



Job Description

Post Title and Post Number	NIHR Clinical Lecturer in Public Health in NIHR priority theme of Prevention and Public Health	
Organisation Advertising Description	Dept of Applied Health Research (AHR), College of Medicine and Health	
Post Number		
Full Time/Part Time	Full Time	
Duration of post	Maximum of 4 years or obtaining CCT, whichever is sooner. There will be 50% time protected for research throughout the programme.	
Post is open to:	Internal and External Candidates	
Grade/Level	Clinical. Must hold a current NTN (ST3 or above). Must have a higher research degree (PhD, MD or equivalent); all candidates must have submitted their final thesis to be eligible to apply and must have been fully awarded their higher degree in order to be able to take up the post by 1 Sept 2025.	
Salary		
Terms and Conditions	Clinical	

Description of research component of programme:

Background

Information and intelligence are crucial for the development of an NHS for the 21st century. The University has an established track record in the analysis of electronic records from general practices and hospital settings including University Hospital Birmingham which has world-leading hospital information systems. Strong collaborations between data scientists and clinicians have enabled world class research to be conducted examining epidemiology of disease, studying effectiveness of interventions and evaluating of health policies. Additionally, the University of Birmingham population health data science team are integral to the Midlands Health Data Research UK partnership and are involved in two of the revolutionary digital innovation hubs (INSIGHT and PIONEER).

This theme should cover the various components of Public Health e.g. wider determinants, health improvement, infectious disease control and population screening.

The University of Birmingham health informatics and multimorbidity team (which the candidate will be aligned to) have expertise in the use a variety of health and social data





including but not limited to: primary care, secondary care, biobank, crime, social services and educational data. Harnessing the information held in these datasets and developing new methodologies will provide opportunities for positive public health action locally, nationally and internationally.

Research strands

The proposed research strands which the ACL will work on will engage use of these datasets and the expertise available at the University of Birmingham. The successful candidate will work on important public health issues and methodology development in health data science.

Research strand: Example of clinical areas (not limited to)

- 1. Multimorbidity and pregnancy: The team have recently won a grant to examine the causes and consequences of multimorbidity in reproductive aged women. This work will involve the use of datasets and collaborations across all four nations of the UK as part of HDR. The goal of the work is to 1) describe the epidemiology of multimorbidity in pregnancy, 2) determine clusters of morbidities, 3) determine the relevance of different levels of multimorbidity of mother and offspring outcomes, 4) determine the interplay between physical and mental health conditions in morbidity clusters, and 5) under the experiences and limitations of the care provided for multimorbid pregnant women in the NHS.
- 2. Complex multimorbidity: The OPTIMising therapies, disease trajectories, and AI assisted clinical management for patients Living with Complex multimorbidity (OPTIMAL) Study at the University of Birmingham, brings together clinicians, researchers and patients' groups to study complex multimorbidity, disease trajectories and the application of artificial intelligence to advance clinical decision making. The project aims to use data-driven research to characterise and understand how multimorbidity occurs, how treatments can be better targeted, and how polypharmacy and treatment decisions can be improved through use of AI methods. The study will help improve understanding of disease trajectories within complex multimorbidity clusters, understand the contribution of prescribed medications to disease trajectories and develop alternative ways to generate evidence for treatment decisions in the context of complex multimorbidity. This will provide valuable information to help patients and clinicians make informed decisions and identify points for prevention and intervention.
- 3. Violence against women and children: The team are leading on international work tackling violence against women and children. The ACL will have the opportunity to engage in the NIHR global research group on VAW/C which is cross-cutting high, medium and low-income countries. Broadly, the group is working on developing panels of survivors to engage in healthcare decision making, undertaking observational research to understand the burden of ill health associated with violence as well as its cost, and also finding out and implementing what works to prevent violence.
- 4. Gambling harms: The team are leading an exciting multi-disciplinary project on gambling which is focussed on the following three activities: 1) Describing and understanding the effects of interventional public health laws and regulations intended to reduce harms associated with gambling, 2) undertaking observational studies to explore the breadth of gambling related harms and 3) developing a core outcome set to design a best practice model for studying gambling related legal and population-based interventions.

Future directions: The ACL will be responsible to expand the breadth of health informatics and multimorbidity work conducted by the team. In particular, the team are exploring routes to undertake multimorbidity work globally in the remit of a global research unit. The ACL will also have the opportunity to be involved in the regional School for Public Health Research





(PHRESH) and will also be able to engage in other local public health infrastructure including the NIHR health determinants research collaborations.

