SoR 100 YEARS
THE SOCIETY OF RADIOGRAPHERS

# Clinical Academic Radiographer: Guidance for the support of new and established roles

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# Contents

## Executive Summary

The Society of Radiographers (SoR) is the professional body, trade union and membership organisation for clinical imaging, diagnostic, and therapeutic radiography professionals in the UK. In 2021 SoR convened a subgroup to the SoR Research Advisory Group who sought to provide a guidance document that would outline the value of clinical academic roles to clinical imaging and radiotherapy services.

SoR define clinical academic roles as not one single post but rather a continuum of practice across a range of levels, the core of which is the provision and synergy of the domains of clinical and research practice. There are multiple benefits of clinical academic radiographer roles to clinical and academic organisations. For example, the roles bring value in the form of:

1. Improved patient outcomes and experiences as a direct result of evidence-based and person-centred care and research.

2. Increasing the research capability and output of local academic, clinical imaging and radiotherapy services.

3. Increasing the authority, visibility and voice of clinical imaging and radiotherapy services within and across organisations.

4. Enabling clinical services to meet Care Quality Commission (CQC), Care Inspectorate (CI), Regulation and Quality Improvement Authority (RQIA), Care Inspectorate Wales (CIW), and Quality Standard for Imaging (QSI) requirements for research.

5. Assisting clinical imaging and radiotherapy services to meet professional body expectations of local research strategies and teaching, learning and research cultures.

6. Facilitating individual staff and team capabilities to meet regulatory and professional body requirements for evidence-based practice, research and innovation.

7. Enhancing the overall research knowledge, skills and capabilities of clinical imaging and radiotherapy healthcare professionals.

8. Producing a positive effect on radiographic cultures with an associated rise in staff recruitment, engagement, and retention.

9. Increasing the influence and raising the profile of radiographers nationally and internationally.

Leaders and managers of clinical imaging and radiotherapy services will find the guidance information useful to work toward UK Quality Standards for Imaging (QSI), along with their relevant national Care Inspectorate (CI), Regulation and Quality Improvement Authority (RQIA), Care Inspectorate Wales (CIW), or Care Quality Commission (CQC) requirements for well-led research. The guidance document includes hyperlinks to multi-professional guidance for clinical academics, including Nursing, Midwives and Allied Health Professionals, which collectively highlight that the development of research culture must be an inclusive and system wide approach across healthcare. The guidance will therefore provide clarity for imaging and radiotherapy professionals and their respective clinical and academic managers; it will enable the development and support of new and established clinical academic radiographer roles.

## Glossary of Terms

**Commonly Used Research Abbreviations and Terms**

| | |
|---|---|
| BRC | Biomedical Research Centre |
| CCRN | Comprehensive Clinical Research Network |
| CLRN | Comprehensive Local Research Networks are the primary vehicle for providing infrastructure to support study involvement. They encourage participation in a range of high quality clinical studies in the NIHR Comprehensive Clinical Research Network Co-ordinating Centre portfolio and provide a coordinated and efficient infrastructure of research personnel and facilities to support recruitment. There are 25 in England. |
| CRF | Clinical Research Facility: hospital-like facility with consulting rooms, standard patient beds, ward medical equipment, research nurses supporting only research |
| CSP | Coordinated System for gaining NHS Permissions: Standard process for adoption onto NIHR Portfolio of Studies to access NIHR CRN Support and funding; streamlines the process for gaining NHS permissions by collating the information for global and local approvals; apply via IRAS by completing and submitting CSP Application Form. |
| CTU Clinical Trials Unit: | Design and conduct CTIMPs, sometimes in specialist clinical areas, such as Cancer, or types of trial, such as RCTs |
| CTIMPs | Clinical Trial of an Investigational Medicinal Product |
| EudraCT | European Clinical Trials Database: A database of all clinical trials in Europe. |
| GCP | Good Clinical Practice: Also known as ICH-GCP |
| HEI | Higher Education Institution |
| IRAS | Integrated Research Application System: A single, web-based system for completing applications for the permissions and approvals required for health and social care research in the UK. The various applications can be printed or submitted for this single system including (REC, R&D, MHRA, GTAC, NIGB, ARSAC) |
| LRN | Local Research Network |

| | |
|---|---|
| MHRA | Medicines and Healthcare products Regulatory Agency: The UK Competent Authority (CA) and licensing authority for medicines and medical devices |
| MRC | Medical Research Council |
| NCRN | National Cancer Research Network |
| NIHR | National Institute for Health Research |
| NRES | National Research Ethics Service |
| R&D | Research and Development |
| R&I | Research and Innovation |
| RCT Randomised Controlled Trial: | A randomised controlled trial (RCT) is a clinical study in which two (or more) forms of care are compared; the participants are allocated to one of the forms of care in the study, in an unbiased way |
| RDS | Research Design Service |
| REC | Research Ethics Committee |
| Research Passport | A system for HEI researchers who need to undertake their research within NHS organisations, which provides evidence of the pre-engagement checks undertaken on that person in line with NHS Employment Check Standards. |

## Introduction

The purpose of this guidance document is to offer support from the Society of Radiographers (SoR), the professional body for clinical imaging and radiotherapy professionals, for the development of clinical academic roles. Members of diagnostic and therapeutic radiography teams should be research active (1). This will be to varying degrees depending upon the role of the team member. For example, activity can range from maintaining own awareness of research projects being undertaken within services through to taking part in or leading research projects. The College of Radiographers (CoR) research strategy states that research must be for patient benefit (2) and undertaken in partnership between patients, public and professionals (3). Research is at the core of the job plan of clinical academic radiographers. A 2021 UK Government Strategy report (4) is clear that we need to support healthcare professionals to develop research skills relevant to their clinical role and to design studies in ways that ensure delivering research is a rewarding experience, rather than an additional burden. To do this sustainably, we need to ensure support is available where it is most needed, including primary and community settings, so we can deliver research 'where people are' and actively engage with under-served communities (4).

