

Modernising Scientific Careers
Generic job description - Trainee Healthcare Scientist {Pathway}

Name of designated organisation:	{XXXXXXXX}
Location:	Based in host training department with regular travel to academic institution and rotation into hospitals usually local to host department for completion of curriculum and learning outcomes
Job title:	Trainee Healthcare Scientist {pathway}
Grade:	Circa. £26,000 per annum
Responsible to:	Designated Training Coordinator/Officer
Accountable to:	Head of Department
Tenure:	3 years fixed term (supernumerary)
Hours of work:	37.5 hours per week.
Liaises with:	Liaises with other technical and scientific staff of department /section, and other Trainee Healthcare Scientists across a wide range of departments.
Key working relationships:	<p>The trainee will work closely with the training coordinator/officer and more senior members of staff to follow the curriculum for the MSC Scientist Training Programme.</p> <p>The trainee will work in specified areas of the department and be responsible to the Designated Training Coordinator/Officer for their own work and progression through the scheme.</p> <p>All trainees will be expected to travel to national academic and other courses regularly throughout their training - in some cases this may involve overnight and/or residential stays. Trainees will undertake a master's degree course at a designated academic institution specific for the training pathway. Trainees will be expected to rotate both through the host department, as well as through other local/regional/national scientific services, in order to complete the required pathway work based curricula. Trainees will be a part of a national training programme and will be registered with the National School of Healthcare Science based in the West Midlands Multi-professional Workforce Deanery</p>

Job purpose

In conjunction with and supported by the designated Training Coordinator/Officer, the Trainee Healthcare Scientist will be responsible for their own progression through the training programme, for completing the learning outcomes as outlined in the Learning Guides, progressing through a mixture of work based competence and experience in NHS scientific departments and undertaking the complementary academic master's programme at the designated Higher Education Institution.

The post holder will be expected to undertake a range of demanding scientific and clinical functions initially under supervision, as well as occasional duties in response to specific elements of the curriculum. A major part of the training and development will take place within a designated organisation (linked to a specific scientific department) and is integrally linked to the knowledge and applied learning that forms part of the nationally commissioned academic master's programme. Post holders will also be expected to undertake mandatory training as deemed necessary by their host department.

At all times the Trainee Healthcare Scientist is expected to work within standard operating policies and procedures of the host department and NHS organisation and adhere to high standards of professionalism, health and safety, risk reduction, confidentiality, patient care and dignity, and respect for equality and diversity as set out in the NHS Constitution.

The Trainee Healthcare Scientist {*pathway*} will be employed by the host department for a fixed term of three years during which time they will work through a programme of learning comprising initially three months in each of four rotations, one of which to be the specialism which will subsequently be pursued for the remainder of the work based programme. This will be combined with an academic programme at master's (MSc) level over the three year programme. The first part of the academic programme will introduce the basic science and theoretical background of the rotational disciplines and their application in clinical science within health as well as providing an introduction to healthcare services and values. The master's degree includes a research project within year 2/3.

In order to encourage learning and development, the post holder will have the chance to take an elective rotation of 4-6 weeks. This is an opportunity to expand knowledge, broaden experience in the specialist fields and gain valuable insight into how different services function.

Job statement

The trainee will undertake the full training programme in order to progress through the modules of the training scheme. In so doing they will learn how to perform and interpret clinical and specialist scientific processes underpinned by theoretical and applied knowledge and practical experience and will learn how to:

- Carry out complex scientific and clinical roles, including those working directly with patients
- Analyse, interpret and compare investigative and clinical options
- Make judgements, including clinical and differential judgements, involving complicated facts or situations that impact on patients
- Initiate and undertake innovation, improvement and R&D and be involved in the education of healthcare science trainees and other learners in the workplace.

They will be expected to complete all work based training and assessment alongside the academic master's course to exit the programme with eligibility for registration with the Health and Care Professions Council (HCPC) and use of the protected title of Clinical Scientist. In addition, they will be expected to undertake work based experience to enable them to communicate complex technical,

scientific and sensitive information to colleagues within their department in both verbal and written forms.

Trainees must meet the HCPC's standards for training, professional skills, behavior and health.

