

Swarr, Daniel

After finishing general pediatrics residency training at Baylor College of Medicine, Dr. Swarr completed a combined fellowship program at The Children's Hospital of Philadelphia, which led to Board certification in Neonatal-Perinatal Medicine and Medical Genetics & Genomics. As both a neonatologist and geneticist, Dr. Swarr is particularly interested in both isolated and syndromic birth defects impacting the health of newborn infants.

The goal of Dr. Swarr's research is to improve our understanding of the etiology and pathogenesis of congenital malformations and pulmonary disease using a wide variety of tools from developmental biology, genetics and epigenetics. His laboratory is particularly interested in understanding epigenetic mechanisms by which gene expression is regulated during early endoderm and lung development, and how disruptions of these processes lead to neonatal disease. Current work seeks to define the role of long non-coding RNAs (lncRNAs) during lung development and lung epithelial repair after injury.

Dr. Swarr's laboratory is also actively involved in "translating" findings from basic developmental biology to better understanding disorders of the esophagus, trachea, and lungs through a patient registry-biorepository established in collaboration with investigators at CCHMC and The Children's Hospital of Philadelphia.