The Council for Allied Health Professions Research (CAHPR) provide a detailed research practitioner framework (5) with expectations across four increasing levels of development: awareness, core, intermediate and advanced level. The range of activities undertaken by imaging and radiotherapy healthcare professionals will commonly be proportionate to their role and level. For example, this may be at the level of awareness among pre-registration students, intermediate for registered staff, core level for clinical trials radiographers and advanced level for post-doctoral clinical academic radiographers. The main core role of all clinical academic allied health professionals is research. Clinical academic radiographer roles may be new for some services, but there is also an ambition to support and promote knowledge of the roles of established clinical academic radiographers.

## Background

The Redfern report was published in 2001 following serious concerns about organ retention at Alder Hey Childrens' Hospital in 1999; that public enquiry concluded there had been serious problems with the management and accountability of medical academic staff. The Redfern report in turn led to the Follett Review (2001), which provided principles for appraisal, disciplinary and reporting arrangements for joint appointments of clinical academics between the UK National Health Service (NHS) and Higher Education Institutes (HEI). A key point was that there must be clear and distinct lines of accountability, jointly set out, with each individual member of clinical academic staff specifically aware who they are accountable to.

The Follett principles for clinical academics(6) refers to joint recruitment and appointment, agreed induction, joint job planning, joint appraisal and clear processes for the management of an individual's performance and conduct. There is an expectation that these principles must extend to all joint appointments when there are clinical and academic roles and responsibilities, including Allied Health Professionals (6). In the years since the publication of the Follett principles, NHS Employers have provided a range of guidance for consultant level clinical

academics:

- Job Plan Consultant Clinical Academic (nhsemployers.org)
- Draft Memorandum of Understanding (nhsemployers.org)
- Guidance For The Employment Of Consultant Clinical Academics (nhsemployers.org)
- Clinical Academic Contract 2013 (nhsemployers.org)
- Clinical Academic Suggested Clauses 2013 (nhsemployers.org)
- Clinical Academic Trainee Induction and Governance Checklist (nhsemployers.org)

Acknowledging that range of guidance from NHS Professionals, the purpose of this SoR guidance document has a remit beyond contractual and governance issues, to summarise the obvious benefits and support the development of clinical academic radiographer roles to ultimately benefit patients, public and professionals. The contributors to this guidance aimed to synthesise and summarise information in a brief document and to signpost to pertinent Allied Health Professional (AHP) focused toolkits, resources and research evidence that are available to support the development of AHP and Clinical Academic Radiographer roles. A range of rich resources support the development of clinical academic radiographer from the pre-doctoral level through to doctoral, post-doctoral and clinical academic radiographer leads. See, for example:

- Clinical Academic Approach for Nurses Midwives AHPs (nmahp-ru.ac.uk)
- AUKUH Transforming Healthcare Through Clinical Academic Roles (councilofdeans.org.uk)
- The Academic Workforce in Health Faculties (councilofdeans.org.uk)
- Capitalising on the transformational opportunities of early clinical academic career training for nurses, midwives and allied health professionals (researchgate.net)
- Developing the Role of the Clinical Academic Nurse, Midwife and Allied Health Professional in Healthcare Organisations (researchgate.net)
- HEE-NIHR Integrated Clinical Academic Programme | NIHR
- Clinical Academic Careers Framework: (hee.nhs.uk)
- Position Paper: Improving Clinical Academic Careers for Nurses, Midwives and Allied Health Professionals | Council of Deans of Health

Taking all those resources into account, the guidance here is a summary introduction for imaging and radiotherapy professionals and their respective clinical and academic managers. SoR encourage the use of those resources in the hyperlinks above.

## Definition of Clinical Academic Radiographer Roles

Clinical academics are ***clinically active health researchers***, who undertake academic roles whilst providing clinical expertise within health and social care settings (7).

In 2012 the Department of Health defined the clinical academic as a health care professional who engages concurrently in clinical and academic environments (8). Clinical academic workforces consist of clinically active health researchers. Reflecting that definition, clinical academic radiographers work as clinically active professionals; simultaneously researching ways to improve current patient care and pathways and delivering better outcomes for the patients, service users, carers, and families that they treat or care for. They often work in partnership with higher education institutions alongside their clinical role, ensuring that their research is grounded by the issues of patients and services that they see first-hand. The purpose of clinical academic researcher roles is to engage with research, providing clinical and research leadership in the pursuit of innovation and delivery of evidence-based healthcare; where their research informs and improves the effectiveness, quality, and safety of patient care. Despite the benefits for healthcare and patients, a report from Cancer Research UK (CRUK) (9), endorsed by the Society and College of Radiographers, found that there are disparities in opportunities to develop research careers between different regions of the UK and between professions, specialties, gender and ethnic groups, calling for a systems approach to improving research capacity. A key recommendation is that healthcare organisations must develop pathways to research, where opportunities to conduct and improve research capacity should exist for staff at all career stages, along the career pathway in a cumulative way rather than as one-off opportunities. CRUK recommend that healthcare organisations target variations in research activity and capacity of all staff groups and professions.