Example principal duties

Scientific and clinical practice

- Undertake a range of clinical and scientific investigations as appropriate to the role. These may include the processing of blood and other samples, direct clinical measurements on patients, and procedures involving ionising and non-ionising radiation.
- Acquire and maintain a high level of professional competence in the performance of all tests, investigations and measurements carried out.
- Interpret and act upon results of tests, investigations and measurements in accordance with departmental policies, procedures and quality systems.
- Comment and advise on new proposals and protocols, especially for service improvements.
- Assist in the provision of advice to medical, nursing and other healthcare staff on the optimal and safe use of scientific procedures and highly complex equipment, including assisting in the design of new facilities.
- Assist with the procurement, acceptance and use of medical devices and consumables.
- Be responsible for the safe use of complex scientific and medical equipment, including recording all maintenance and calibration procedures performed and any corrective actions undertaken.
- Use reagents, consumables, hazardous materials and equipment safely and in accordance with Health and Safety policies.
- Participate in risk management procedures including risk assessment and the investigation and reporting of adverse incidents.
- Participate in internal and external audit processes and quality systems.
- Undertake R&D within the department as an integral part of training and acquire relevant skills to undertake clinical audit.
- Assist with supervision and training of support staff, students and new appointees, and participate in departmental seminars and scientific meetings to disseminate knowledge acquired through study or research.

Education and learning

- Successfully progress and complete the training and assessment programme in conjunction with the local Training Coordinator/Officer and National School of Healthcare Science to achieve certified competence awarded by the Academy of Healthcare Science. Undertake suitable training within the host department and other placements to successfully acquire core competencies and thereafter maintain the required standards of competence when undertaking duties.
- Take responsibility for own learning and development by recognising and taking advantage of all opportunities to learn, including appraisal, supervision, academic course and problem based learning and maintaining a personal portfolio of learning.
- Ensure that own learning needs, identified with the Training Coordinator/Officer and reflecting the requirements of the curriculum, are met.
- Retain sufficient flexibility and adaptability in learning in order to ensure full contribution to improving services in response to changing health care needs.
- Maintain knowledge of recent scientific developments and undertake supplementary training to develop both knowledge and skills.

- Attend mandatory training (both vocational and academic) as required.
- Participate in internal and external assessment processes.

Patient management and clinical care

- Delivery of patient care – experience and contribution in the following areas:
 - Provide support to specialist clinics and specialist treatment interventions.
 - Perform, report and interpret a range of investigations undertaken indirectly for or directly with patients within a range of care settings.
 - Specialist care and treatment interventions for patients across the range of clinical pathways and health care settings.
 - Appropriate clinical and scientific advice and interpretation of analytical results.
 - Participate in multidisciplinary meetings.
 - Apply and promote evidence based practice and use of relevant clinical protocols and procedures.
 - Ensuring that all equipment used on patients and the public is handled and applied in accordance with health and safety requirements and other national or international guidelines.
 - In some specialisms trainees will be involved in the collection and processing of clinical samples from patients.

Communication

- Communication and interpretation of complex clinical, scientific and technical information to a wide range of people including clinicians, managers, patients and the public.
- Liaise with senior scientists and clinical users of the service on appropriateness of investigations, interventions and tests.
- Communicate scientific innovation and service redesign.
- Communicate research and development findings in written and oral formats to internal and external contacts.

Quality audit

- Contribute to audits to inform patient management and clinical care.
- Contribute to quality audits relating to accreditation and regulation.
- Perform quality assurance, process and outcomes audits relevant to the specialism.
- Develop an audit report and prepare an action plan for any issues that arise from the audit process.
- Contribute to the design of audits to improve the cost effectiveness of the service to patients.

Clinical governance

- Maintain standards for health and safety procedures.
- Comply with quality and governance procedures within the department including risk management and risk mitigation.
- Maintain high standards of professional and personal conduct.
- Ensure that patient safety and experience and effectiveness of service are maximised.

Occasional duties

- To carry out any other reasonable duties to achieve learning and experience that may be required, which are commensurate with the grade and nature of the post.

- This job description outlines the main current duties and responsibilities of the training post. The job description will need to be reviewed and subsequently may be altered. Any resulting changes will be subject to consultation.
- In addition to regular assessment and planning meetings, the trainee will have an annual meeting to discuss progress and to consider issues relevant to the wider national training programme.

Terms and conditions of service - agenda for change

{To be tailored to each healthcare employer}

General

Successful candidates will be employed on the designated organisation's Terms and Conditions of Service. A full copy of all Terms and Conditions may be obtained from the Human Resources Department and will include a requirement to participate in an annual joint review and work towards the Knowledge and Skills Framework (KSF) requirements of the post. This is a competency framework that describes the knowledge and skills necessary in order to deliver a quality service.

All employees are required to adhere to all relevant healthcare employer Policies and Procedures including Health and Safety, No Smoking and Alcohol and Equal Opportunities Policies.

Health, safety and risk

All designated organisation employees are required to comply with relevant Health and Safety legislation and the designated organisation Health and Safety Policies. In accordance with sections 7 and 8 of the Health and Safety at Work Act 1974 (<http://www.hse.gov.uk/legislation/hswa.htm>) employees must: -

- Take reasonable care of their own and others health and safety whilst at work.
- Co-operate with their employer to enable the employer to comply with the Act.
- Not to intentionally or recklessly interfere with or misuse anything provided in the interests of health and safety.

