

COMMENT

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I was born in Cape Town, South Africa, and immigrated to the USA (Denver, Colorado) when I was 8 years old. I received my medical degree from the University of Colorado and completed a residency in pediatrics at Connecticut Children's Medical Center. I became interested in pediatrics early in medical school when I learned how to do an H&P for a child. I was always interested in physiology and congenital anomalies and found them both in Pediatric Cardiology. I completed a fellowship in pediatric cardiology at Johns Hopkins University, and am now a senior research fellow, supported by the Pediatric Scientist Development Program.

As a pediatric resident, I was struck by the multiple children with pulmonary hypertension who became extremely ill, leading to the unfortunate death of some. Pulmonary hypertension is a disease characterized by increased pulmonary artery pressures, resulting in right-sided heart failure, with very high mortality. There is a paucity of therapeutic options and lack of understanding of which children would get a severe disease and why.

Since starting fellowship, I worked with Dr. Allen Everett looking at proteomic markers of disease severity in pediatric pulmonary hypertension. This was my first foray into serious research, and especially into bench and translational research. I started looking at single proteins as prognostic markers of pulmonary hypertension, but have moved toward trying to understand the function of multiple key proteins in vascular growth and their effect on the pulmonary vasculature and the heart. This is especially interesting in children where the heart and lungs are still growing very rapidly. The article highlighted in this edition of Pediatric Research looks at insulin growth factor binding protein 2, one of a group of growth factors that I am exploring as effectors of vascular growth and disease in pulmonary hypertension. I'm now working on using new methods to understand the function of multiple proteins together, including protein–protein and gene–protein interactions in pulmonary hypertension.

My advice to those interested in research is to find a supportive mentor; I had minimal research experience starting fellowship, but I've had the support of an experienced mentor (Dr. Everett) and his lab. I also recommend getting to know other people in the field you're studying who can guide you to develop interesting and relevant research questions. I hope that my research will translate into clinical understanding, and eventually improved outcomes.

ADDITIONAL INFORMATION

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