

Project Title: Development of a novel 3D retinal model.

Diabetic eye disease is the leading cause of blindness worldwide. To prevent diabetic eye disease, it is important to understand and control diabetes-linked changes in the way the body functions. Fenofibrate, a drug commonly given to treat high cholesterol, has been shown to slow the development of diabetic eye disease in individuals with type 2 diabetes however, it is not known how this happens. When Fenofibrate is taken, it is broken down into proteins that are shown to help improve the bodies immune system and lower the release of proteins that are shown to damage important parts of the eyes structure. Looking into the relationship of how Fenofibrate stops the damage of the eyes structure could allow for an understanding of how we could use this drug to slow the development of diabetic eye disease. We aim to make a model of a key part of the eyes structure that will allow us to test Fenofibrate and determine how it could be used to treat diabetic eye disease.