MANCHESTER 1824
The University of Manchester

Careers in Clinical Science

27th October 2018

Dr Ang Davies
Angela.davies@manchester.ac.uk
@MSCclinbioinf

MANCHESTER 1824
The University of Manchester

Who are Healthcare Scientists?

Healthcare Scientists make a difference to peoples' lives... and so can you

- Only make up 5% of NHS workforce but involved in 80% of all clinical decisions
- Eg blood science, audiology, genomic counselling, bioinformatics
- Are developing some of the most amazing clinical and technological advancements.
- Are involved in improving clinical service and undertaking research

MANCHESTER 1824
The University of Manchester

Structure of the Scientist Training Programme

University

Introductory Modules

E - learning

Specialist teaching

Examinations

Research project

Final examination awarding MSc

Work base

Induction

Rotations

Specialist (elective)

Research modules

Assessment programme

Work based e-portfolio

Continuous assessment
DOPs
CBDs
Competences
OCEs
Annual Review of Progression

Objective Structured Final Assessment

Review and confirmation of all Assessments

Completion of Training Programme

REGISTRATION

MANCHESTER 1824
The University of Manchester

The Scientist Training Programme

- Coordinated by the National School of Healthcare Science in collaboration with employers, academic providers, professional bodies, commissioners and the Academy for Healthcare Science

- Supports nearly 900 STP trainees in over 500 NHS departments across England, Scotland, Wales and Northern Ireland, in a breadth of specialisms

MANCHESTER 1824
The University of Manchester

STP Specialisms

Life Sciences

- Haematology and transfusion science
- Clinical biochemistry
- Genomics
- Genomic counselling
- Reproductive science
- Cytopathology
- Clinical Immunology
- Histocompatibility & immunogenetics
- Histopathology
- Microbiology

Physiological Sciences

- Audiology
- Cardiac science
- Critical care science
- Gastrointestinal physiology
- Neurophysiology
- Ophthalmic and vision science
- Respiratory & sleep sciences
- Urodynamics science
- Vascular science

Clinical Bioinformatics

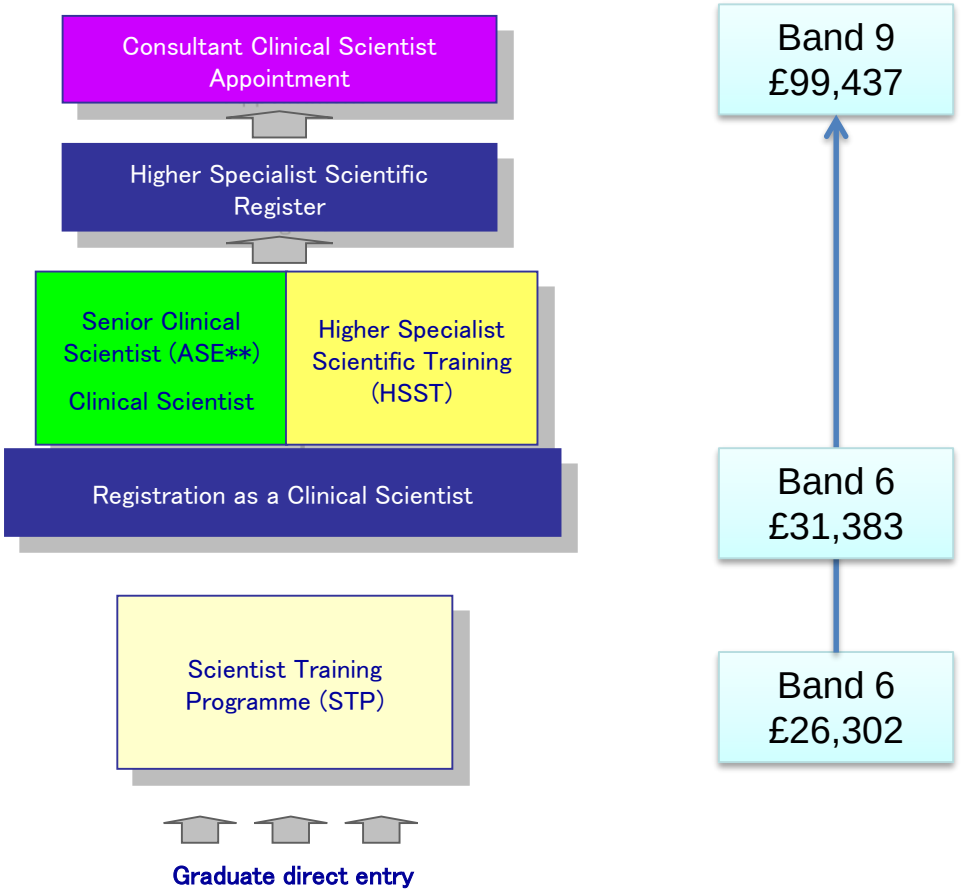
- Clinical Bioinformatics (Genomics)
- Clinical Bioinformatics (Physical Sciences)
- Clinical Bioinformatics (Health Informatics)

