

So You Want To Be A Clinical Research Fellow

Charlotte Addy¹, Judy Bradley¹, Lorcan McGarvey¹, J Stuart Elborn², Damian Downey¹

1 Centre for Experimental Medicine, Queen's University Belfast 2 Imperial College and Royal Brompton Hospital, London

Correspondence to: Dr Charlotte Addy

Email: c.addy@qub.ac.uk

Key words: Clinical Research Fellow; Academic training; Fellowships; Clinical Trials; Out Of Programme Research

INTRODUCTION

Clinicians with expertise in clinical research are essential to delivering high quality care, developing innovation and inspiring future researchers.¹ Clinical research skills are an essential part of postgraduate training, with all trainees required to complete an “academic checklist” during speciality training.² Specific academic training pathways are available,³ but for those wanting to develop an interest in research without committing to a formal academic pathway, a period “out of programme” (OOP) as a Clinical Research Fellow can be undertaken.⁴ Trainees can choose to do this at any stage in their career but this most commonly occurs during speciality training.^{5,6}

WHAT IS A CLINICAL RESEARCH FELLOW?

A Clinical Research Fellow is a doctor employed in a research role⁴ often leading to a higher degree e.g. MD/PhD. Research is usually carried out over 2-3 years.⁴ Shorter term posts designed to assist in delivering larger studies are also available.⁶ The diversity of roles undertaken by Clinical Research Fellows is vast with a variable balance between original research and delivering other studies.⁶ Roles can encompass any part of clinical research from addressing basic science questions in the laboratory to clinical trials.

Conducting research requires new skills to complement those developed in clinical training.^{5,6} There are a growing number of structured “training fellowships” which include specific training in research skills, alongside conducting original research.⁶ These are supported by national funding bodies such as the National Institute of Health Research (NIHR)⁶, Wellcome Trust⁷ or Cancer Research UK⁸ and by local Clinical Research Networks including the Northern Ireland Clinical Research Network (NICRN).⁹

Clinical Trial Fellowships

Specific training, legislative and governance requirements are required for any researcher or “Trialist” conducting clinical

trials.¹⁰ Clinical Trial Networks provide leadership, funding, education and support for trials and the teams delivering them. In the UK the largest group supporting fellowships in clinical trials is the NIHR, with competition for NIHR funding and fellowships consistently high.⁶ As the need for researchers with specific “Trialist” skills increases structured fellowships in clinical trials are also increasing.⁶⁻⁹

The first NICRN⁹ Fellowship “The James Fellowship in Clinical Trials” started in 2015. This was specifically designed to provide training and experience in delivering clinical trials combined with completion of the fellow’s own trial as part of a PhD programme at Queen’s University Belfast. This fellow participated in numerous trials, successfully delivered an original research study, published articles and presented work at international conferences. The success of this fellowship has allowed other NICRN fellowships to be created using a similar model.

Routes into fellowships

Routes into Clinical Research Fellow posts vary depending on the fellowship, associated higher degree and funding source. Posts are advertised in medical journals, online and increasingly on social media. Fellowships provided by large research bodies including the NIHR⁶, Wellcome Trust⁷ and Health and Social Care (HSC) Research and Development¹¹ have a competitive application and interview process. Applications require a project proposal supported by a senior researcher.⁶⁻⁸ Making contact early is essential as this process may take over a year. Evidence of commitment to research including an intercalated degree, conference presentations and publications increase the chances of a successful application.

Whilst this sounds daunting the most important thing to remember is that nothing makes researchers happier than discussing their work. Senior researchers welcome interest from juniors who want to consider undertaking research and are happy to provide guidance on where to start. Many research projects have started off with a simple conversation.

BENEFITS OF BEING A CLINICAL RESEARCH FELLOW

The best aspects of being a Clinical Research Fellow are the varied opportunities on offer and the chance to develop research skills which can be taken into a future academic or clinical career. Fellowships offer the opportunity to develop research skills in a structured manner within a supportive environment.⁶ Fellowships are flexible allowing better work/life balance and flexibility around outside commitments. These posts allow you to work within enthusiastic multi-disciplinary research teams and to learn from both your supervisors and the wider research team. Such posts offer the opportunity to develop your own research program and network of contacts by attending local, national and international meetings and conferences.^{6-9,11} The investment of research bodies into fellowships provides additional support to encourage presentation and publication of your own research.^{6-9,11}



CHALLENGES

However, undertaking a Clinical Research Fellow can be challenging. Once a post is identified time “Out Of Programme for Research” (OOPR) must be planned well in advance.⁴ With planned changes to postgraduate training this may become easier in the future.^{5,6} Clinical Research Fellow posts are often fully funded with a salary but checking whether this covers University fees, study budgets and other potential expenses is vital. Fellows usually have no on call commitments, which inevitably impacts on the salary paid.

Once in post, balancing competing commitments between your own research, training and clinical commitments requires organisation and efficient time management. Logistical challenges can be encountered in ensuring appropriate access to IT systems in both the university and Trust; as well as appropriate contracts and indemnity cover for all work you may be required to do.

WHAT CAN I DO AFTER A FELLOWSHIP?

