

STRONG CHILDREN'S RESEARCH CENTER

Summer 2013 Research Scholar

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ABSTRACT

Title: Investigation of Cardiac Morphology in a Mouse Model with a Congenital Defect

Background: Congenital defects of the developing heart are a major cause of mortality in newborn babies. One of the genes involved in heart development is FoxJ1. It regulates the transcription of genes that control the production and function of motile cilia as well as abnormal nodal cilia. Nodal cilia are responsible for the leftward movement of the extracellular fluid, which then establishes left-right asymmetry. While the exact mechanism is unknown, mutations in this gene have led to abnormal nodal cilia. This leads to imB1(1)Or]TJEtn5o ab-rilia. Thi