What were some standout highlights — work you're most proud of?

In the mid-1990s, we successfully isolated a gene that encoded a protein we called Islet Antigen-2 (IA-2). Looking at human sera for autoantibodies to IA-2, we found that this autoantibody often appeared years before the onset of type I diabetes. Now, it's widely used to predict which children are at high risk for developing type I diabetes. Other studies in our lab led to the discovery of immune interferon in the circulation of patients with diseases such as lupus, rheumatoid arthritis and scleroderma. These findings played a key role in opening up the field of lymphokines in autoimmune diseases.

Segments of this interview appeared in a previous interview with Abner Notkins by NIH volunteer E. Gordon Margolin, M.D., 4/22/2017.



Aequanimitas

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Department of Medicine Annual Awards 2019

Natasha Chida Ambulatory Preceptor Award

Edie Vargo Part-Time Faculty Member Joel Blankson

Full-Time Faculty Member Malorie Simons

Fellow Award Nelson 8 Team

Interprofessionalism Award Kevin Shenderov and Nick Smith Distinguished Teaching Society in the

School of Medicine Alan Jacobsen Basic Student Teaching Award –

Intern Arsalan Derakhshan Basic Student Teaching Award — Senior Resident Alex Moffett American College of Physicians Award Yuxuan Wang and Anthony Bowen,

J. Mario Molina Scholars Award Kristi Briggs

Lou and Nancy Grasmick Physician Scientist Scholars Award

Paul Scheel and Zach Gitlin Frank L. Coulson Jr. Award

Kassandra Albright Norman and Mary Stewart Memorial Award

Jordan Nahas-Vigo Norman Anderson, M.D. Memorial Award

Kelly Arps Priya Palagummi Memorial Award Casey Ireland

Daniel Baker Award



MEET THE NEW ASSISTANT CHIEFS OF STAFF

From left, Shannon Walker (Thayer Firm); Chad Hochberg (Longcope Firm); Alison Wand (Janeway Firm) and Kevin Eaton (Barker Firm).



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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.