## Support for Managers who are Developing and Managing Clinical Academic Posts

For the development of clinical academic radiographer roles, the support of clinical and academic managers is critical. Managers will work with healthcare professionals to embed research in practice while balancing service costs and available resources. Conversely, it is important to note the cost to services of not having clinical academic careers and posts in place is notable in terms of quality of care, recruitment, and retention of staff. The requirements of the Care Quality Commission and key lines of enquiry centred around well-led services and research; Quality Standards for Imaging; SoR Education and Career Framework; and College of Radiographers Research Strategy 2021-2026 all make clear the benefits and increasing expectations of research for healthcare services and educational institutes. A range and diversity of researchers, not simply medic dominated, is essential and must include nursing, midwifery, and allied health professional workforces.

St. Bartholomew's Hospital, London, provide an example working model in practice: Embedding post-doctoral clinical academic careers in practice: The St Bartholomew's Hospital model - PubMed (nih.gov).

## Creating a Business Case: Benefits of Clinical Academic Radiographer Career Pathways

Clinical academics contribute to the recruitment and retention of high-quality staff through the benefits of increased engagement, investment and support for staff and patients

AUKUH Transforming Healthcare Through Clinical Academic Roles (councilofdeans.org.uk)

The creation of clinical academic radiographer posts in clinical practice are perceived to have a multitude of benefits, the main elements include:

- **Increased Patient Benefit** – Patient benefit is and always should be the cornerstone on which all sound health-related research is based. It has been shown that patients have better outcomes from treatment within a research-orientated institution. By enabling research literature to be understood and developing the necessary research skills, opportunities for evidence-based practice can be identified and acted upon. This can provide the professional with the necessary skills and impetus to act upon these observations, to question practice, and opportunities to seek out improvements or innovations and to act on the evidence accordingly for increased patient benefit.

- **The Development of Staff Skills** – Clinical academic radiographers further the academic skills available to their service, for example, progressing from postgraduate training through to the completion of doctoral level study, post-doctoral posts, and expertise. The enhancement of which will allow them to provide leadership to other staff within the clinical, research and academic arena through a mentoring and supervisory role and leading by example. This will provide encouragement to others to undertake research and develop a knowledge base that is more accessible to staff, as well as extending the clinical academics role with continued independent practice.

- **Increased Departmental Research Funding and Output** – Through the provision of dedicated research time, clinical academic staff will be able to apply for grant funding from a wide range of providers including the NIHR and CoR and act as principal investigator. It will also allow them to act as a contact for other principal investigators completing research within imaging and radiotherapy. Successful grant bids will bring funding into the department to fulfil these studies and directly provide other staff members the opportunity to become engaged in the research process. Unsuccessful bids offer a real-world example of the difficulties associated with research funding and completion of studies, allowing staff to develop resilience in this area and to enhance and refine developing skills. Completed research will be disseminated both within professional arenas (e.g., conferences and journal papers) and to the public where indicated through plain language / lay presentations (e.g., posters and general science conferences). This output and engagement will provide fulfilment of SCoR, Care Quality Commission (CQC), Care Inspectorate (CI), Regulation and Quality Improvement Authority (RQIA), Care Inspectorate Wales (CIW), and Quality Standard for Imaging (QSI) expectations, and will allow research to be embedded within a department.

- **Increasing Clinical Imaging / Radiotherapy Service Visibility** – Providing direction to staff both within and external to the imaging and radiotherapy departments of a healthcare organisation can lead to research becoming embedded within practice. This promotion of excellence can lead to the clinical academic raising their own and the department's profile and meet

the healthcare organisation wide objectives to meet strategic research goals. Within a healthcare organisation the clinical academic can build collaborative partnerships throughout the institution to streamline communication and support wider hospital research. Promotion of clinical academic careers can allow the Clinical academic to increase their influence both nationally and internationally by embedding themselves within a diverse range of professional bodies, forums, and advisory groups. This can highlight a service and healthcare organisation's forward-looking vision, raising the profile and influence.

- **Increased Staff Engagement** – Development of clinical academic leadership skills will demystify the language surrounding research within a department. It will enable research to be more accessible both to access, ensuring external clinical innovations and advancements of clinical practice can be implemented into departmental practices, whilst also contributing to evidence-based practice by enabling skill development for staff in relation to undertaking research and its publication.

- **Increased Staff Retention** – By extending roles into the clinical academic pathway, all staff will view the department as a forwarded thinking and innovative employer, providing opportunities to develop staff and promote evidence-based practice. This will increase staff retention through increased opportunities for skills and career progression, in line with the 4-tier framework.

