

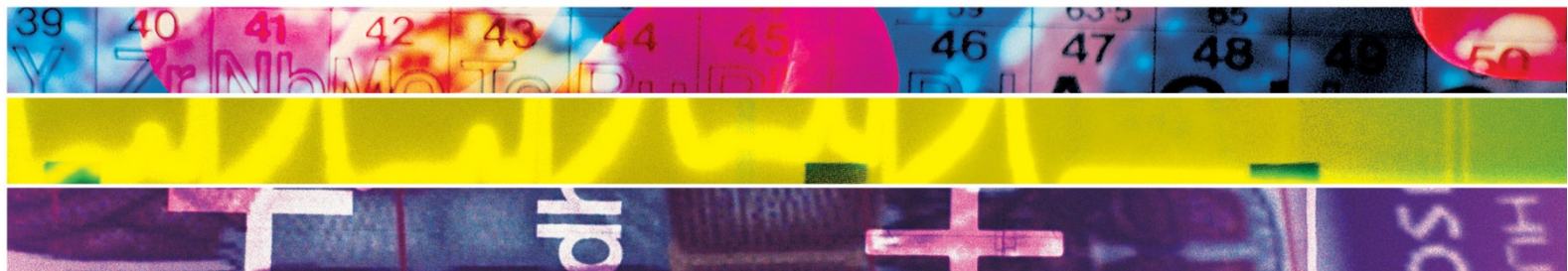
# Curricula, training & assessment

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MSC Team

## Modernising Scientific Careers

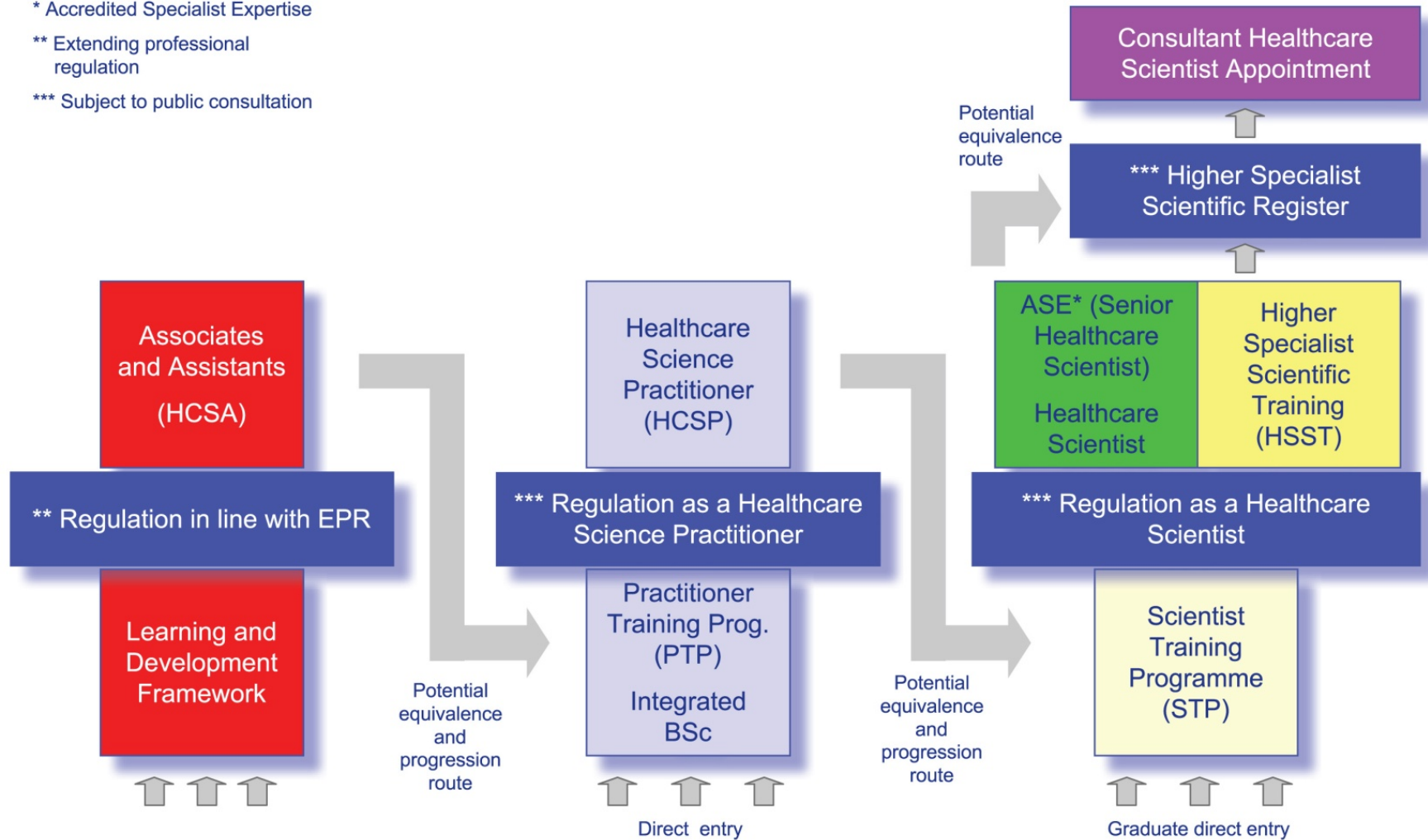


# Modernising Scientific Careers: Career and Training Pathways

\* Accredited Specialist Expertise

\*\* Extending professional regulation

\*\*\* Subject to public consultation



# How have we developed the curricula?

- **MSC Programme Professional Advisers and HE Leads**
- **Genetics pilot:** curriculum development, assessment tools from spring 2009
- **Divisional role descriptors** with service/profession involvement winter 2008/spring 2009
- **Curriculum Working Groups** summer 2009 onwards: service/profession involvement to define Scientist and Practitioner competences, learning outcomes and indicative content
- **Assessment Working Group** December 2009 onwards: populating assessment tools with curriculum material

# Where have we got to with the curricula?

- **Generic curriculum** across all career levels: patient focus
- **Shared learning** between HCS groups
- **Practitioner Training Programme BSc**: academic curricula completed July 2010; training manuals, assessment tools September 2010
