Pediatric RESEARCH

COMMENT

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I attended Cornell University, with an early interest in Neuroscience and Neurobehavior, including a research internship studying oligodendrocyte proliferation and maturation. Afterwards, I attended medical school at Columbia University, College of Physicians & Surgeons, where my clinical clerkships confirmed my early instincts to work with children. I moved to Washington, DC for my pediatric residency at Children's National Health Systems. During my resident rotations in neonatology, I was able to bridge my interests in physiology and clinical care, and stayed on at Children's National for my first fellowship in Neonatal-Perinatal Medicine, followed by a second fellowship in Fetal and Translational Medicine. During these fellowships, I developed an academic focus on brain autoregulation and autonomic function in term and preterm infants, as well as additional training in brain imaging of both the fetus and the newborn. These training programs also provided a strong clinical foundation in the healthcare of children.

Building on an early background in neuroscience that began in my undergraduate years, I am continuing my academic career in neonatology with a focus on brain-oriented care. During my neonatology training, it became evident that in order to understand the premature brain, we must first develop a better understanding of in utero brain development. My studies of fetal medicine reinforced the critical concept: a stressed uterine environment may have lifelong neuropsychiatric consequences if fetal brain or placental growth is disrupted. I believe that to improve neonatal outcomes, we must transform our current clinical paradigms to begin treatment in the intrauterine period, and continue care through the perinatal transition through strong collaborations with obstetricians and fetal-medicine specialists. Under the mentorship of Catherine Limperopoulos, Director of the Developing Brain Research Laboratory and Adre du Plessis, Chief of Fetal and Translational Medicine at Children's National, we study the mechanisms of acquired fetal and neonatal brain injury, as well as the role of placental health in supporting early neurodevelopment. My best advice to future clinician-scientists is to stay curious and open-minded; I doubt I could have predicted my current research interests or described the path between the study of early oligodendrocyte maturation to in vivo placental development, but each experience along the way–both academic and clinical—has led me to where I am today.

ADDITIONAL INFORMATION

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