HSST Specialty: Clinical Bioinformatics - Genomics

I would be grateful if you would use this template to comment on the proposed syllabus for Clinical Scientists training on the Higher Specialist Scientist Training (HSST) programme. Your input is very important to us and the syllabus development working group would like to take your comments into consideration when drafting the final version. The syllabus will be part of the HSST curriculum that will lead to the Certificate of Completion of Higher Scientific Training (CCHST) and will indicate that clinical scientists have reached the required standards of competence to practice at the level of Consultant Clinical Scientist in the UK.

Please answer all the questions and make specific comments where possible to help in our decision-making process. We would be grateful if you could please e-mail your completed comments to genomicseducation@wm.hee.nhs.uk by 15 February 2016.

Name
The Royal College of Radiologists

Position
Informatics Committee

Is the scope right?
The syllabus has been designed to equip Clinical Scientists with the knowledge, skills, attitudes and behaviours to work independently at the consultant level within their scope of practice and multi-professional teams in the area of Clinical Bioinformatics (Genomics) in the UK Health Service. The Consultant Clinical Scientist in Clinical Bioinformatics (Genomics) is a new and distinctive role that will bring high-level scientific and clinical leadership to this specialist area. Whilst retaining a specialist area of expertise in bioinformatics these senior clinical scientists will provide breadth as well as depth of knowledge, supporting services and colleagues in innovation, translation and interpretation of complex genomic data, optimising the benefits this brings to patient care. They will play an essential role in ensuring effective and strategic procurement of the necessary IT infrastructure to support its optimum use for clinical care, potentially transforming healthcare by taking a systems approach across the spectrum of services and within public health. The will be expected to have the expert skills to communicate with the public, patients and colleagues working in and commissioning health services and colleagues working in the Higher Education and business sectors.

Comments
The intentions behind the changes are clear, and the suggested developments seem reasonable.

Are the modular elements right? (Page 75-137)
This curriculum begins with a 2-year Stage 1 broad training programme followed by a further 3-year Stage 2 specialist programme. In Stage 1, all Clinical Scientists in HSST will achieve a high standard (doctoral level) of scientific and clinical practice in Clinical
Bioinformatics (Genomics), building on the masters level Scientist Training Programme (STP). In Stage 2 they will develop and apply their expert scientific skills, as appropriate to clinical bioinformatics (genomics) and will undertake doctoral level research as well as gain high level competences in identifying opportunities for and bringing innovation into practice. A series of generic modules across the programme cover other crucial areas including patient and public engagement; science communication and teaching and learning.

Clinical Scientists in HSST will also need to meet the requirements of both the Good Scientific Practice (GSP) professional syllabus and the specialty-specific scientific syllabus which together form the curriculum for the attainment of the standards of professional and specialism-based knowledge applied to practical, laboratory, clinical, teaching, research and innovation skills.

Comments

The clinical genomics curriculum, which is available for review, seems sensible. However, our greatest concern is around the health informatics curriculum. Unfortunately, this is not yet available for review, but in our experience this is the area of least clarity, in part because the area is new and rapidly developing.

Is the learning set at a high enough level?

The curriculum is set at doctoral level.

Clinical Scientists in HSST will be expected to complete a portfolio to provide evidence of achievement of the curriculum outcomes and meet the required level of competence through a framework of formative and summative assessment. The Clinical Scientist in HSST will have senior input readily available at all times where required. By the end training the clinical scientist must be able to demonstrate a level of knowledge and skill indicating their suitability for independent professional practice.

Comments

Do you think the Good Scientific Practice Syllabus (pages 32-74) and Clinical Bioinformatics in Genomics Syllabus (pages 75-137) describe a training programme that puts the patient at the centre of care, prioritises patient safety and emphasises the excellence of practice and care in the development of clinical scientists in genomic science?

Comments
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<td>There are several national bodies with experience of health informatics, including the Royal College of Radiologists, and we would strongly encourage the course designers to engage with these bodies around the health informatics aspects of the course.</td>
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Thank you for taking the time to give your feedback on this document.