Date of entry:	25-10-22
What have you done on your project this week?	**AIM – design a virtual simulation of a PCR experiment** This week I worked on the primer design One part of the simulation will allow them to pick from several different primer sequences (they must choose the correct primers)
What have you found difficult? (How do you intend to ameliorate this? How can you grow? Can you create a bullet point for your CV from this?)	Finding the best DNA sequence to use for this simulation, and the correct/incorrect PCR primers, was difficult. In the end I chose the gene encoding the beta-lactamase, because antibiotic resistance is important Designing the incorrect PCR primers was hard too. Bullet point for CV: able to design educational tools that feature antibiotic resistance
What has been a success?	I found a way to make the simulated PCR turn red and beep with an error noise when the user selects the wrong primers. Found a paper by Wright and Newman that describes using PCR in an undergraduate lab – useful
What files/data have you produced? (are they stored securely and labelled clearly?)	▪ Sequence to amplify by PCR: ndm-blactamase ▪ PCR primers (correct and incorrect) in a Word file called ndm-bla_primers ▪ Made images of DNA sequence with correct and incorrect PCR primers: jpegs saved in "Documents/MyThesis/PCRimages/" ▪ Updated simulation file (PCR.html) –
What is the objective for next week?	▪ Create graphics and explanations of the PCR ▪ Find structures for DNA polymerase ▪ Edit thesis intro