

5 Questions with Jordan Orange, Chair of Pediatrics

✖ Most people are healthy, at least most of the time. Why that is has always captivated Jordan Orange, MD, PhD, the new chair of pediatrics at Columbia University Vagelos College of Physicians and Surgeons.

“I do not come from a family of physicians and scientists, and I thought the best way to answer the question was to be a physician who investigates the human condition—and I was at least partly correct,” Orange says.

Throughout his career, Orange has blended a commitment to pediatric clinical care with a focus on basic and translational research. He is an international leader in pediatric primary immunodeficiency and has defined a new class of diseases known as natural-killer-cell deficiencies.

“Natural killer cells are there—always ready—to protect us against danger,” Orange says. When the cells are broken in some way, the immune system cannot fight pathogens or cancer. “One of the things we’re focused on now is how to use natural killer cells therapeutically as treatment for diseases.”

[Before joining Columbia this summer](#), Orange was professor of pediatrics, vice chair for research, and chief of immunology, allergy, and rheumatology at Baylor College of Medicine.

Q: Tell us a little about yourself. How did you choose pediatrics?

During my clinical years in medical school, I was really just taken by the discipline of pediatrics. Children are experiencing their environment for the first time, and there

are so many twists and turns that an individual goes through that allows them to either emerge as healthy or not. Then also, just from a very humanistic perspective, any day that we could do something to help a child really felt like a good day. I was trained to be a healer and that's very important to me.

Q: How do you see pediatric clinical care evolving at Columbia in the next few years?

The leaders of both NYP and Columbia are talking about a new future for child health in New York City, what I refer to as "For New York, In New York." Columbia has the largest pediatrics faculty in the city; we have the largest footprint and we really have to be there for New York's children. This means getting out into our communities, bringing new clinical programs and excellence to the communities, that's a priority.

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We also need to be clinically super potent—with broad excellence across all clinical areas of child health so that we can be a comprehensive and superb children's hospital of the highest level. When a patient comes here with a complex problem, we have to be able to offer the very best of available services.

We currently have a full range of specialties here and we can treat any child that walks into this hospital today. In some places, we will be increasing critical mass to improve accessibility.

Q: Does the mix of patients who come to Columbia make that a challenge?

We have what's referred to as a high case mix index; that is, we have some of the sickest patients in the United States. The complexity of patients at this children's hospital is actually the second highest in the country.

I think that requires specialties to really work together to treat the patient comprehensively and holistically. That does happen here, and we'll be creating avenues and programs for it to happen more fluidly and more effectively.

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Some of our complex patients are drawn here for our areas of distinction in which we have especially good outcomes, for example, complex congenital heart defects. We have phenomenal surgeons, phenomenal cardiologists, phenomenal interventionalists, phenomenal nurses, and phenomenal cardiorespiratory therapists. A full range of services allows for these patients to converge here and for the outcomes to be exceptional.

Q: One of your goals for the department is to strengthen research in the department. Why is it important for pediatricians in academic medical centers to conduct research?

Research is of the essence in pediatrics. Pediatrician-scientists are people who speak both the language of child health and of research. They are, I believe, better positioned to innovate on behalf of children and better able to apply new research advances to the needs and gaps in pediatrics.

We're at Columbia, which is a top national research institution, and our department is filled with high-quality faculty, really brilliant individuals advancing an important clinical mission and meaningful research. There is every

reason that we should be one of the top research departments of pediatrics. With regards to NIH funding for departments of pediatrics, we just jumped in the rankings to number 14, but we should really be able to do what other Columbia departments do, and that's outpace the NIH and other institutes in research and funding.

How do we do that? We're not a free-standing children's research institute, but I think that that's a strength. We exist within the free-flowing environment of Columbia and we really need to work hard to bring other Columbia researchers and programs to pediatrics. I would love to see recruitments that can connect spheres of excellence at Columbia with child health.

Q: In running a pediatrics department, do you have any guiding principles?

Something that's very important to me personally is what I call DRG: Dignity, Respect, and Gentility. It's an important way of describing how we need to interact with each other, how we need to interact with the people our work touches, how we need to interact with our patients and families.

We have a great existing culture around these concepts and I just want to be sure that we crystallize that and build upon it.

Jordan Orange, MD, PhD, became the Reuben S. Carpentier Professor and Chair of the Department of Pediatrics at Columbia University Vagelos College of Physicians and Surgeons on July 1, 2018, succeeding Lawrence R. Stanberry, MD, PhD. Orange also is pediatrician-in-chief at NewYork-Presbyterian/Morgan Stanley Children's Hospital.