

AH Biology Visit To Cancer Research UK Centre

On the 28th of October a group of enthusiastic Advanced Higher Biologists set off to visit the Cancer Research UK Centre at the Western General Hospital. After getting slightly lost and jogging around half of the hospital grounds, we arrived exhausted but excited in anticipation of what we were to see and learn. First we were given a talk by Professor David Harrison, Director of the Edinburgh Cancer Research Centre and Cancer Research UK Clinical Cancer Centre, about what the organisation does and aims to do in the future. He also explained the importance of Cancer Research UK not only to the person who has cancer but also to their family and friends. Afterwards a specialist in cancer spoke to us about the nature of cancer itself, its effects on patients and various treatments available to attempt to manage cancer.

Next we were shown upstairs to the laboratories where some PhD students were available to talk through their experiments. The research being carried out was investigating the development of melanoma (a type of skin cancer) in zebra fish. One student was looking at how the cancer spread in adult fish and the other was looking at embryos of zebra fish at various stages of growth to see if signs of melanoma could be identified during early development. Much of the analysis involved analysis of particular genes.

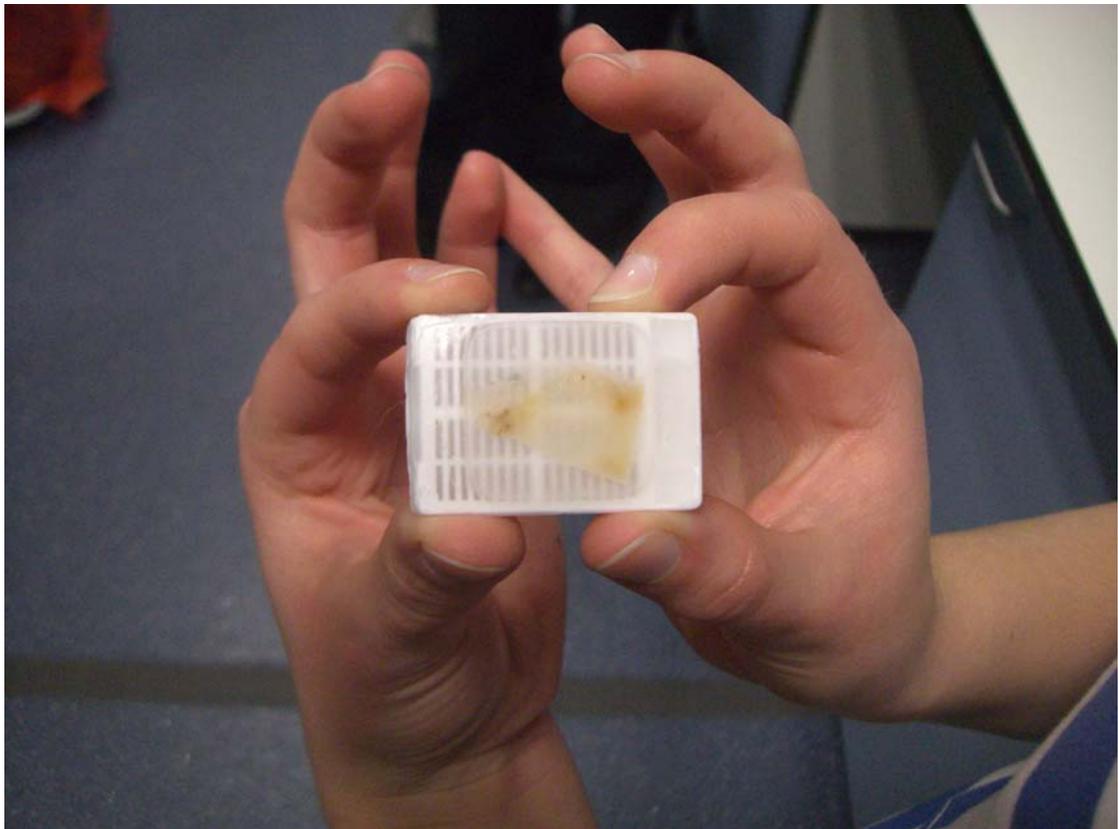
As we made our way back downstairs we passed through the Fish Room where the zebra fish that were being tested on were kept. In another laboratory a genetic scientist was on hand to explain a sophisticated piece of equipment used to identify malignant areas of breast tumours after they had been removed. It also could identify the presence of certain molecular receptors, an essential test in order to decide on the most cost effective treatment for a patient post operation eg. herceptin, tamoxifen.

At the end we were given the chance to ask questions and had some in depth discussions with the doctors and scientists on topics covered at school and information learnt during the evening. Afterwards we were provided with a feast of juice and biscuits! I'm sure everyone who took part would agree the evening was extremely interesting and tied in very well with the section of the course that we have been studying. Special thanks go to **Ms McKenzie** and **Mr Ramage** for making this trip possible.

By Emma Hughes



Looking at zebra fish embryos under a microscope



A sample of a breast cancer tumour