BIOINFORMATICS EDUCATION

A personal perspective…
SOME QUESTIONS
In your job what has stayed the same in the last 5 years?

In your job what has changed in the last 5 years?
WHAT WILL BE THE SAME IN 5 YEARS TIME?

WHAT WILL BE DIFFERENT IN 5 YEARS TIME?
WHERE ARE WE NOW?

- An evolving profession
- An evolving environment
  - IT infrastructure
  - Genomics governance
  - Application areas
  - Science base
  - Structural uncertainty
WHAT DO WE HAVE?

- Scientist Training Programme:
- HSST
- Apprenticeship
- MOOCS
- Academic Msc
- PGCert
- On the job..
STP

- Pros: Recruitment that supports bringing in the best
- Pros: A developing infrastructure
- Pros: Meeting a need
- Pros: On the job training

- Cons: Syllabus outdated and constrained
- Cons: Still a difficult University/NHS divide – support can still be an issue
- Cons: Doesn’t map to the patient pathway
- Cons: Differing student experiences
HSST

- Syllabus: IT/Data science/Genomics/Omics/Specialisms
- Pros: Community of Practice
- Pros: Leadership
- Pros: Space to develop
- Cons: 5 years!
- Cons: PhD or training?
- Cons: Limited capacity
- Cons: Busy students
- Cons: Not cost effective for HEIs
MOOC

• Pros: Raises the profile of the profession
• Pros: Attracts new students
• Pros: Large numbers and easy access

• Cons: Not accredited
• Cons: Limited engagement
APPRENTICESHIPS

- Pros: Entry level (graduate level)
- Pros: Potentially useful workforce
- Pros: Funding

- Cons: who will it attract
- Cons: what are the roles?
ACADEMIC MSC/PG CERT

- Pros: Can be cost-effective for HEI (foreign students)
- Pros: Develops more people for the profession
- Pros: More freedom in curriculum
- Cons: Limited experience of real environment
Is the academic clinical bioinformatics community strong enough?
What is the make up of the teams we need for clinical bioinformatics?
Where do research software engineers fit?
What is the right syllabus?
How do we futureproof the people we are training now?

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