Heart Rhythm Congress 2017

Higher Specialist Scientist Training (HSST) in Cardiac Rhythm Management (CRM)

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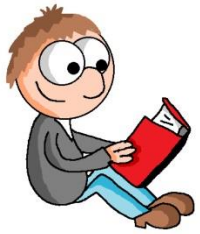
I am a HSST Student

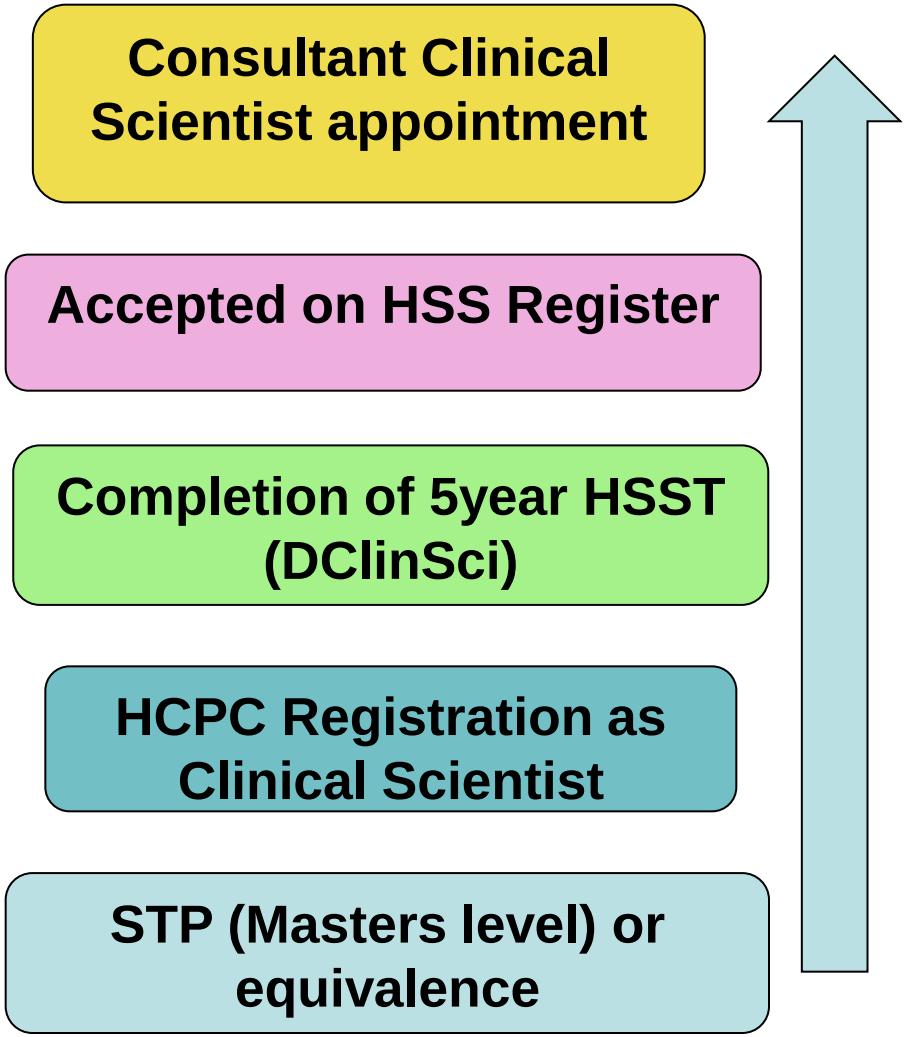


- Started Oct 2016 (just starting year 2) - Cohort 3
- Do not represent the National School of Healthcare Sciences nor Uni
- This talk is about my experiences….

- Work in a District General Hospital
- Standard Physiologist Qualifications (HNC MPPM; SCST; RCCP)
- MSc Advanced Clinical Practice: Device Management at Teeside
- Accreditation (BHRS and BSE)
- HCPC Registered (via equivalence route)

What is HSST?

- Training beyond STP level
- 5 Year Clinical Doctorate
- Awarded DClinSci in Cardiac Science



What's the point of HSST?