Physical Sciences

- Clinical pharmaceutical science
- Imaging (ionising radiation)
- Imaging (non-ionising radiation)
- Clinical measurement and development
- Medical device risk management and governance
- Radiation safety physics
- Radiotherapy physics
- Reconstructive Science
- Rehabilitation engineering

MANCHESTER 1824
The University of Manchester

Careers in Healthcare Science Pathway



What is MAHSE?

- Cross-University body
- Encourages innovation and sharing of good practice
- Support and develop PTP/STP/HSST delivered in Manchester
- 8 STP themes being delivered

MAHSE open day 8th Jan to book email: admin@mahse.co.uk

MAHSE MSc Clinical Science

Physiological Sciences

Neurosensory
- Audiology
- Neurophysiology
- Ophthalmic and Vision Science

CCVRS
- Cardiac Science
- Critical Care
- Vascular Science
- Respiratory and Sleep

Gastrointestinal Physiology and Urodynamic Science

Physical Sciences

Medical Physics
- Radiotherapy Physics
- Radiation Safety
- Imaging (non-ionizing)
- Imaging (ionizing)

Clinical Engineering
- Rehabilitation Engineering
- Clinical Measurement and development
- Device Risk Management and governance

Clinical Pharmaceutical Science

Reconstructive Science

Life Sciences

Cellular Sciences
- Cytopathology
- Histopathology
- Reproductive Science (Andrology)
- Reproductive Science (Embryology)

Blood Sciences
- Clinical Biochemistry
- Clinical Immunology
- Haematology and Transfusion Science
- Histocompatibility and Immunogenetics

Infection Sciences
- Clinical Microbiology

Genomic Sciences
- Cancer Genomics
- Genomics
- Genomic Counselling

Clinical Bioinformatics

Clinical Bioinformatics
- Genomics
- Health informatics
- Physical Sciences

All in Blue offered by MAHSE

MANCHESTER 1824
The University of Manchester

How do you become a Clinical Scientist?

- Apply for job in January to start in September
- Online aptitude tests
- Application form on NHS Careers website
  - answer the 4 questions on the form
  - relate your experience to the **patient**
- Application forms assessed – shortlisted
- Interviews in Birmingham during March/April (speed-dating)
- Successful candidates choose preferred location
- Information about applying to the Scientist Training Programme

What makes a good Clinical Scientist?

- **High achieving** graduates
- People who are **passionate** about science or technology
- People who want to apply their skills and knowledge for the benefit of **patients** and the **public**
- People who seek constant **improvement** and **innovation**
- Many will work directly with patients as well as being involved in innovation, **research** and **development** and **education** and **training**

Resources and tips

- Websites:
  - NHS careers & National School of Healthcare Science (NSHCS)
  - Public Health England / Royal College of Pathologists
  - STP Perspectives

- Application:
  - Reference the NHS Values & Behaviours (NHS Constitution) & focus on the patient
  - Understand where Clinical Scientists and **the role you're applying for fits** into the healthcare system
  - Speak to people in the field, volunteer, attend lab visits: be **proactive**

MANCHESTER 1824
The University of Manchester

Clinical Bioinformatician Role

- The role of Clinical Bioinformatician
- Genomics specialism
  - Responsible for analysing and interpreting genetic data and advising scientists and clinicians to best inform patient care.
  - Involved in building the necessary IT infrastructure including appropriate servers, databases and pipelines to analyse the data.
  - Leadership role in establishing best-practice for data analysis and interpretation, data storage and governance within their laboratory.
  - Interact with multidisciplinary teams including clinical scientists, clinical geneticists, other specialty clinicians and genetic counsellors, and advise colleagues with respect to interpretation of genetic data that will inform patient care.