**iGEM Minutes 22.03.17**

In Attendance – Neil, Valeria, Jessica (Chair), Lais, Jack, Sophie, Declan (Minute Taker), Michaela, Anna, Dana

Items

1. Last meeting all ideas discussed – 3 shortlisted; PKS of antibiotics, Herbicide sensing and bioremediation, heavy metal bioremediation. 1st of May deadline for telling iGEM?
2. Funding – need to find some, synthetic biology centre, industry, other schools
3. Deadlines – Need to be aware. **Action - list by Lais**
4. Projection selection
   1. Herbicide sensing and bioremediation
      1. Amynopyralid in herbicides, kills broad leaf plants in very low concentrations. Idea is to create a detector for this and possibly some method of treating the manure and removing the chemical
      2. Glyphosate – ‘Europe’s favourite weed killer’ linked to cancer, residues in bread. Idea is to bio-remediate this chemical. EPSPS aided reaction to be considered. Alcanivorax has a EPSPS synthase gene.
      3. Applications for consumers and farmers – proposal of a sensor and a dry-suspension of modified bacteria to remediate the chemicals.
      4. Points of issue – clarification of the EPSPS reaction and what were the products, the fact biosensors have been done may times before. Also the degradation of glyphosate
   2. Heavy Metal Bioremediation
      1. Teams already looked at this area; Cornell 2014
      2. Mercury and lead were looked at; mercury failed but succeed with lead
      3. Penn 2014 – Used E. coli not magnetotactic bacteria
      4. Main points of issue were the fact it has been done before, need a novel take on this. Also how to express the magnetosome.
   3. Polyketide Antibiotic synthesis
      1. See Jess’ PowerPoint
      2. Main points of issue were the viability of the china bio bricks and the availability of a mass spec machine
      3. **Action – Jess to email uni, Lais to email Northumbria about mass spec**
   4. Next week decision – MSc students’ opportunity to bring ideas
      1. **Action – Vote next week, ideas to be honed and represented**
5. **Action - Neil to send links out to put names on the iGEM page**