## The Role of The Society of Radiographers, The College of Radiographers and Peer Support

SoR provide professional body direction and trade union support for clinical academic radiographer posts. CoR guidance documents support patient, public and professional matters of research and education. Links to relevant guidance include:

- College of Radiographers Research strategy 2021-2026 (collegeofradiographers.ac.uk)
- The College of Radiographers Research Priorities for the Radiographic Profession | SoR
- Getting into Research: A Guide for Members of the Society of Radiographers | SoR
- Research grants and funding | CoR (collegeofradiographers.ac.uk)

SoR facilitate an online workspace for researchers that is available for the use of all SoR members. The workspace provides an online discussion board with facility for radiography peer support and advice. In addition, SoR employ a research lead and an officer for research who are available for help and advice, please contact pande@sor.org with enquiries.

## Clinical Academic Development

The development of clinical academic careers will depend on the background knowledge and skills of the individual practitioner. Access to supportive mentorship and role models is essential. This should include both cognate profession and multi-professional mentorship models.

### Four Core Domains of practice

There is no formal CoR accreditation for individuals who undertake clinical academic roles, however, alignment with the four core domains of advanced and consultant practice may define and guide the learning outcomes for clinical academics during their career pathway, where each level of practice will build upon these domains. It is acknowledged that the weighting of the four domains, expert clinical practice, leadership, education, and research, is not fixed in any radiographer's role; however, there is recognition that the research domain for a clinical academic radiographer should contain significant evidence that the individual is maintaining their role as a research active health care professional in such a role.

Detailed specifications for the four core domains for advanced clinical practitioners and consultant practitioners are outlined in guidance from NHS England and Health Education England. This SoR guidance document elaborates below, with examples of how a clinical academic may demonstrate each domain.

### Research

The Clinical Academic will:

- Identify areas requiring evaluation or development of evidence-based practice.
- Have expertise in design, development, and analysis of research in a specific area/methodology.
- Prepare and submit project proposals, undertake writing of grant applications/ bids.
- Understand research ethics.
- Have training in research related good clinical practice (GCP).
- Lead and manage research projects advancing the knowledge in a specialist field.
- Disseminate projects at suitable forums, contributing to the growing body of evidence-based practice.
- Communicate with patients and carers to empower them to make informed choices about their health care and in their participation of research.
- Implement research findings and embed them into clinical environments.

The SoR more specifically explains that research activity may vary depending on the formal level of research training, where the following are examples of activity that may be attributed to clinical academic radiographer research activity:

- Hold a research-based qualification e.g., MRes, PhD
- Experience of writing research grant proposals

- Experience of ethics and research governance e.g., ethics applications, positions on R&D ethical boards
- Experience of presenting research findings (locally, nationally, or internationally)
- Critical appraisal skills e.g., journal reviewer, university supervisor or lecturer
- Experience of implementing research into clinical practice e.g., service improvement projects, departmental education, journal clubs, CPD sessions
- Research dissemination e.g., Journal publications, conference presentations, online/print publications, PPI/public forum presentations
- Lead on research delivery e.g., CI for research studies, PI for local research studies, identify, approach, consent, and recruit patients into suitable research studies, GCP certification

## Clinical Practice

The Clinical Academic will:

- Practice at an appropriate clinical level to their training level and experiences.
- Exercise, where appropriate, personal autonomy in managing patient, service user and carer needs.
- Identify and address the clinical and emotional needs of individual patients, service users and carers.
- Deliver knowledgeable radiographic care in agreed practice settings appropriate to the individuals training experience.
- Provide appropriate information to patients, service users, carers and their families using advanced communication skills.

## Leadership & Management

The Clinical Academic will:

- Provide radiographer led services and carry a suitable clinical caseload as appropriate.
- Organise and manage research caseloads.
- Supervise clinical delivery and research teams.
- Lead on and work towards local and national research priorities.
- Act as Principal or Chief Investigator on projects, taking responsibility for defining research questions and objectives.
- Develop and sustain the local research reputation.

## Education

The Clinical Academic will:

- Assess their training needs and use appropriate strategies to further their knowledge and skills.

- Support the training and development of others, sharing their specialist knowledge and practical skills.
- Provide advice and/or lead on the clinical academic workforce.
- Identify, support and mentor those interested in and contributing to the research development of the clinical workforce.
- Contribute to education, training and learning opportunities for other health care professionals at all levels of education both clinically and classroom based.

These lists are not exhaustive and clinical academic radiographers may identify other means of meeting the requirements of the four pillars of practice. Activities performed by a clinical academic radiographer may satisfy more than one core domain as their role develops further down the career path towards post-doctoral and professorship level.

## Clinical Academic Career Formal Pathways and Training

The National Institute for Health Research (NIHR) was formed in 2006 and is a UK Government agency funded by the Department of Health and Social Care. The NIHR provides funding for research that can provide patient benefit and improves the health and wealth of the nation. Applicants to NIHR must have a NHS contract in an English healthcare provider institution. For the devolved nations, professionals are welcomed to work with their respective administration, either Health and Social Care Research Development (HSCRD) Northern Ireland, NHS Research Scotland (NRS) or Health and Care Research Wales (HCRW).

SoR offer advice and support for members via contact with a professional officer for research or SoR research lead: pande@sor.org Local hospital trusts or health boards may also support staff who wish to apply for formal pathways and training via local mentoring, research support groups, preparation for applications and research training sessions.

