PROJECT RESUME

Heart disease is the most prevalent cause of death in industrialised countries. As the heart cannot regenerate, heart disease causes permanent damage. In the embryo, the primitive heart is built from early differentiating cells. However, a 2nd cell population exists that contributes to the heart for a long period of time, and that is crucial to generate the mature heart. These cells, as they have lasting cardiac competence, may hold clues as to how to generate cells for cardiac therapy. To characterise the properties of these cells, we must first be confident in locating them during development. This project will use the chicken embryo, an established model for human heart development. We will label the cells with dyes at the time there are specified in the early embryo. We will then trace the cells at their various intermediate position until they are being recruited into the heart.