The Use of Retinoic Acid to Promote Atrial and Ventricular “like” cells to Aid in Atrial Fibrillation Research

Nautica McCully
Cleveland State University
Retinoic Acid to Promote Differentiation of Atrial-Like Cardiomyocytes for Atrial Fibrillation Research

College of Sciences and Health Professions

Student Researcher: Nautica McCully
Faculty Advisor: Shamone Gore-Panter

Abstract

Atrial fibrillation (AF) is the irregular contraction of the atria, which are the top chambers of the heart. AF is the most common cardiac arrhythmia, affecting nearly 2.3 million people in the United States, common among people 40 and older. When AF is present the electrical signals that control this process is unbalance. Without proper diagnoses and treatment AF can be a life-treating condition. The use of human cell-derived cardiomyocytes will allow the study of cells involvement in atrial fibrillation development. The addition of retinoic acid during a 30-day time course to myocytes allowed us, to investigate retinoic functions, by comparing RA treated cultures to non-treated cultures. As data analysis is currently being reviewed future investigation is needed to determine results.

*Supported by the McNair Scholars Program