### Health Education England and National Institute of Health Research fellowships

In addition to funding research projects, the NIHR in partnership with Health Education England (HEE) also supports a range of career pathway fellowship awards. There are two categories of fellowship awards:

- All professions: Available for everyone to apply to
- Integrated clinical academic (ICA) programme: Ring fenced monies for non-medics to apply to.

The ICA programme provides funding to undertake a research qualification (PhD) or post-doctoral study for registered healthcare professionals who wish to develop their careers to include clinical research with their clinical roles. The fellowships range from novice (pre-doctoral) through to independent researcher (professorship). The prestigious fellowships are very competitive but to those successful individuals, the awards provide salary reimbursement, research costs, a

personalised training package and access to the NIHR network.

The fellowship schemes are:

1. Fellowships for all: Anyone can apply for these regardless of profession or employer.

2. HEE/NIHR Integrated Clinical Academic Programme: A ring fences fellowship scheme that only non-medics and dentists can apply to.

3. Doctors and dentists: Fellowship scheme that only doctors and dentists can apply for.

4. The range of fellowships available are shown in Figure 1:

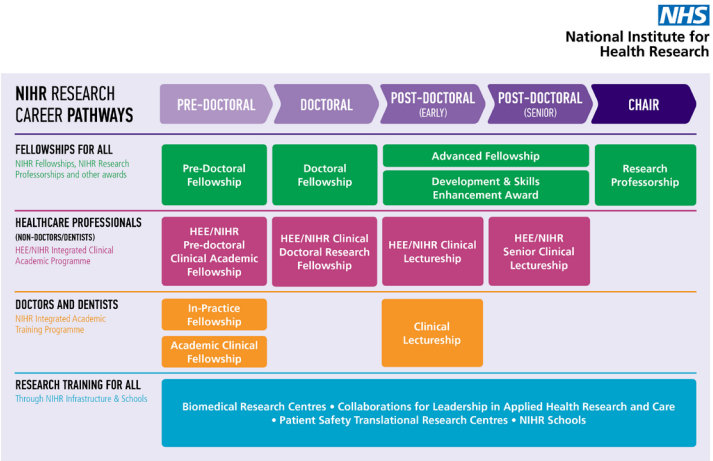


Figure 1: The NIHR fellowship schemes (image courtesy of the NIHR)

## The Health Education England/National Institute of Health Research Integrated Clinical Academic fellowship scheme:

**HEE/NIHR Research internships** are locally managed programmes that allow novice researchers to 'dip their toes' into research to see if this is the career pathway they wish to follow. The programme provides funding for backfill for the applicant, a small training budget and funding for their supervisor. This internship is perfect for those who wish to gain some experience in a research team.

**HEE/NIHR Pre-Doctoral Clinical Academic Fellowship (PCAF)**. The PCAF provides resource for an individual to prepare and write an application for their doctoral fellowship. This includes salary, training, and supervision costs. The PCAF ***does not*** provide funding to complete a stand-alone research project.

There are two PCAF fellowships available to apply to:

1. **Full PCAF.** Appropriate to those who are wanting to apply for a PhD and need to undertake some preparation to allow them to complete a doctoral application.

2. **PCAF Bridge.** Suitable to those who only require time to write their doctoral application

The PCAF competition normally launches in January each year.

**HEE/NIHR Clinical doctoral fellowship (CDRF).** The CDRF scheme funds non-medics to study for a PhD by research in parallel to developing their clinical skills. Successful individuals demonstrate potential leadership and cover the costs of their salary, PhD fees, training and development plan and research costs. The CDRF competition normally launches in March each year.

**HEE/NIHR Clinical lectureship (CL).** The Clinical Lectureship scheme provides support to individuals who have recently completed their PhD and provides support to individuals to help them to establish themselves as an independent researcher. The CL fellowship provides 50% salary funding which is matched by their employer, in addition to full project funding and training and development costs. The CL competition normally launches in March each year.

**HEE/NIHR Senior Clinical Lectureship (SL).** The Senior Clinical Lectureship scheme supports individuals that have become established independent researchers but are not yet leaders in their field. The CL fellowship provides 50% matched salary funding with their employer in addition to full project funding and training and development costs. The SCL competition normally launches in March each year.

Information about the current portfolio of HEE/NIHR ICA fellowship schemes can be found at:

- https://www.nihr.ac.uk/explore-nihr/academy-programmes/hee-nihr-integrated-clinical-academic-programme.htm

**HEE/NIHR Bridging schemes.** There are a limited number of locally managed bridging schemes that provide funding between fellowships. These have a range of names depending on the institution running the schemes (e.g., bronze, silver, or gold awards). Funding is available to provide time to complete a pre-or post-doctoral fellowship application. Each scheme varies between host institution. Further details can be found at:

- https://www.hee.nhs.uk/our-work/clinical-academic-careers/integrated-clinical-academic-ica-programme/bridging-scheme

**HEE/NIHR Fellowships for all.** In addition to the ring-fenced non-medic ICA pathway, the NIHR run fellowship schemes that are open for all professions. Unlike the ICA pathway, the candidates do not have to be employed by the NHS, this allows University based radiographers the opportunity to apply for a NIHR fellowship.