''Developing the Leaders of tomorrow''

Goal = Consultant Scientists

'with a level of accountability equivalent to a medical consultant'

'very senior scientists to lead development of new research, technology and practice'

'contribution to high quality & safe patient care through new advances, improved interaction, better communication and innovation'

Employers awarded HSST places with a view to developing Consultant Scientist positions

What does a Consultant Scientist do?

Hands-on Leader/ Frontline

Strategic/ Some hands-on

Strategic/ Pure Managers

My vision = Consultant Scientist in CRM

- Greater autonomy, greater accountability, own caseload
- To take on more duties traditionally passed to Consultant
- To lead more Physiologist Led Clinics/ One-Stop Clinics
- To clinically assess patients and decide further management & referral e.g. ?Ablation, upgrade
- To be able to prescribe/ titrate (?) – anticoagulation, rate control, ? HF
- CRT Super-Clinics e.g. response, medications
- Arrhythmia Clinics with investigations, device referral & counselling
- Develop advanced communication skills e.g. for End of Life care (suitability for box change, downgrade, deactivation)
- Greater influence in Strategic Planning e.g. innovation, service and staff development
- Raise the voice of Cardiac Science to improve funding and commissioning
- To lead on governance, R&D, IQUIPS

How will this role help the NHS?

- Improve patient experience – single visit, more convenient
- Reduce number of hospital attendances – one-stop clinic
- Improve efficiency/streamline service
- Relieve routine Cardiologist workload – to concentrate on complex
- Reduce waiting lists for Cardiologist – improve access to care
- Promote MDT working & raise profile of our profession
- Enable better work practices to develop
- Staff development/ Interesting job roles – recruitment & retention
- Use of latest science& technology to improve services

So how does HSST help??

3 types of learning:

- Academic (Uni)
- Workbased Assessment (OLAT)
- Professional Practice (GSP)

Academic Component

- Attend University (Uni of Manchester or Manchester Met)
- ~ 2-3day blocks
- Roughly once a month (October to May)
- Curriculum split into 3 sections:

Academic Curriculum (5yrs)

Leadership Yrs 1-3

Core Clinical Yrs 1-2

5	**Section C: Module C3:** Research, Development and Innovation *(130)*				
4	**Section B: Module B9** *Specialist Option Modules (Adult or Congenital Heart Disease and Paediatric)* **(20)**	**Section B: Module B10** *Specialist Option Modules (Adult or Congenital Heart Disease and Paediatric)* **(20)**	**Section C: Module C2** Research, Development and Innovation *(70)*		
3	**Section A: Module A5** Improving Outcomes for Health and Social Care *(20)*	**Section B: Module B8** *Specialist Option Modules (Adult or Congenital Heart Disease and Paediatric)* **(20)**	**Section B: Module B7** Teaching, Learning and Assessment *(20)*	**Section C: Module C1** Research, Development and Innovation *(40)*	
2	**Section A: Module A3** Personal and Professional Development to Enhance Performance in Practice *(30)*	**Section A: Module A4** Leadership and Quality Improvement in the Clinical and Scientific Environment *(20)*	**Section B: Module B3** Contemporary Issues in Healthcare Science *(20)*	**Section B: Module B6** Diagnostics & Monitoring **(20)**	**Section B: Module B5** Therapeutics *(10)*
1	**Section A: Module A1** Professionalism and Professional Development - **M Level** *(30)*	**Section A: Module A2** Theoretical Foundations of Leadership *(20)*	**Section B: Module B1** Advanced History Taking, Clinical and Communication Skills **(15)**	**Section B: Module B2** Clinical Presentation and Management *(20)*	**Section B: Module B4:** End of Life Care *(5)*

Research Yrs 3-5

Specialist Clinical Yrs 3-4

Specialist Modules (choose 3)

