

Pioneers of Hope

At the Monroe Carell Jr. Children's Hospital at Vanderbilt, our physicians' work extends beyond patient exam rooms. They are also searching for discoveries to offer better treatments, and hopefully, find cures for their pediatric patients. The doctors profiled here represent only a sampling of the physicians working tirelessly to make Children's Hospital a place of unwavering hope. Starting this issue, we will include a profile to highlight our long-standing partnership with our community pediatricians who help ensure all children receive the best care each and every day.



Stephen Patrick M.D., MPH, Neonatology. Photo by Susan Urmy.

While the immediacy and intensity of caring for newborns in the Neonatal Intensive Care Unit at Monroe Carell Jr. Children's Hospital at Vanderbilt appeals to **Stephen Patrick, M.D., MPH**, he is equally interested in understanding how and why the tiny infants ended up there in the first place.

Of particular concern to him are the babies who suffer complications from drug withdrawal due to their mothers' opiate dependency.

"What I see in our health system repeatedly is we react to health problems after they have occurred. My hope is that in drawing attention to drug withdrawal, rather than putting the shame and blame on the mom, we think about this as a problem that should be addressed way before infants arrive in the NICU," said Patrick, who came to Vanderbilt in July 2013 from the University of Michigan.

Patrick attended the University of Florida, where he started out as an engineering major. He liked to tinker with things and figure out why they worked—and why they didn't. This natural curiosity served him well as he changed course, attended medical school and took a year off to earn a Master of Public Health degree from Harvard.

"In medical school, it was evident that there was an entire health system around my patients that was affecting them. I took off a year to get a better understanding of how our health system works, how things interact, and hopefully, how to make things better."

Patrick, assistant professor of Pediatrics, completed a pediatrics residency at the University of Michigan and a fellowship in neonatology. He participated in the Robert Wood Johnson Clinical Scholars program for physicians interested in health services and health policy research.

"You can see in our NICU the problems that we take care of are just a microcosm of what is happening around us when you think about prematurity. It's more a story of poverty and bigger, broader questions that need to be addressed to improve outcomes for our infants."

As a neonatology fellow he began to observe more infants having drug withdrawal from prescription opioids. He studied national trends and found that the diagnosis rate tripled over the last decade, reaching one infant per hour in the United States by 2009, accounting for \$720 million in health care expenditures.

"That's where that translational piece happens that's so important for me: to take something that we see at the bedside and put some data to it to influence policymakers," said Patrick, who spends 75 percent of his time conducting research.

He recently received a Department of Health grant to build a predictive model for infants developing drug withdrawal based upon maternal prescribing factors. About 30 percent of mothers enrolled in Tennessee's Medicaid program have at least one legal prescription for opioids.

"That's part of my interest—engaging with folks in Tennessee to figure out how we begin to control this problem and begin to think about it from a public health perspective."

Outside the NICU, Patrick enjoys spending time with his family, including two daughters, ages 8 and 3. He enjoys woodworking and kayaking and discovering what Nashville has to offer, including the hiking trails at Percy Warner Park.

"Nashville is a perfect match for us. We love it. I am so grateful for the amazing amount of support I've received from Vanderbilt," said Patrick, who recently spent a month in the White House Office of National Drug Control Policy. "This is a testament of how supportive Vanderbilt is of junior faculty and this issue."

– by Kathy Whitney