A purple and green light

Description automatically generated

**How limited information can lead to large-scale wound healing**

When you get a papercut, your cells quickly organize to close the wound – requiring complex coordination and cooperation.

In this project, you will be looking at cutting edge (pun intended) biomechanics. Ongoing research suggests a link between local distribution of proteins and global cellular motion. You will be given an array of cell-images from a paper quantifying this exact phenomenon. Using computer vision and some fundamental statistics, your job is to develop a method to analyse the images, seeing if you can find evidence for a link between the wounded cells and order in the surrounding tissue.

Studying how the body heals is a key – and very active – area of research in biophysics. Furthering our knowledge of what regulate the movement of cells has implications for understanding everything from cancer treatments to the emergence of life itself.

Some basic coding skills required.

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