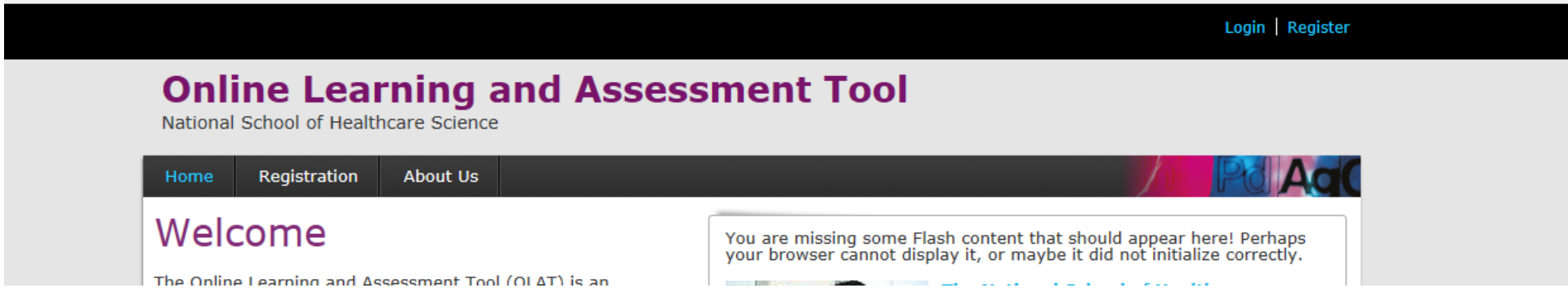
ADULT

- PPM
- ICD
- CRT
- EP1
- EP2
- Advanced TTE
- TOE
- Stress Echo
- Adult Congenital Heart disease

PAED

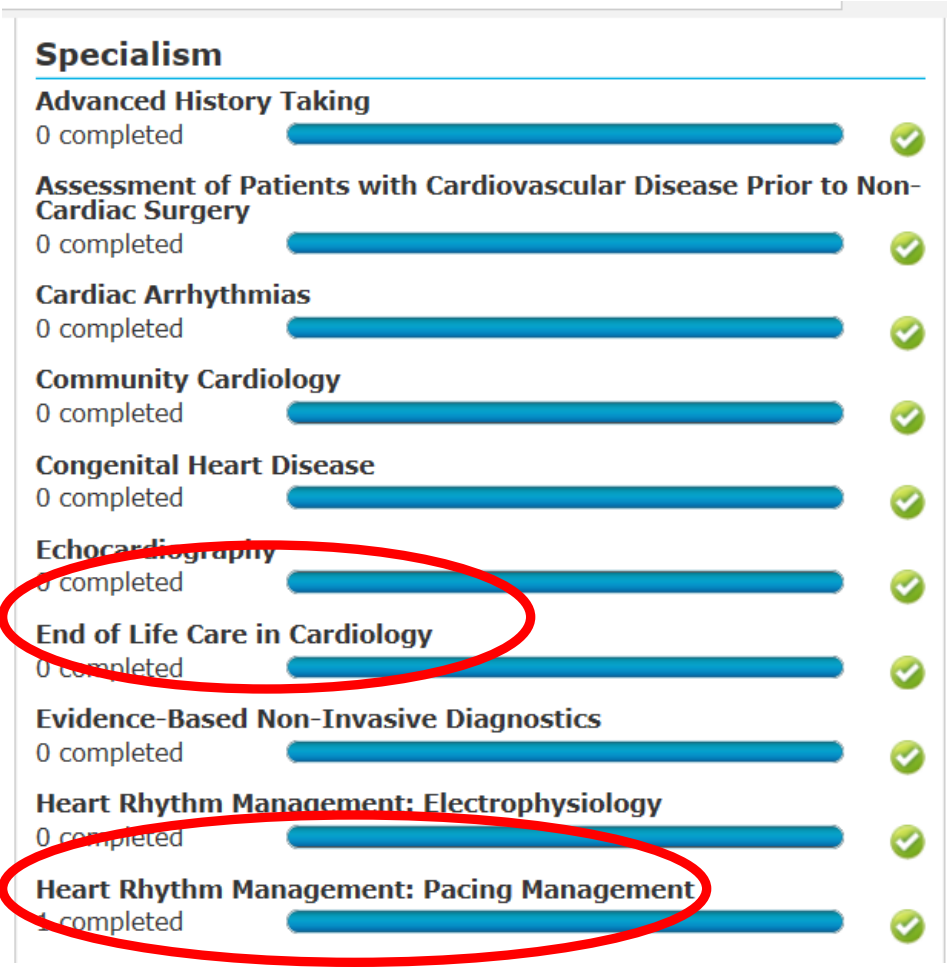
- Congenital (compulsory)
- Fetal screening
- Fetal Cardiology
- Cardiac EP & Pacing
- CRT
- TTE in congenital
- TOE in congenital
- Adult congenital

