

Job Description for NIHR Academic Clinical Fellowship in Cardiology (Multiple Long-Term Conditions) IMT3

- 1. Job Title:** Academic Clinical Fellow in Cardiology
- 2. Duration of post:** 3 years
- 3. Research institutions in which training will take place**

Research training will take place at University College London (UCL) based in any of the relevant areas within UCL Cardiovascular Medicine (see details below).

4. Timetabling of clinical and research time

The successful candidate will undergo their Internal Medicine Training in the North Central sector in London; 25% of their time will be dedicated to research time which translates to 3 months in each year of IMY1-3 training years.

Academic: 25% of training time will be dedicated to academic activities. In IMT Year 3 this is taken as a single 3-month block. In ST4/5 research time may be taken more flexibly (e.g. monthly or weekly) depending on local availability/setup and the preference of the successful candidate.

Clinical component of the training program for IMT Year 3:

The ACF will join the program at IMT3 level and in year 1 will complete rotations in Internal Medicine to ensure a broad range of training in Internal Medicine and sign off for IMT Stage 1 at the end of year 1 of the ACF. Clinical work during this time will focus on managing the acute unselected medical take, the ongoing care of medical inpatients and outpatient work as outlined in the IMT Stage 1 curriculum Training. Opportunities will include the local and regional IMT3 training as well as simulation training. Specific rotations and rotation locations will be devised with the IMT Training Program Directors based on the clinical training needs of the ACF but will not routinely include Cardiology.

Clinical component of the training program for ST 4–5:

75% of the year the candidate will be placed in Cardiology at Barts Heart Centre or linked hospitals depending on training and rotation requirements.

Location of clinical placement will be evaluated at yearly ARCP dependent on adequate clinical progress. Academic progress is also assessed at the yearly ARCP and satisfactory progress is dependent on appropriate ES reports. The Annual Review of Competency Progression (ARCP) decision aid defines the targets that have to be achieved for a satisfactory ARCP outcome at the end of each training year for trainees in IMT and can be accessed via this link [IMT ARCP Decision Aid 2019 \(August 2026 update\).pdf \(jrcptb.org.uk\)](https://www.jrcptb.org.uk/IMT_ARCP_Decision_Aid_2019_August_2026_update.pdf).

During third year, the candidate is expected to have placed themselves in the optimum position to apply for doctoral fellowship award to exit into a (usually) three year PhD programme.

Exit point: at this stage, the candidate can exit the Academic Clinical Fellowship and convert to a standard NTN in NE Thames at the appropriate entry level.

5. Description of research component of programme

This programme offers research training & projects in multimorbidity related to cardiovascular, respiratory disease and cancer, adaptable to the specific needs and interests of trainee.

Opportunities for research span laboratory science and genomics to imaging and data science, across the life course from fetal life to old age, using established multi-disciplinary collaborations. The ACF will have the opportunity to work with multi-morbidity data from multiple sources, from prospective population and clinical studies (e.g. HERMES: heart failure, GENIUS: coronary disease, TRACERXEvO: lung cancer platform study; BIOPIC: paediatric inherited cardiovascular disease) to linked and curated national electronic health records (e.g. CALIBER).

ACF will have opportunities to learn or develop their skills in areas relevant to the theme including:

- [Modern genomic and multi-omic techniques in population studies](#) to understand the bidirectional relationship between cancer and heart failure
- Machine learning to discover novel phenotypes of heart failure, atrial fibrillation & lung cancer based on risk factors and co-morbidities in national electronic health records (EHR)
- [Imaging-based screening](#) for newly recognised age-related valve, conduction, and myocardial diseases and use of myocardial biopsies to develop new therapies.
- Use of computer algorithms and imaging data from lung cancer screening to identify cardiovascular comorbidities and better stratify CV and [cachexia risk](#)
- [Application of advanced cardiac imaging techniques](#) for mechanistic insights into cardiovascular effects of newer cancer therapies and cancer-related cachexia
- Observational data analysis of clusters of polypharmacy and multimorbidity in large-scale EHR data, [addressing inequities in CV care facing cancer patients](#)
- [Epidemiology and mechanisms of multi-system immunotoxicity](#) related to immunotherapy

The following University College London cardiovascular research departments are available for research: <http://www.ucl.ac.uk/cardiovascular/research>:

a. The Hatter Cardiovascular Institute (Prof Derek Yellon, Prof Derek Hausenloy)

Email d.yellon@ucl.ac.uk

Research interests include myocardial protection, ischaemic preconditioning and postconditioning, limiting reperfusion injury at both a basic science level (physiological models of ischaemia-reperfusion injury, cell signaling pathways and mitochondrial function) and in the clinical setting (CABG surgery, PCI).

b. The Centre for Cardiovascular Genetics (Prof Aroon Hingorani)

Email a.hingorani@ucl.ac.uk

Research interests include identifying the genetic factors that contribute to an individual's risk of developing coronary heart disease. In addition, investigating how the environment modulates the impact of these genetic factors.

c. The Centre for Heart Muscle Disease (Prof Perry Elliott)

Email perry.elliott@ucl.ac.uk

Research interests include inherited cardiovascular disease in the young, targeting cardiomyopathic disease (DCM, HCM and ARVC), heart failure and sudden death in the young.

