

A Message from Dr. Lucky Jain

Dear Friends,

For the past two years, our research and clinical teams at Children's Healthcare of Atlanta and the Emory University School of Medicine Department of Pediatrics have shown what it takes to combat a global pandemic.

In Atlanta and across the world, we pivoted from our day-to-day research to collaborate on multidisciplinary projects, working together to pursue innovative and nimble solutions to the evolving challenges presented by COVID-19. Indeed, our team's tireless efforts and personal sacrifices that began in 2020 have produced incredible advances and unforgettable impact in 2021.

In the past year, we participated in efforts that have led to: the development of serological tests and assays of neutralizing antibodies; authorization of pediatric vaccines with 250 children enrolled and 150 committed to begin the Pfizer/BioNTech and Moderna pediatric studies; the availability of at-home tests (after evaluating more than 70 different technologies in the National Institutes of Health (NIH) Rapid Acceleration of Diagnostics (RADx) program); authorization of new drugs for treatment such as the baricitinib-remdesiver combination; and identification of potential biomarkers. Overall, our researchers and physicians have published 145 COVID-19 studies since the pandemic began, with 29% appearing in high impact journals. Of these studies, 17 focused on MIS-C and two identified potential biomarkers of COVID-19.

We helped change the course of the virus and touched the lives of many in need. On top of it all, our regular research program continued to achieve significant milestones.

Representative of our many cutting-edge breakthroughs, the 2021-2022 U.S. News & World Report rankings are another testament to our success. Children's ranked among the nation's top pediatric hospitals with four specialties ranking in the top 10 and nine specialties ranking in the top 20. Our clinicians are empowered with innovative treatments discovered through basic, translational and clinical research.

While deeply involved in today's most vexing challenges, we always have an eye to the future. As part of our research expansion plan, it's important to note the unprecedented support we received this past year. A \$31 million gift from the Marcus Foundation is helping to establish a Center for Pediatric Cellular Therapies; a five-year public and private initiative from the Georgia Research Alliance will advance exploration into sickle cell disease; and a previous \$90 million transformational gift from the Robert W. Woodruff Foundation continues to facilitate 30 new positions for research-focused faculty members.

These donations are in addition to \$101.4 million in total extramural funding, including \$72.5 million in NIH funding awarded to our researchers in the last year.

This growth plan also enabled the design and construction of the new Health Science Research Building II (HSRB-II), expected to open in 2022. A significant portion of the building is dedicated to pediatric research. As such, HSRB-II will ensure we have the translational research environment required to enable research breakthroughs that will reduce the burden of disease for kids and their families. This is in addition to new clinical research space in the Children's Healthcare of Atlanta Arthur M. Blank Hospital scheduled to open in 2025.

We have accomplished so much, and I'm honored to share with you this 2021 Research Report highlighting some of our incredible feats. I look forward to the innovation and life-changing work to come in 2022 and beyond.

All the best,

Lucky Jain, MD, MBA Chief Academic Officer, Children's Healthcare of Atlanta George W. Brumley Jr. Professor and Chair, Emory University School of Medicine Department of Pediatrics