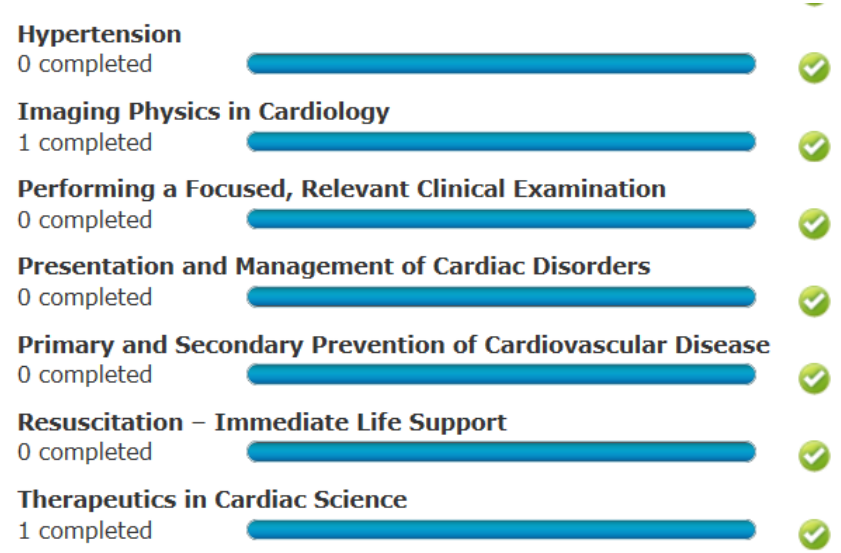
Work Based Assessment



- Assessed online via OLAT
- Same platform STP
- Number of specialist topics to complete
- Need to document competency and assessments
- Developing a breadth of knowledge in addition to specialist skills
- Bespoke programme – design own learning with your employer

OLAT Topics for HSST





- Complete these over 5 years
- Bespoke to each trainee

OLAT - Pacing

1CS-15: Heart Rhythm Management: Pacing Management	0 out of 1
Ref:	**Learning Outcome:**
1CS-15 LO 1	By the end of this module the Clinical Scientist in HSST, with respect to heart rhythm management and pacing, will be able to critically analyse, synthesise, evaluate and apply knowledge with respect to the fundamentals of cardiac stimulation, the equipment used for cardiac pacing, guidelines and troubleshooting. They will be expected to perform a range of clinical skills in adults and/or paediatric patients as appropriate to the clinical role and consistently demonstrate the attitudes and behaviours necessary for the role of a Consultant Clinical Scientist within a patient-focused service.

- Need to agree appropriate assessments with your supervisor
- Performing a pacing/ICD check is insufficient at this level!!
- Interpretation & management of complex patients more suitable
- Design & Implementation of SOPs and Pathways
- Designing new clinics .e.g. CRT Optimisation Clinics
- Implementing Q& A processes and Audit, R&D
- Presenting at meetings and MDT

OLAT – End of Life Care

1CS-5: End of Life Care in Cardiology	0 out of 1

Ref:	Learning Outcome:
1CS-5 LO 1	By the end of this module the Clinical Scientist in HSST, with respect to end of life care, will be able to recognise the professional role undertaken by scientific staff in end of life care of relevance to cardiac conditions in patients of all ages (e.g. valvular heart disease, heart failure, congenital heart disease) where the focus of care should change from therapies designed to alter the natural history of the disease to those aimed at symptom control, and consistently demonstrate the attitudes and behaviours necessary for the role of a Consultant Clinical Scientist.