d. The Centre for Cardiovascular Biology and Medicine (Prof John Martin, Prof Ian Zachary)

<http://www.ucl.ac.uk/medicine/cardiovascular-biology/index.html>

Research interests include investigating the biological mechanisms that control the integrity of the vascular wall and mediate its relationship with the blood such as the role of vascular endothelial growth factor as an arterioprotective agent; Platelet and megakaryocyte biology as it relates to arterial thrombosis and atherogenesis; and the study of vascular gene therapy.

e. Centre for Cardiovascular Disease Imaging (Prof James Moon, Prof. Charlotte Manisty, Prof. Thomas Treibel, Prof. Gabriella Captur)

Email j.moon@ucl.ac.uk

Research interests include investigating the role of cardiac MRI in grown-up congenital heart disease; cardiomyopathies, acute myocardial infarction and electrophysiology. Research and clinical imaging operates across UCLH, UCL, Barts Heart Centre and Great Ormond Street hospitals

f. Royal Free Centre for Cardiovascular Research (Prof Marianna Fontana, Dr Dan Knight)

Email Dan.Knight@nhs.net

Focus on infiltrative cardiac diseases and pulmonary hypertension.

g. Imaging in Population Science (Prof Alun Hughes and Prof. Gabriella Captur)

Email gabriella.captur@ucl.ac.uk

Expertise in various aspects of cardiometabolic disease and aging. It includes the MRC Unit for Lifelong Health and Ageing at UCL - the home of the National Survey of Health and Development (the 1946 Birth Cohort). Activities in the department range from discovery science, through detailed cardiometabolic phenotyping.

h. Institute of Cardiovascular Sciences – Department of Cardio-Oncology (Prof Charlotte Manisty)

Email: c.manisty@ucl.ac.uk

Early detection and treatment of cardiovascular toxicity related to cancer treatment (including immunotherapy) and risk prediction in cancer survivors is essential to improve long term cancer outcomes. Research interests include optimizing screening including application of AI analysis techniques, mechanistic studies using CMR, risk stratification including 'omics and informatics.

i. Institute of Cardiovascular Sciences – Department of Heart Valve Disease (Prof Thomas Treibel)

Email: thomas.treibel.12@ucl.ac.uk

Early detection and treatment of valvular heart disease associated adverse cardiac remodeling and risk prediction of outcomes before and after valve replacement. Research interests include optimizing screening including application of AI analysis techniques, mechanistic studies linking deep phenotyping imaging with tissue analysis, risk stratification including 'omics and informatics.

Research interests include investigating the role of cardiac MRI in grown-up congenital heart disease; cardiomyopathies, acute myocardial infarction and electrophysiology, Cardio-Oncology. Research and clinical imaging operates across UCLH, UCL, Barts Heart Centre and Great Ormond Street hospitals

j. Translational Electrophysiology & Digital Health (Professor Pier Lambiase)

Email p.lambiase@ucl.ac.uk

Research interests include investigating complex mapping for catheter ablation, cardiac restitution analysis in ventricular arrhythmias, risk stratification in ion channel diseases and right ventricular cardiomyopathy. Clinical trials in ablation and ICD, pacing studies. This clinical research is conducted at the Barts Heart Centre with basic cellular electrophysiology at the William Harvey Research Institute in Professor Tinker's laboratory.

If progress on to Clinical Lecturer - Full Sub-Specialty Clinical Training

This academic training program focuses on achieving both academic and general cardiology training. As detailed above it is expected that the trainee will devote around 50% of their time during the last 2 years to research and to incorporate full sub-specialty clinical training e.g. in interventional cardiology or electrophysiology is difficult. It can only be realistically achieved if the candidate has performed clinical research in his/her future sub-specialty clinical training area, developing skills during the 3 years out-of-program research

6. Description of clinical training component of programme

Clinical training will take place in hospitals across North Central and North East London. These include Barts Heart Centre, University College London Hospital, Royal Free Hospital and related network DGHs.

GIM training will be incorporated alongside cardiology training in the first 1-2 years of training as an ACF. 75% of the training time will be clinical and 25% will be academic. ACFs will have named educational and academic supervisors and yearly reviews at the ARCP. The ARCPs will review cardiology, GIM and academic progress.

7. Academic Programme Director

Professor Thomas Treibel

Email: thomas.treibel.12@ucl.ac.uk

8. Clinical Programme Director

Dr Roshan Weerakody (Cardiology TPD);

Email: r.weerackody@nhs.net

Dr. Salim Cheerioth (NCL IMT TPD)

Email: salimcheerioth@nhs.net

Dr. Dipa Jayaseelan (UCLH Local IMT TPD)

Email: dipa.jayaseelan@nhs.net

9. NHSE contact

Specialty Team <https://lasepgmdsupport.hee.nhs.uk/support/home>

Recruitment Enquiries - <https://lasepgmdsupport.hee.nhs.uk/support/home>

10. Useful websites for further information

<https://www.nihr.ac.uk/explore-nihr/academy-programmes/integrated-academic-training.htm>

National Coordinating Centre for Research Capacity Development <http://www.nccrcd.nhs.uk/>

University College London: <http://www.ucl.ac.uk>

11. Confirmation that the post attracts an NTN (A) – YES

This job description was prepared on 14th August 2026