Hi, my name's Stephen Jenkins. I'm a Chancellors Fellow at the Centre for Inflammation Research. My lab works on cells called macrophages. Now, macrophages are present in all healthy tissues where they help maintain homeostasis, but they are also important in inflammation where they help control inflammation, fight infection and repair damaged tissues. Now, for a long time it was thought that all macrophages were derived from circulating precursors called monocytes. However, we recently discovered that during certain types of inflammation resident macrophages actually undergo high levels of proliferation in order to expand in number in the tissues. As you can see from this slide here we can see a number of mitotic macrophages taken from mice infected with parasitic worms. Also, findings from other labs have shown that actually resident tissue macrophages appear to be a distinct lineage from the monocyte-derived cells. So key questions we have in our lab are how the resident macrophages are maintained and how this changes as we age.