Careers in perspective: Bioinformatician

What is a bioinformatician?
- **Bioinformatics**: A field that uses computers to understand biological data
- **Role of bioinformaticians can vary, they can:**
  - Analyse and visualise complex big datasets in a meaningful manner
  - Create databases, tools or software
  - But they all use computer programming languages to handle data or build tools/software
  - Examples: R and python

What is personalised medicine?
- **Big biological datasets can be used to understand the mechanisms of disease and so leads to personalised medicine**
- **Personalised medicine**: tailoring treatment to an individual
  - Everyone's genetic/molecular makeup is different
  - So the same disease will progress and respond to treatment differently for certain individuals
  - It's like how different shoppers get different t-shirts - you certainly will not get the same style/size as your parents!

How do I get into Bioinformatics?
- You don’t need a Bioinformatics degree - People’s background can range from biology, computer science or maths
- All you need to know is how to code, handle data and think scientifically
  (Personally, I studied Biochemistry and did a PhD in cancer biology where I did some bioinformatics but a PhD is not a necessity for non-academic jobs)

Useful links/resources