Information regarding the all-profession fellowship schemes can be found at:

- https://www.nihr.ac.uk/explore-nihr/academy-programmes/fellowship-programme.htm

Despite the presence of such training pathways, there is currently a lack of a clear roles or a clear and progressive career trajectory for clinical academic radiographers. That contrasts with advanced clinical practice or to consultant career pathways, where there tends to be clarity of the expected role. Navigating a clinical academic career pathway can be more complex because it will depend on the research training obtained, researcher experience, clinical expertise, and leadership positions (see Figure 2).

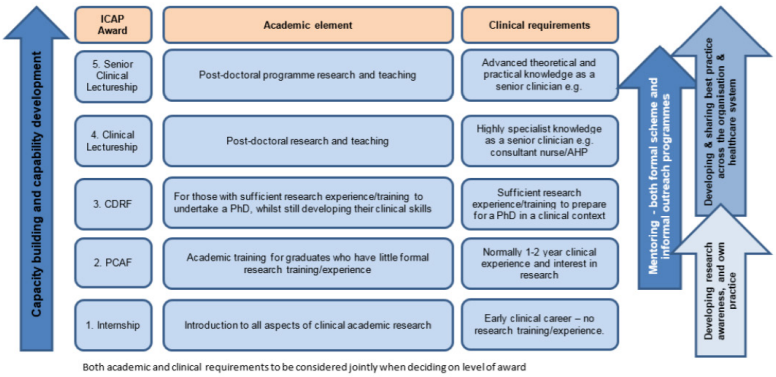


Figure 2: Career progression as a Clinical Academic (10).

In particular, navigating positions at post-Doctoral level has been identified as a challenge and poor progression has been identified in the advanced stages of the pathway for NMAHP clinical academics (11). To retain research expertise and experience within the clinical environment and continue to improve patient experience and outcomes, embedding progressive clinical academic roles within healthcare organisations should be regarded as essential.

## Further Routes to Funding

The College of Radiographers and also College of Radiographers Industry Partnership Scheme (CoRIPS) regularly provide and advertise competitive funding rounds, grants, awards and fellowships for members at a variety of levels including pre-registration students, doctoral and post-doctoral professionals https://www.collegeofradiographers.ac.uk/research-grants-and-funding.

A wide range of organisations and charities hold competitive calls for research projects and targeted projects to support research costs and in some cases will backfill staffing. Guidance is provided in a SCoR document situated in the SoR online document library: Getting into Research: a guide for members of the society of radiographers

## National Research Profiles, Clinical Academic Radiographer Job Descriptions and Person Specifications

### National Research Profiles:

National research profiles are available for the posts listed via the hyperlink below.

- Clinical Researcher
- Clinical Researcher Specialist
- Clinical Researcher Specialist
- Clinical Researcher Consultant

National Research Profiles | CoR (collegeofradiographers.ac.uk)

Job descriptions provide additional context to the current national researcher profiles. Four examples are provided below:

## Pre-Doctoral Researcher

*Job Title:* Clinical Academic Research Radiographer/Sonographer/Nuclear Medicine Technician

*Grade:* 5/6 link grade option or Band 6

*Accountable to:* Clinical Manager, Lead Clinical Academic & University Programme Director

*Job purpose:*

The clinical academic research radiographer/sonographer/nuclear medicine technician will work in both clinical practice and clinical academic roles. The post holder will be providing effective patient centred care whilst also spending time with the local University where they will engage with specified research activity and projects.

*Duties and responsibilities:*

- The post holder will work within a clinical team to deliver patient care, identifying potential research questions based on clinical experience.
- The post holder will contribute to the development of innovative evidence-based practice in radiography, working towards a Masters level qualification and / or a Doctoral award application.
- The post holder will contribute to writing departmental protocols, implementing national and healthcare organisation wide policies, procedures, and guidelines.
- The post holder will maintain professional and courteous working relationships with staff working in a multidisciplinary team.
- The post holder will prioritise the privacy and dignity of the patient, respecting their clinical and emotional needs.

| Job Evaluation Factor | Core Essential | Core Desirable |
|---|---|---|
| Qualification | Pre-registration radiography qualification (BSc, MSc or equivalent)<br><br>Full registration with HCPC or equivalent regulatory body | At least class 2(i) or equivalent undergraduate degree grade |

| | | |
|---|---|---|
| Communication and relationship skills | Good communication skills<br><br>Ability to work as part of a multidisciplinary team<br><br>Ability to work under the supervision of clinical and academic staff to achieve research goals | Presentation skills |
| Knowledge training and experience | Up to date knowledge of current professional issues and practice | Willingness to gain knowledge and develop professionally |
| Personal Characteristics | Capability of completing a higher degree within the required length of candidature<br><br>Evidence of motivation for an understanding of the proposed area of study<br><br>Ability to prioritise tasks | |
| Working conditions | Adaptable and flexible | |

## Doctoral Researcher

*Job Title:* Clinical Doctoral Research Fellow

*Grade:* 7 or 8a for experienced clinical/research radiographers/sonographers/ nuclear medicine technicians

*Accountable to:* Clinical Manager, Lead Clinical Academic & University Doctoral Candidature / PhD Programme Director

*Job purpose:*

The Doctoral Research Fellow is a post-registration Radiographer, Sonographer, Nuclear Medicine Technician, undertaking a Doctoral research award whilst maintaining a clinical role. They will develop towards an advanced preparation in research principles (Doctoral level award) and methodology whilst delivering expert clinical knowledge, skills, and expertise in a specific clinical area.