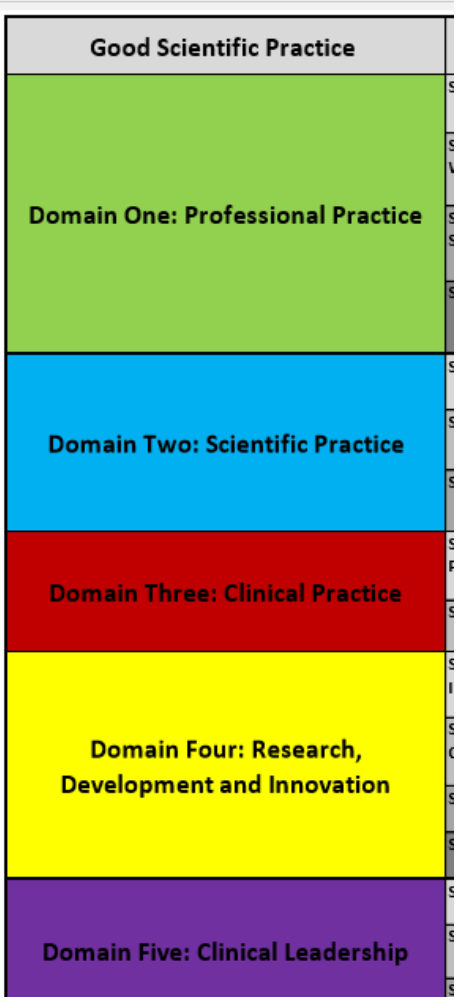
- Design and implementation of SOPs for ICD Deactivation
- Designing Pt Info leaflet for ICD Deactivation
- Coordinating MDT meeting for HF team and Palliative Care
- Audit community deactivation
- Pathways for pts unsuitable for box change or ? for downgrade
- Shadowing palliative care to practice advanced communication
- Case studies of patients e.g. PPM pt declining box change

Whats next - Workplace learning

- Cardiology ward rounds/ OP Clinics
- Shadow Community HF Nurses & Palliative team
- Work with Inherited Cardiac Conditions team
- Involvement with imaging - Cardiac MRI & CT Angio
- Work with medics to develop protocols & pathways for future clinics
- Get practicing

Professional Practice

- Use Good Scientific Practice Framework – 5 domains
- Log progress by completing a template (Annual Review of Progression)
- Use examples from the workplace e.g. PDRs, risk assessments, meetings, SOPs, service redesign, quality improvement



Annual Review of Progression

Domain Two: Scier	STANDARD 6 – DIRECT SCIENTIFIC VALIDATI AND EVALUATION		
		6.2	**Provide consultant level clinical scientific advice, including interpretation of investigations and their outcomes, therapies and their implications for patient care and management, and recommendations for additional or more complex investigations**	Physiologist Lead for Devices MDT and HF MDT meetings
		6.3	**Provide scientific advice on legislative compliance in own specialist area of practice**	Designs and presents results of national audit (NICOR and NICE compliance) at Clinical effectivenss meeting (CEG) & trust action plan
		6.4	**Bring critical analysis to the practice of the clinical scientific specialism, ensuring that regular review of research and evidence is undertaken so that adaptation to practice can be made in a timely and cost effective manner**	Leads Devices MDT and contributes to Regional South Yorkshire Devices Meeting to encourage consideration of research and best practice

My Journey So Far…..

