Dr Radhika Aiyappa-Maudsley, Department of Molecular and Clinical Cancer Medicine

**Abstract**

Being in a research environment is challenging at the best of times, the long hours, the failed experiments, the delayed gratification, and the pat on the back that never comes. During one of these ‘moods’, I was imaging some cancer cells treated with ionising radiation to investigate the levels of DNA damage induction. Each spot on the nuclei corresponds to one double strand break in the DNA. This technique, γH2AX immunofluorescence, is one of the methods to determine the damage caused by chemo and radiotherapy to cancer cells. What I also saw under the microscope, was a cluster of cells in the shape of a heart. This was enough to remind me why I am passionate about research. The work that we carry out today will result in better treatments and outcomes for patients tomorrow - The hope for joy, laughter and promise of a better future.