After finishing a Clinical Research Fellow post trainees can return to clinical training^{1,3} or if inspired to pursue a research career consider an academic training pathway.^{1,5,6} Reviews of postgraduate and academic training highlighted the need for increased flexibility^{3,5,6} leading to academic pathways becoming available at all stages of training.^{4,5,6} An Academic Clinical Fellowship (ACF) or lectureship (ACL) combining clinical training with an ongoing research role can be applied for during core/speciality training.^{4,5,6} Later in your career skills developed as a Clinical Research Fellow may allow negotiation of research time within a Consultant job plan or open up the possibility of a clinical academic post with time split between the NHS and a University.⁶ National research bodies including the NIHR⁶ and Academy of Medical Sciences¹² are increasingly supporting structured fellowships for post-doctoral researchers wanting to pursue an academic career. The drive to promote flexibility within academic training is likely to further increase the academic career options available.^{5,6}

HOW DO I FIND OUT MORE?

There is a wealth of information on Clinical Research Fellow posts available on the NIHR website⁶ and information on OOPR can be found the Royal College websites.^{4,13} It is easiest to start by talking to other local trainees who have undertaken a Clinical Research Fellow post or look out for research showcase events aimed at trainees in your local area. In NI there is an annual Trainees research day with representatives from across the spectrum of clinical research supported by the Ulster Medical Society. Meet the expert events, conferences and guest lectures are also all useful places to make contact with research teams.

Acknowledgements

The “James Fellowship in Clinical Trials” is kindly supported by the NI Clinical Research Network and a philanthropic

donation from the James Family to support research into Respiratory Disease within Northern Ireland.

REFERENCES

1. Irwin GW, Spence AR, McAuley DF, Kennedy RD, Gardiner KR, Elborn JS. Academic medicine—revolution, evolution or extinction? *Ulster Med J.* 2014;**83**(3):141-5
2. Joint Royal College of Physicians Training Board Academic [JRCPTB]. Essential Academic competencies to be achieved by CCT by all clinical trainees. Checklist for all trainees [Internet]. JRCPTB; 2018. Available from: <https://www.jrcptb.org.uk/documents/eportfolio-academic-checklist-all-trainees> [Last accessed September 2018].
3. Report of the Academic Careers Sub-Committee of Modernising Medical Careers and the UK Clinical Research Collaboration. Medically- and dentally-qualified academic staff: recommendations for training the researchers and educators of the future. 2018. [Internet]. Available from: http://www.ukcrc.org/wp-content/uploads/2014/03/Medically_and_Dentally-qualified_Academic_Staff_Report.pdf. [Last accessed September 2018].
4. Conference of Postgraduate Medical Deans of the United Kingdom. [COPMED]. The Gold Guide. A Reference Guide for Postgraduate Specialty Training in the UK. 7th ed. January 2018. Version: GG7 31st January 2018. [Internet]. Available from: https://www.copmed.org.uk/images/docs/gold_guide_7th_edition/The_Gold_Guide_7th_Edition_January__2018.pdf. [Last accessed September 2018].
5. Greenaway D. Shape of Training. Securing the future of excellent patient care. Final report of the independent review Oct 2013. [Internet]. Available from: https://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf [Last accessed September 2018].
6. National Institute for Health Research. NIHR trainees Co-ordinating centre. Ten years on: adapting and evolving to new challenges in developing tomorrow’s health research leaders. July 2017. [Internet]. Available from: <https://www.nihr.ac.uk/our-faculty/documents/TCC-NIHR-Strategic-Review-of-Training-2017.pdf> [Last accessed September 2018].
7. Wellcome Trust. PhD Training Fellowships for Clinicians. 2018 [Internet]. Available from: <https://wellcome.ac.uk/funding/clinical-phd-programmes> [Last accessed September 2018].
8. Cancer Research UK. Opportunities for PhD students and postdoc researchers. 2018. [Internet]. Available from: <http://www.cancerresearchuk.org/funding-for-researchers/opportunities-for-phd-students-and-postdoc-researchers> [Last accessed September 2018].
9. Northern Ireland Clinical Research Network. [NICRN]. 2017. [Internet]. Available from: <http://www.nicrn.hscni.net/> [Last accessed September 2018].
10. Peace KE, Chen DG. Clinical trial methodology. Chapman & Hall/CRC Biostatistics Series CRC Press; 2010.
11. HSC Public Health Agency. HSC Research and Development Division Northern Ireland. Doctoral Fellowship Award Scheme. 2019. [Internet]. Available from: <http://www.research.hscni.net/health-social-care-rd-doctoral-fellowship-award-scheme> [Last accessed September 2018].
12. Postdoctoral Researchers: What’s available for me? Academy of Medical Sciences; 2018. [Internet]. Available from: <https://acmedsci.ac.uk/grants-and-schemes/whats-available-to-me/postdoctoral-clinical-researchers> [Last accessed September 2018].
13. Joint Royal College of Physicians Training Board Academic [JRCPTB]. Training & certification. Out of programme. [Internet]. Available from: <https://www.jrcptb.org.uk/training-certification/out-programme> [Last accessed September 2018].