First Day at Uni

- **~70 people in my year**
- **All different disciplines within HCS e.g. medical physics, biomedical engineering, lab based scientists, neuro, respiratory, etc**
- **Only 4 from Cardiac Science (Cohort 3)**
- **We are tiny part of the bigger picture**

Cohort 3 – Cardiac Science

Cohort 3

Year 1 Highlights

- Meeting other likeminded professionals
- Sharing best practice with other centres
- Learning about own leadership style & strengths and weaknesses
- Learning how to raise the voice of HCS within NHS & own hospital
- Trailblazing HSST
- Opened my eyes to possibilities
- Done things outside of my comfort zone……

Worked with an actor for advanced communication skills

RACPC as the doctor

Year 1 Lowlights

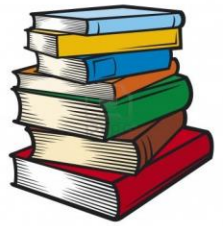
- Volume of work ++
- Managing work/life balance
- Re-acclimatising with academic work
- No precedent for what is expected (guinea pigs)
- Limited guidance for work based learning (especially with OLAT)

Logistics Considerations

- Employer gets a £13,000/per year – to cover travel expenses, accommodation, etc
- Recommended 20% Study Time - hard to cover clinical work
- Employer submits a job plan and this should be included in workforce planning
- Salary= Employer dependent (but min Band 7 during training)
- NHS Employers have mapped some Consultant Scientist positions to Band 8c

How do you get onto HSST?

- Mostly inservice posts (rather than direct entry)
- Employer nominates you & applies for a place (funding via Health Education England)
- Information on how to apply is on the website for the National School of Healthcare Science http://www.nshcs.hee.nhs.uk
- Small window for applications each year usually in March
- Apply via online application portal called Oriel
- Competitive entry + Interview
- Must meet benchmark criteria even if in-service place has been granted
- Need to be HCPC registered (i.e. you need Clinical Scientist Equivalence by the time the HSST starts)



Person Spec for HSST

Entry requirements	Core Person Specification for HSST Trainee	Assess by
REGISTRATION	Registration with the HCPC as a Clinical Scientist *Note:applicants who are eligible for such registration, and have their application underway, may apply for the HSST programme but if appointed are not eligible to commence an HSST training position until registered.* This registration requires education to the level of MSc in Clinical Science, or equivalent.	A
	A passion for (committed, in-depth interest in and enjoyment of) clinical scientific practice and its application to patients and healthcare in a clinical environment.	A & I
	Ability to analyse and critically evaluate scientific, technical, educational and medical literature. Ability to identify opportunities for research and innovation and successfully complete and disseminate findings. Ability to make judgments, including clinical judgments involving facts or	A & I

http://www.nshcs.hee.nhs.uk/images/hsst-recruitment/hsst-core-person-spec-v1-feb2017.pdf

Clinical Scientist (STP) Equivalence

- Apply via the Academy for Healthcare Science
- https://www.ahcs.ac.uk/equivalence/equivalence-guidance/
- Fee is £280

- Stage 1 - Preliminary application online with 1000 words summary of professional experience

- Stage 2 – Prepare a Portfolio to include 5000 word report and evidence mapping your professional experience to the domains of Good Scientific Practice (portfolio should not be longer than 150 pages). Must complete within 6months of stage 1.

- Stage 3 – Interview

- Then issued with a certificate of equivalence and can apply for HCPC

HSST Equivalence

- Became available this year

- Apply via the Academy for Healthcare Science
- https://www.ahcs.ac.uk/equivalence/equivalence-guidance/

- Must be on HCPC register as a Clinical Scientist

- Must have 5 years experience in senior position

- Doctorate qualification not essential but must be able to demonstrate equivalence to that level

- Similar process to STP equivalence with 3 stages- preliminary application, Portfolio then Interview

- Then issued with a certificate of equivalence and can apply for entry onto Higher Specialist Scientist Register (HSSR)

HSS Register (HSSR)

- 2 Routes – HSST or via HSST Equivalence
- Sets the standards for Consultant Scientists within HCS
- Standards of proficiency for HSSR available at http://www.ahcs.ac.uk/
- Aims to standardise knowledge & skills, professional behaviour
- Maintain quality and accountability

Summary

- Provides a platform for higher level training
- HSST is still evolving
- There is a lot of work!!
- Gives Cardiac Science a voice within the wider HCS domain
- Challenges how we currently do things
- Opens possibilities and opportunities within the workplace
- Steep learning curve
- Great development for individuals and wider profession

Thankyou for Listening

Any Questions?

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