- **Scientist Training Programme**: MSc specifications for Life Sciences, Physics and Engineering July 2010; training manuals September 2010 [Physiological sciences December 2010]
- **Assistants and Associates** [CF 1-4]: work started, to be completed by March 2011
- **Higher Specialist Scientist** Programme: work starting July 2010, to be complete by March 2011

# Assessment of workplace-based learning

## ➤ Choice of suitable methods to test

➤ Knowledge and its application

➤ Practical skills

## ➤ Direct observation in the workplace

➤ Scientific thinking and reasoning

➤ *Discussion of reports and cases*

➤ Practical skills

➤ *Direct observation*

➤ Communication with patients

➤ *Direct observation*

➤ Professionalism

➤ Multi-source feedback

# Assessment tools [workplace-based]

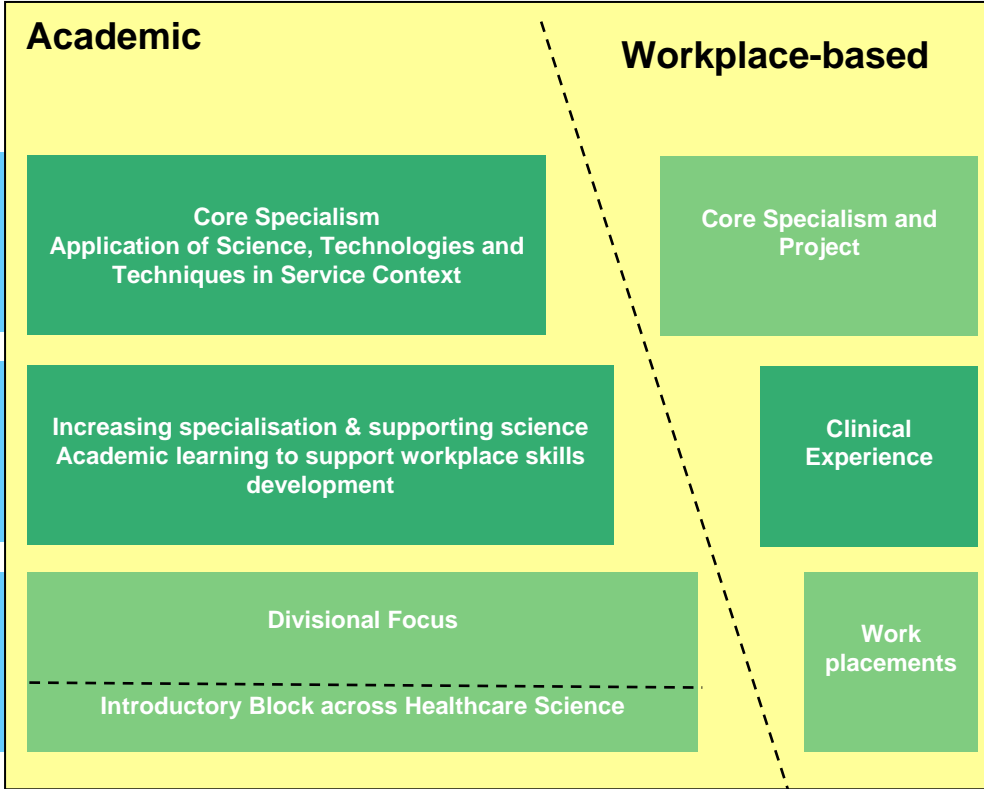
- Direct observation of procedures [DOPs]
- Case Based Discussion (CBD)
- On-line
- Developed from high level outcomes specified in work place modules
- Standardised training manuals being written by curriculum working groups
- To include a training portfolio where evidence is collated and kept in one place as a record of progress
- Currently being piloted in the Genetics programme

