

MSc-project

Title: Image analysis of intestinal cell lines grown on soft matrices

Description:

Intestinal cells are normally grown on a flat and hard surface in a cell laboratory. However, the *in vivo* situation differs significantly from this as here the intestinal cells grow on soft villi structures, as shown in Figure 1.

This project aims for utilizing image analysis to investigate how different cell matrices affect cell morphology. This will be done staining functionally or structurally proteins such as actin, as shown in Figure 2.

In this project, the focus will be on learning cell culturing, advanced microscopy (fluorescence and confocal), and image analysis of the achieved images.

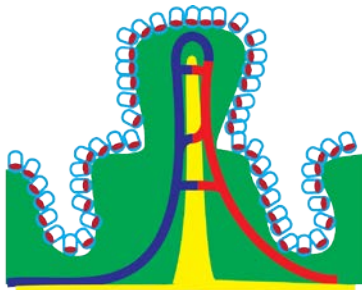


Figure 1. Structure of intestinal villi cells

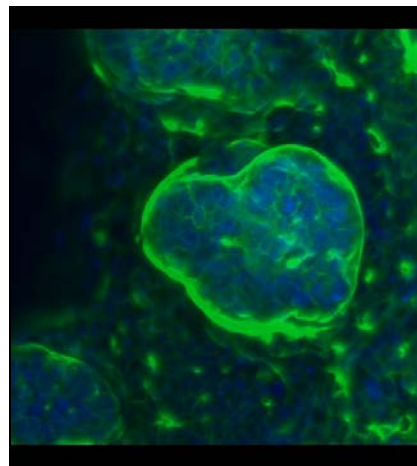


Figure 2. Confocal image of intestinal

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Allowed no of students per report: 1

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