*Duties and responsibilities:*

- The post holder will develop and execute own doctoral study under supervision that contributes to activity of research group.
- The post holder will deliver knowledgeable, evidence-based, safe, and effective radiographic care to patients in agreed practice settings, working as part of the radiography team and in partnership with departmental clinical leaders.
- - The post holder will be involved with others in planning and implementing standards of care, practice guidelines and where appropriate integrated care pathways, continually evaluating the quality of patient care.
- The post holder will work in collaboration with health and social care

colleagues within the healthcare organisation and external care providers to deliver excellent clinical care and support the translation of research into evidence-based practice.

- The post holder will plan, develop, and implement an innovative research proposal under supervision.
- The post holder will disseminate research findings through contributing to the writing of publications for submission to professional and academic journals and presentation of research findings.

| Job Evaluation Factor | Core Essential | Core Desirable |
|---|---|---|
| Qualification | Pre-registration radiography qualification (BSc, MSc or equivalent)<br><br>Full registration with HCPC or equivalent regulatory body | At least class 2(i) or equivalent undergraduate degree grade<br><br>Relevant masters qualification or equivalent |
| Communication and relationship skills | Good communication skills<br><br>Ability to work as part of a multidisciplinary team<br><br>Ability to work cooperatively with clinical and academic staff to achieve research goals<br><br>Ability to supervise junior clinical and research staff<br><br>Excellent presentations skills | |
| Knowledge training and experience | Ability to sustain research at doctoral level<br><br>Preliminary knowledge of research techniques<br><br>Contribute to the delivery of specialist care through carrying a case load, acting as an expert practitioner in specialist area, demonstrating and enacting a safety-first attitude. | Potential to develop expertise in new areas of the subject |
| Personal Characteristics | Capability of completing a higher degree within the required length of candidature<br><br>Evidence of motivation for an understanding of the proposed area of study<br><br>Ability to develop understanding of complex problems and apply in-depth knowledge to address them | |
| Working conditions | Ability to work autonomously for sustained periods of time | |

## Post-Doctoral Researcher

*Job Title:* Post-Doctoral Clinical Academic Radiographer/Sonographer/Nuclear Medicine Technician

*Grade:* 8b

*Accountable to:* Divisional Lead & Head of Research/Lead Clinical Academic

*Job purpose:*

The Post-Doctoral Radiographer/Sonographer/Nuclear Medicine Research Fellow will have advanced preparation in research principles (Doctoral level award) and methodology with expert clinical knowledge, skills, and expertise in a specific clinical area.

*Duties and responsibilities:*

- The post holder will conduct independent, interprofessional scientific studies and research in the clinically appropriate field to improve the quality, safety, experience and outcomes of patients and their families.
- The post holder plans and conducts high quality clinical research, collaborating within and across HEI and healthcare organisations.
- The researcher provides expertise in design, development, analysis and dissemination of new knowledge and the use of evidence to guide and support clinical practice.
- The post holder with work closely with the Divisional lead and Head of research/Clinical Academic lead to deliver an integrated research strategy for the department.
- The post holder will provide high quality clinical care and consultancy within, and beyond the organisations, regarding clinical academic research and practice development.
- The post will have an element of direct clinical practice, which is critical to identify key practice problems and relate to our patient needs, with a view to improving clinical practice and service delivery.
- The post holder will work collaboratively, autonomously and with authority arising from the use of advanced levels of knowledge and skills to deliver, shape and develop scientific clinical academic research across organisations, geographical and professional boundaries.
- This post will involve acting as a catalyst of change for practice and service development, challenging and redefining professional and organisational boundaries.
- This post encompasses a high level of research, clinical, education and leadership responsibilities.

| Job Evaluation Factor | Core Essential | Core Desirable |
|---|---|---|
| Qualification | Pre-registration radiography qualification (BSc, MSc or equivalent)<br><br>Full registration with HCPC or equivalent regulatory body<br><br>PhD, Professional Doctorate, or equivalent doctoral level award<br><br>Specialist interest in clinical area<br><br>Specific research interest to research priorities | |
| Communication and relationship skills | Excellent communication skills<br><br>Ability to work as part of a multidisciplinary team<br><br>Ability to work cooperatively with clinical and academic staff<br><br>Ability to supervise junior clinical and research staff<br><br>Excellent presentations skills | |
| Knowledge training and experience | Track record of capability to attract grant funding and run a research programme<br><br>Contribute to the delivery of specialist/ advanced care through carrying a case load, acting as an expert practitioner in specialist area, demonstrating and enacting a safety-first attitude. | Willing to participate in undergraduate and postgraduate education |
| Personal Characteristics | Ability to work independently and develop projects<br><br>Ability to motivate others | |
| Working conditions | Ability to work in highly pressured and emotionally challenging areas | |

## Lead Clinical Academic

*Job Title:* Lead Clinical Academic Radiographer/Sonographer/Nuclear Medicine Technician

*Grade:* 8C

*Accountable to:* Divisional Lead & Head of Research/Lead Clinical Academic

*Job purpose:*

The Lead clinical academic is a post-doctoral Clinical Academic Radiographer/ Sonographer/Nuclear Medicine Technician. They will have advanced preparation in research principles (Doctoral level award) and methodology with expert clinical knowledge, skills, and expertise in a specific clinical area.