# Healthcare Science Practitioner Training Programme (PTP)

**Equivalence**  
 Trainees with prior experience (either academic or work place experience) could be exempt from certain components.  
 Graduates will exit with a graduate diploma in the additional academic learning

**\* Regulation as a Healthcare Science Practitioner**

**Integrated BSc (Hons) in Healthcare Science with a Certificate of Competence**



**Year 3  
 Application to Practice**

**Year 2  
 Techniques & Methodologies**

**Year 1  
 Scientific Basics**

↑  
 Increasing experiential learning (up to a maximum of 50 weeks)

\* Subject to public consultation

# Conceptual framework for 'integrated' BSc[Hons]

|  |                            |  |  |  |  |         |
|--|----------------------------|--|--|--|--|---------|
| <b>Year 3</b><br><b>Application to Practice</b>  | Professional Practice [10] | Scientific Basis of Health Care Science – Specialist Option [60]   | Research Project [30]                        | Specialist Work Based Training 25 weeks [20]   | *46 wks                                      |         |
|  | Generic Curriculum         | Discipline Specific Curriculum   |  |  |  |         |
| <b>Year 2</b><br><b>Techniques &amp; Methods</b> | Professional Practice [10] | Research Methods [10]  | Scientific Basis of Health Care Science [60] | Scientific Measurement [30]                    | Specialist Work Based Training 15 weeks [10] | *40 wks |
|  | Generic Curriculum         | Division Specific Curriculum   |  |  | Discipline                                   |         |
| <b>Year 1</b><br><b>Scientific Basics</b>        | Professional Practice [10] | Scientific Basis of Healthcare Science - Integrated Module across Body Systems will usually include informatics, maths and statistics [60] | Scientific Basis of Health Care Science [50] | Division Specific Work Based Training 10 weeks | *36 wks                                      |         |
|  | Generic Curriculum         |  | Division Specific Curriculum                 |  |  |         |

**Extended Academic Year \*estimated duration**

[XX] = number of credits

# BSc Pathways

- **Life sciences:** (blood diagnostics, infection diagnostics, tissue and cellular diagnostics, genetics technology)
- **Cardiovascular/respiratory sciences:** (cardiac physiology, respiratory physiology and sleep)
- **Neurosensory sciences:** (neurophysiology, audiology, vision sciences)
- **Medical Physics:** (radiation physics technology, radiotherapy technology, nuclear medicine technology)
- **Clinical engineering:** (renal technology, rehabilitation engineering, medical engineering technology, radiation technology)

# BSc curricula available, June 2010

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# Healthcare Scientist Training Programme (STP)



**Rotational Programme – Overview**

**Single Specialism (18 months)**

**Elective – one from any healthcare science discipline or a related clinical service (for 4 – 6 weeks)**

**Specialism 1**

**Specialism 2**

**Specialism 3**

**Specialism 4**

**ROTATIONS (12 months)  
4 x 3 months**

**Introductory Academic Block – 3 months**

# STP rotations and pathways

- **Life sciences [4]:** blood, infection, tissues/cells, genetics
- **Physiological sciences [2]:** cardiovascular/respiratory, neurosensory
- **Medical Physics [1]**
- **Clinical engineering [1]**

# More to come...

- **Assistants and Associates [CF 1-4]**
- **Higher Specialist Scientist Training Programme**
- **Accredited Specialist Expertise**
- **Recognised Technical Expertise**