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Research: Molecular Biology of Heart Disease

Research

My research revolves around understanding the molecular mechanism(s) that contribute to **heart failure and myocyte gene expression**. Heart failure has been induced by the activation of several **G-protein-coupled receptors**, including the angiotensin II type I receptor (AT1R). These AT1 receptors have also been shown to promote apoptosis in isolated **cardiac myocytes**. My research goal is to elucidate how the **G-protein-coupled AT1R signals to the JAK-STAT signaling pathway** in primary myocytes, and determine which cellular proteins act as adapter molecules to the AT1R in myocytes. Unraveling this mechanism will aid our understanding of how G-protein-coupled receptors influence heart disease.

Publications

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