NHS
Cambridge
University Hospitals
NHS Foundation Trust

UNIVERSITY OF CAMBRIDGE

Academic Clinical Fellowship

In

Trauma and Orthopaedic Surgery

(CT1)

One post

Entry: August 2027

Job title	Academic Clinical Fellow in Trauma and Orthopaedic Surgery
Post(s)	ACF-2027-14-005 – Response Mode Post 5 – General Surgery OR Neurosurgery OR Trauma and Orthopaedic Surgery

These posts will attract an Academic National Training Number – NTN(a)

Duration and Outcome

This post will be appointed at ST1 level and is funded for three years. The principal aim of the ACF scheme is to allow academically gifted clinical trainees the opportunity for 25% protected research training and during that time to formulate and submit an application for an externally funded Research Training Fellowship (RTF) (e.g. Medical Research Council, Wellcome Trust, British Heart Foundation). If candidates are unsuccessful in obtaining funding for an RTF/PhD, they can transfer into non-ACF ST3+ posts and pursue full-time clinical sub-specialty training. It is anticipated that all successful ACFs completing RTFs would be in a strong position to compete for Clinical Lecturer posts following award of their higher research degree, as per the Integrated Academic Training programme.

NHS Organisation(s) in which training will take place

Addenbrooke's Hospital, Cambridge University Hospital NHS Foundation Trust.

Research Institution(s) in which training will take place

University of Cambridge and Cambridge University Hospital NHS Foundation Trust.

Day release or block release for protected research time?

It is anticipated that the successful applicant will be available for research on a block basis (e.g. 3-9 months durations) comprising 25% WTE over three years. This will be subject to negotiation.

Description of the Research Component

The medical research undertaken in Cambridge is world leading. In the last research Assessment Exercise (RAE) which assessed the quality of research in all subjects in UK Universities, Cambridge's aggregated quality profile across subjects covered by the medical panels was the highest of any UK Medical School, with 80% of research assessed as world leading or internationally excellent.

Musculoskeletal (MSK) conditions are estimated to affect 1.71 billion people globally and an estimated 18.8 million across the UK, accounting for more than 22% of the total burden of ill

health (morbidity) in the UK. MSK conditions have further economic and societal implications; each year 20% of people in the UK see a doctor about an MSK problem with the disease costing the NHS £5 billion and the UK £7 billion (lost productivity) per year. Osteoarthritis (OA) is an exemplar with a "huge impact". In the UK, around 8.75 million people aged 45 years in the UK have sought treatment. Total joint replacements for end-stage osteoarthritis of the hip and knee are being offered to younger patients, but with an increased life-time risk of revision.

There is a clear global requirement to address unmet need in the treatment of early osteoarthritis before extensive joint destruction. Regenerative strategies aim to restore, repair, and replace the damaged joint structures, such as the lining cartilage, with cells (including stem cells, either manufactured or "native") and molecules. Within the Division of Orthopaedic Surgery, we have an established record in this translational approach, using world-class infrastructure within the University Department of Surgery, NIHR BRC, NIHR Phenotyping Hub and Cambridge Stem Cell Institute. Cambridge is the lead for the national Versus Arthritis Centre of Excellence in Tissue Engineering and Regenerative Therapy, which is directed by Prof. McCaskie.

The ACF will join established interdisciplinary programmes of research in this area and a variety of projects are available. Our stratified approach seeks to determine the stage and phenotype of the early arthritis, which can then be matched to the most appropriate regenerative therapy. This includes analysis of human samples and imaging, with techniques in cell biology, molecular biology (including single cell transcriptomics and bioinformatics). Additional questions will encompass machine learning, bioprinting, biomaterials and cell manufacture. The aim is to identify important cells, as therapy or resident cell target, and how this can be translated into repair and regenerative strategies in cartilage, bone and tendon.

Description of the Clinical Training Component

The Clinical training for the ACF programme will be provided by the appropriate Clinical Directorates relating to Surgery and Trauma and Orthopaedic Surgery to allow the acquisition of the key skills and competencies required to progress to Specialist Training in T&O.

Further Information and Contacts

Clinical Academic Training Office (CATO) at the University of Cambridge

CATO Director	Professor Alasdair Coles Email: ajc1020@medschl.cam.ac.uk
ACF Programme Director	Dr Virginia Newcombe Email: vfjn2@cam.ac.uk

Academic Training Lead	Professor Andrew McCaskie Email: DeputyHeadSCM@medschl.cam.ac.uk
Other Contacts	
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NIHR	http://www.nihr.ac.uk/IAT