

An example of a real work placement – Gillian's photo diary



This is Gillian – a 5th year pupil at secondary school who wanted to find out more about career possibilities in biomedical sciences. Gillian arranged a work placement during her summer holidays and kept a photo diary of what she did. Read on as she gives us the low-down on her 4 day work placement in a Biology Department.



In the afternoon, I tipped on flies with Kathleen. This involved tipping the drosophilae from the old vial into a new one with fresh food and a strip to prevent mites. I filled one tray, marking the name, date and number on each new vial.



At first the fly room was a bit intimidating, as it seemed to be crawling! But interest soon took over as I saw the effects of the different genetic crosses. Some drosophilae had curly wings, some had no wings and they all had different coloured eyes.

Day 2. Wednesday 26th July 2006

On the second morning I was shadowing Evelyn's group.

Marie showed me some of the fascinating research she is doing for her PhD. She was investigating why some follicles degenerate and others mature by simulating the environment they would have in the ovary. She showed me the results under the microscope.

Day 1. Tuesday 25th July 2006



I arrived at the Biology department of Kings Buildings and at 9am I was given a very warm welcome by Jan. She then showed me around the 5th floor and introduced me to Kathleen.

Jan showed me their storeroom, where the games are kept for the Science Communication workshops. Back in the office I started my task of designing a game that would encourage people to think about DNA Databases.

I knew very little about Science Communication and was eager to learn more about it.



I then had to be told about the safety precautions and health regulations.



Jan and Kathleen took me to a lecture about the "molecule parade" that is going to be part of the Edinburgh Festival Fringe Cavalcade. I found out that science communication tries to break science out of the stereotypical academic box and shares science with the public. It is also great fun!



My afternoon was great fun and very hands on as I found out about Histology with John.



We made slides of a bovine follicle and I got to stain slides of a human ovary sample using Eosin and Haematoxylin.



Day 3. Thursday 27th July 2006

On my first day I had used the microscope to dissect drosophilae ovaries.



Kathleen showed me how to produce a protein gel that would prove that many of the female's protein bands come from the yolk in these ovaries.



First we set up the gel plate and removed bubbles with the comb. We found that temperature effects the rate it sets at! I then loaded the wells with the samples (male, female, ovary and kaleidoscope marker).



Then the electrolysis began and was left over night.



Day 4. Friday 28th July 2006

For the last day of my placement I was with Angela and Natasha on floor 6.

I was sad to leave on Friday, having had a brilliant week. I found everything incredibly interesting. I thought Natasha's work was the hardest to understand, as many of the processes are too microscopic to see. But everyone was fantastic at spending time showing me things and explaining them to me! I don't think my placement could have been any better.



Natasha is doing research into the mechanism that allows proteins to be expressed. This research will enhance gene therapy.



We did a mini prep in the morning, which was followed by gel electrophoresis in the afternoon. Ultra Violet light was then used to visualize the "insert" (transposase) and the clearest ones will be sent away for sequencing. I was very excited when Natasha chose some of "my" inserts!