To provide professional leadership and support to the body of research staff working within therapies and diagnostics, as well as working with strategic partners to grow the capacity and capability of healthcare professionals including AHPs more widely, to become research aware, research ready and research active.

*Duties and responsibilities:*

To work strategically within a multi-professional context building key relationships that ultimately fosters programmes of research where healthcare professionals are active, participating, and leading partners.

To increase the visibility of healthcare professionals within the field of healthcare sciences research, supporting the development of clinical academic careers for these staff.

To be an advocate for the value of research, health care science and evidence-based practice and the role of healthcare professionals in the application of these disciplines for the benefit of patients.

To work with other NMAHP, Medical and Dental professions to enhance research skills and awareness.

- The post holder will conduct and lead and support others to conduct independent, inter-professional scientific studies and research in the clinically appropriate field to improve the quality, safety, experience and outcomes of patients and their families.

- The post holder plans, conducts, and directs high quality clinical research, collaborating within and across HEI and healthcare organisations.

- The researcher provides expertise in design, development, analysis and dissemination of new knowledge and the use of evidence to guide and support clinical practice.

- The post holder with act as the Divisional lead and Head of research/Clinical Academic lead to deliver an integrated research strategy for the department.

- The post holder will provide high quality clinical care and consultancy within, and beyond the organisations, regarding clinical academic research and practice development.

- The post will lead a clinical team to support delivery of care and direct clinical practice, which is critical to identify key practice problems and relate to our patient needs, with a view to improving clinical practice and service delivery.

- The post holder will work collaboratively, autonomously and with authority arising from the use of extensive levels of knowledge and skills to deliver, shape and develop scientific clinical academic research across organisations, geographical and professional boundaries.

- This post will involve acting as a catalyst of change for practice and service development, responsible for leading, challenging and redefining professional and organisational boundaries.

- This post encompasses a high level of research, clinical, education and leadership responsibilities.

- To identify and develop a library of research mentors that healthcare professionals can access for specialists advice and guidance.

- Liaise with the relevant Executive Leads about the management of staff on clinical academic career pathway to support service continuity.
- Responsibility for raising the profile and influence of research, for example, planning the dissemination of research, measuring impact of research and the clinical academic role.
- Developing and coordinating activities such as conferences and seminars.
- Be an active member of local and national research committees

| Job Evaluation Factor | Core Essential | Core Desirable |
|---|---|---|
| Qualification | Pre-registration radiography qualification (BSc, MSc or equivalent)<br><br>Full registration with HCPC or equivalent regulatory body<br><br>PhD, Professional Doctorate, or equivalent doctoral level award<br><br>Specialist interest in clinical area<br><br>Specific research interest to research priorities | |
| Communication and relationship skills | Excellent communication skills<br><br>Experience of working as part of a multidisciplinary team<br><br>Experience of working cooperatively with clinical and academic staff<br><br>Experience of supervising clinical and research staff<br><br>Excellent presentations skills | |
| Knowledge training and experience | Track record of capability to attract grant funding and run a research programme.<br><br>Coaching or mentoring qualification.<br><br>Contribute to the delivery of specialist/ advanced care through carrying a case load, acting as an expert practitioner in specialist area, demonstrating and enacting a safety-first attitude. | Willing to participate in undergraduate and postgraduate education.<br><br>Evidence of recent leadership training. |
| Personal Characteristics | Ability to work independently and develop projects<br><br>Ability to motivate others | |
| Working conditions | Ability to work in highly pressured and emotionally challenging areas | |

## Example Job Plan: Post-Doctoral Clinical Academic

The job plan covers a one-week period averaging 37.5 hours per week.

### Academic responsibilities

Contribute to development of the research activities of (specific) research group, sustaining a personal research plan, developing innovative proposals, and funding bids, managing, and undertaking research activities, publishing in international peer reviewed journals.

Interact and collaborate with HEI research teams, contributing to funding bids, writing peer-reviewed papers, manage and provide guidance to staff and students as required (based on specialist expertise).

Provide advice and, where required, leadership for clinical colleagues undertaking research and provide links with other members of research interest groups within the healthcare organisation and HEI.

Contribute to the on-going development of clinical academic roles within the healthcare organisation and HEI.

Where appropriate, contribute to teaching at undergraduate and postgraduate level in area of specialism, including supervision of research students and/or projects.

### Clinical Responsibilities

Contribute to the delivery of specialist care through carrying a case load, acting as an expert practitioner in specialist area, demonstrating and enacting a safety-first attitude.

Lead the department in delivery of innovative approaches to the care of people and their families in the Imaging/Therapy department, through a programme of service development, quality improvement and clinically focussed research and evaluation.

Act as a source of advice and guidance to health professionals, directing change to patient care.

Act as a coach and role model through propagation of excellent evidenced based practice and mentor less experienced healthcare professionals.

Contribute to the clinical academic research strategy, connecting and supporting clinician researchers.

Engage in the dissemination and translation of research findings, contributing to the promotion of a progressive research culture.

Participate in own CPD, facilitate the CPD of colleagues.

## Thanks to Contributors

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