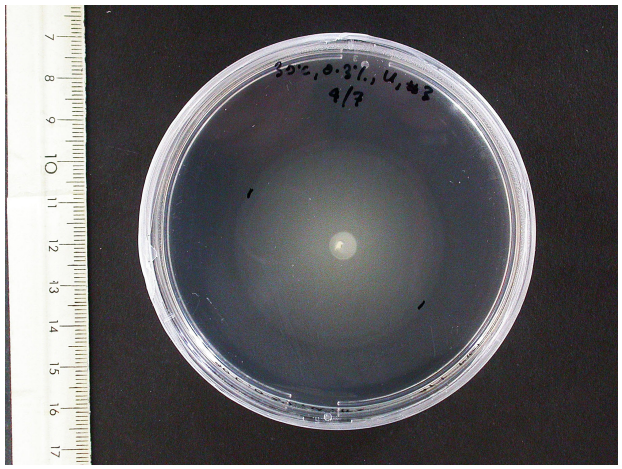
Feasibility study

labwork

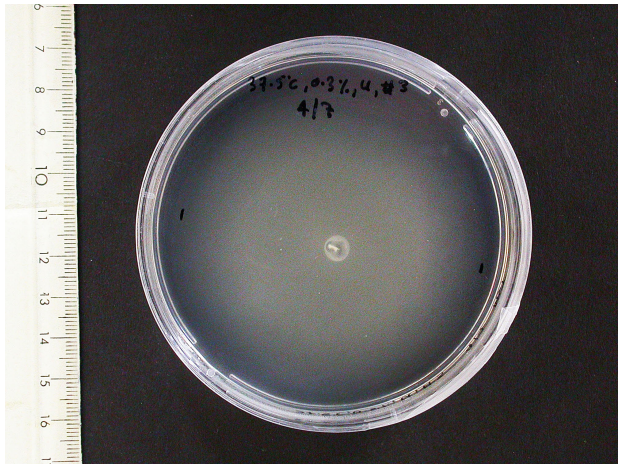
- 1st used Nigel's *E. coli* MG1655 strain
- Tested their motility on Bactotryptone agar
- At 3 different concentrations of agar
- 0.15, 0.3, 0.375
- And 3 different temperatures 25,30 and 37.5
- The higher temp. with 0.15 agar conc. were the most motile

Motility tests

- Top plate optimum
- 0.3% U 30°C



- Bottom plate too far
- 0.3% U 37.5 °C



- MC1000 *E. coli* strain was ordered Monday should arrive early/mid next week
- Materials for beads for the experiments researched;
- Polysciences, Duke Scientific & Microsphere technology Ltd
- Latex beads are polystyrene bonded with DVB (Divinylbenzene)
- Metal coated eg Gold, Iron microspheres of hollow glass sourced

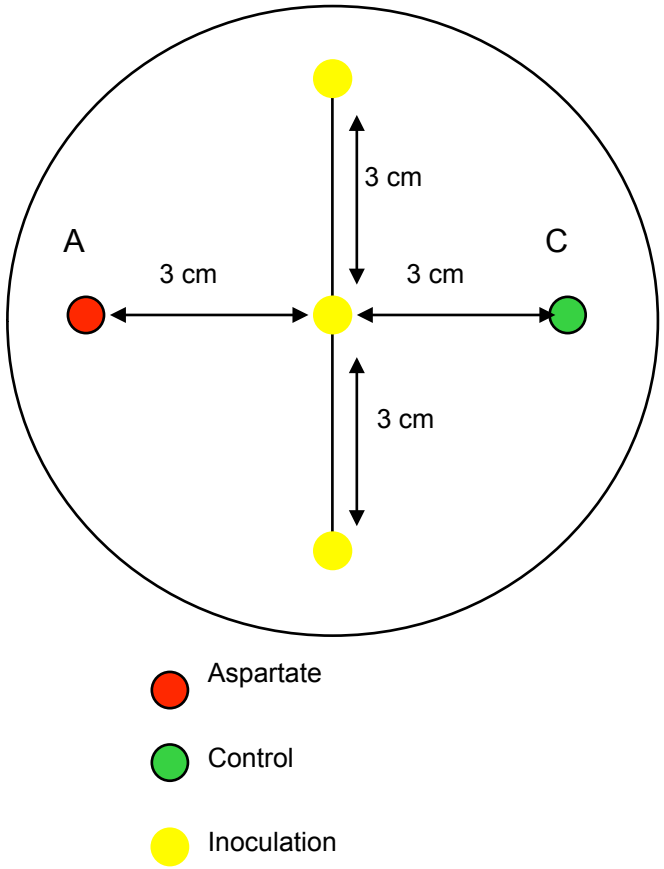
Zigmond chambers

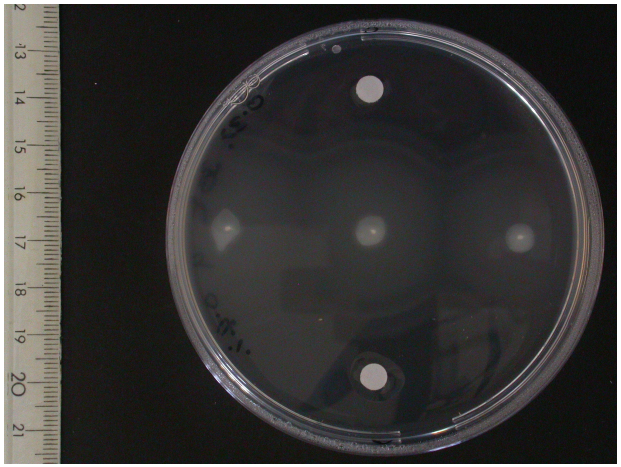
- Investigated possibility of using and adapting zigmond slides as venues for the ‘football match’.
- Duncan Tarling chemistry glass blower is making up a range of test sized slides for us.

L-aspartic acid

- Decided to test aspartate chemoattractant
- Had difficulties initially solubilising in water in sufficiently high concentrations.
- Tested at concentrations 0.2, 0.1, 0.01
- Different agar conc and temps
- Now investigating using L-aspartic acid monosodium salt monohydrate

1st chemotactic response to L-aspartic acid discs (top of plate/control disc btm)



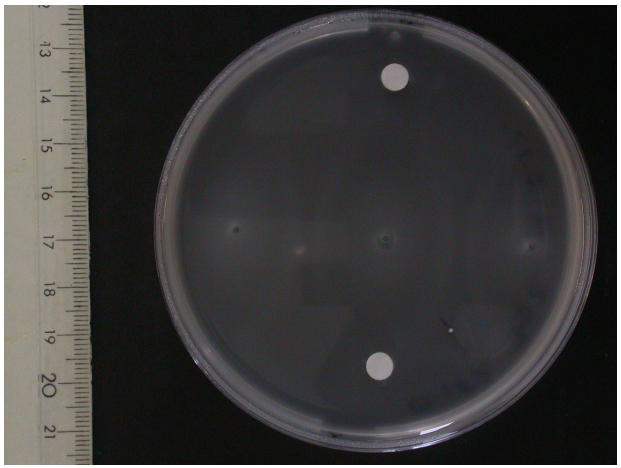


0.3% agar

30°C

U

0.2 % Asp



0.15% agar

30°C

U

0.1 % Asp

Results of chemo test

- not suitable:
  - Agar 0.15 % and 0.5 %
  - Temp 37°C
  - Aspartate concentrations to low
  - Inoculation on surface