

Short Report for Human Physiology Trip March 2010

We took 35 year 10 Human Physiology Students on a day trip to the Biomedical Science laboratories at Lincoln University.

On arrival students felt they became real scientists when they were asked to put on their white coats! Following a Health and Safety briefing, students were split into 3 groups and took part in a carousel of activities between 2 labs throughout the morning.

The first activity took the shape of a case study for a female with anaemia. Students were presented with the case and pre prepared blood films. They were asked to decide whether the results for the female were within the normal range and back up their explanations with observation of blood films. To extend their knowledge, students were then given other case scenarios including a person with suspected malaria.

For the next activity, students were able to stain their own blood films from pre – prepared blood slides. They used a Leishmans stain to do this and were then asked to have a look at the films microscopically under oil immersion. Students were asked to identify the different kinds of white cells and to think about the diseases which would cause a rise in the different types of white cells.

Lastly, students were shown how to make histology slides through wax embedding and microtome. They then used various pig tissues and stained the tissues using methylene blue. Again, they were asked to determine tissue type through microscopic observation. Students were also able to look at other tissues using different staining techniques.

Forensic Science is also taught at the same faculty. Students were very keen to look at the forensics blood splatter pattern scenarios and skeletons set up in the same lab as they were working in!

Following lunch, students receive a tour of the university and a prospectus.

Unfortunately, time ran out for the Parasitology session and the Electron Microscope had a fault.

Sharon Smith (Science Teacher)