Research strand 2: Methodology development

- Clinical trial emulation using real world evidence and data driven pragmatic clinical trial design: Modern trial design is changing, and as real world evidence becomes available in real time, the application of such data in clinical trial design is not just a real possibility but is the future of modern data science. The successful candidate will be involved in working with our team who have a background in clinical trial emulation to design a series of realworld evidence studies.
- 2. Pharmaco-epidemiology methods and approaches using observational data sources: The successful candidate will play a role in the development of pharmaco-epidemiological study methods applicable to routinely collected data.
- 3. The further development of the Automated Clinical Epidemiology Study (ACES) platform Dexter: Much of the success in the field of population data science attributable to the University of Birmingham have come as a result of innovation in data extraction and cleaning methods when applied to observational data through ACES. We will expect the successful candidate to have experience of working with large clinical datasets. Their role will be to continue supporting development of the ACES platform to allow for transferable adaptability across a variety of datasets including Biobank data and secondary care data over the next 24 months. This stream of work ties into the local aims of HDRUK.

Clinical responsibilities

The clinical training will be facilitated as part of the West Midlands Public Health Training scheme. As usual in the ACL role, we anticipate candidates to split their working roles 50:50 between the University and a clinical site. At this stage in training, we would anticipate candidates to have completed both the Part A and Part B exams. As such, their training locations will be determined by their remaining competency grid. Upon appointment, there the successful candidate will have a meeting with the academic lead to discuss which clinical training site will best match their ongoing needs.

Possible clinical training sites (examples but not limited to): Local authority (including Sandwell and Birmingham City Council), UKHSA, OHID, West Midlands Violence Reduction Unit.

Teaching

The successful candidate will have the opportunity to teach medical students and junior doctors. In addition, they will have the opportunity to contribute to lectures, modules and small group teaching sessions on public health topics on the undergraduate MBChB and relevant postgraduate courses such as the MPH. They can also be involved in supervising MD/PhD students and clinical fellows.

Publications, presentations and grants

The post-holder will contribute to a range of ongoing clinical research at the Dept of AHR and will aim to publish in high-impact journals. They will also receive help in securing funding towards increasing independence and personal fellowships by the end of the ACL period.

Academic Lead for the Public Health ACL programme

Informal queries and questions are welcome, and please contact Professor Tom Marshall (<u>t.p.marshall@bham.ac.uk</u>) or Professor Joht Singh Chandan (<u>j.s.chandan.1@bham.ac.uk</u>) to arrange a Zoom call or meeting.





Academic Lead (University) for the IAT Programme

Prof Kristien Boelaert, IAT Lead at the University of Birmingham: k.boelaert@bham.ac.uk.

Appendix 1: NIHR CL Supplementary Person Specification

This person specification should be used in conjunction with a person specification for assessment of clinical competences.

	ESSENTIAL	DESIRABLE	
ELIGIBILITY	 Evidence of achievement of Foundation competences or equivalent. Candidate must be at ST3 or above. Must hold a higher degree (MD, PhD or equivalent) in a relevant subject area*. Evidence of good progress in clinical training and that completion of specialty training* may be accommodated either during or after the 4 year period of the NIHR CL award (*Not applicable to fully qualified GP candidates). 	Evidence of commitment to GMC specialty. Intercalated honours degree and/or additional qualifications e.g. MSc etc.	Application Form
KNOWLEDGE & ACHIEVEMENTS	Demonstration of acquisition of the level of knowledge and skills necessary for the achievement of Foundation and clinical (matched to the entry level) competencies or equivalent. Demonstration of the potential for scientific independence and the ability to lead a research team. Potential to become a leader in chosen field.	Knowledge of the centre hosting the research and how this is best placed to support the research, education and training needs. Prizes or distinctions. Presentation of work at a national or international meeting. Significant publications in peer reviewed journals.	Application Form and Selection Centre
EDUCATIONAL & PERSONAL ASPECTS	Demonstration of understanding, and commitment to, an academic career. Indication of medium and long-term career goals. Demonstration of educational reasons for applying for the Clinical Lectureship Programme.		Application Form





Evidence of team working skills. Evidence of leadership potential. Application Form and Selection Centre

* All candidates should have submitted their final thesis to be eligible to apply and must have been fully awarded their higher degree in order to be able to take up the post (prior to 01 Sep 2025).