Confidentiality

Personal information relating to patients and staff is confidential and must be treated as such at all times. It is a condition of your employment that you will not use, misuse or disclose any confidential information obtained during the course of your employment (except where such disclosure and/or use is authorised by the designated organisation). Contravention of this condition will be regarded as a serious disciplinary matter. In the case of computerised information, contravention could result in a prosecution for an offence or action for civil damages under the Data Protection Act 1998 and the Caldicott Guardianship of patient information, and may also lead to disciplinary action.

Conflict of interest

The designated organisation is responsible for ensuring that the service provided for patients in its care meets the highest standard

(<http://www.nhs.uk/choiceintheNHS/Rightsandpledges/NHSConstitution/Documents/2013/the-nhs-constitution-for-england-2013.pdf>). Equally, it is responsible for ensuring that staff do not abuse their official position for personal gain or to benefit their family and friends. The designated organisation standing orders require any officer to declare any interest, direct or indirect with contracts involving the Trust. Staff are not allowed to further their private interests in the course of their NHS duties.

Equality and diversity

All staff have a personal responsibility to ensure they do not discriminate, harass, or bully or contribute to the discrimination, harassment or bullying of any colleague(s) or visitors or condone discrimination or bullying by others. As trainees you are responsible for promoting diversity and equity of opportunity across all areas of your work. This applies to service delivery as an employee and for any one who you may be working with.

You will be made aware of your responsibilities for promoting equality of opportunity throughout your training and you will be expected to ensure the philosophy and best practice for 'Improving Working Lives' are adopted and openly discussed.

Working time directive

The Working Time Regulations 1998 require that you should not work more than an average of 48 hours each week, i.e. in a 17 week period no more than 816 hours or 1248 hours in a 26 week period (<https://www.gov.uk/maximum-weekly-working-hours/overview>). To work more you must have the authorisation of your manager and you must sign an opt-out agreement that you choose to work more.

Should you have more than one job with the designated organisation or have a job with another employer, then the total hours worked in all your jobs should not exceed the average of 48 hours as above. You are therefore required to inform your manager if you continue to work elsewhere and the number of hours you work, or if you take up work elsewhere during your employment with the designated organisation.

NHS pension scheme

Membership of the NHS Pension Scheme is voluntary and is open to any member of staff aged 16 years or over. This is a contributory scheme and both employee and employer pay contributions towards the benefits payable. On commencement of employment, employees are automatically made a member unless they decide not to join and make alternative arrangements. Pension contributions are deducted direct from pay unless the Payroll Department are notified of an individual's intention not to join by the completion of form SD502.

Further information on the benefits of the NHS Pension Scheme will be given to new employees on commencement.

Staff benefits

A list of staff benefits is available from the Human Resources Department.

The Scientist Training Programme Curricula and Specialisms for 2016 intake were as follows:
Please note that for 2018 this may be subject to change and some specialisms below may not be available for the 2018 intake. Please note there may also be additional specialisms not listed below that may be available for the 2018 intake. Applicants are encouraged to visit the post information webpages (once available) on the National School of Healthcare Science website.

Division	Themes	Specialism	
Physiological Sciences	Cardiac, Vascular and Respiratory & Sleep Sciences	Cardiac Science	
		Respiratory & Sleep Sciences	
		Vascular Science	
		Critical Care Science	
		Gastrointestinal Physiology	
		Urodynamic Science	
	Neurosensory Sciences	Audiology	
		Neurophysiology	
		Ophthalmic and vision science	
Life Sciences	Infection Sciences	Microbiology (<i>including: infection control & epidemiology, virology, bacteriology, mycology, parasitology</i>)	
	Blood Sciences	Clinical Biochemistry	
		Haematology and Transfusion Science	
		Clinical Immunology	
		Histocompatibility and Immunogenetics	
	Genomic Sciences	Genomics	
		Genomic Counselling	
	Cellular Sciences	Histopathology	
		Cytopathology	
		Reproductive Science	
	Physical Sciences and Biomedical Engineering	Medical Physics	Radiotherapy Physics
			Radiation Safety Physics
Imaging (ionising radiation)			
Clinical Pharmaceutical Science			
Imaging (non ionising radiation)			
Clinical Engineering		Rehabilitation Engineering	
		Clinical Measurement & Development	
		Reconstructive Sciences	

		Medical Device Risk Management & Governance
Informatics	Clinical Bioinformatics	Clinical Bioinformatics (Genomics)
		Clinical Bioinformatics (Physical Sciences)
		Clinical Bioinformatics Health Informatics