

Job Description

Post Title and Post Number	NIHR Clinical Lectureship (NIHR CL) in Neurosurgery – ST3 or ABOVE- 55563
Organisation Advertising Description	Institute of Inflammation and Ageing College of Medical and Dental Sciences
Post Number	55563
Full Time/Part Time	Full time
Duration of post	4 years or CCT plus 6 months, whichever is sooner
Post is open to:	Internal and External Candidates
Grade	Clinical
Salary	£31,614 to £58,813 a year
Terms and Conditions	Clinical Research Staff

Job Summary

The University of Birmingham is able to offer an NIHR Clinical Lectureship (NIHR CL) in Neurosurgery to a suitably qualified applicant. This post has been awarded by the NIHR to University/Deanery/NHS Trust partnerships nationally through competition. It forms part of the NIHR Integrated Training Pathway, further details of which can be found on the NIHR website <http://www.nihr.ac.uk/funding/clinical-lectureships.htm>. NIHR Clinical Lectureship (NIHR CL) is the final phase of the Integrated Academic Training Pathway. The post is designed to allow time to complete a period of post-doctoral research to enable progress towards an independent academic career whilst completing clinical training. Applicants for these posts will be Specialist Trainees who have completed or have submitted for a higher degree (PhD / DPhil / MD).

NIHR Clinical Lecturers are specialty training posts that incorporate academic training. NIHR Clinical Lecturer posts are aimed at those who are advanced in their specialty training, have completed a research doctorate or equivalent and show outstanding potential for continuing a career in academic medicine or dentistry. The duration of an NIHR Clinical Lecturers is for a maximum of 4 years and it is expected that NIHR Clinical Lecturers will complete their specialty training during this period. Alongside clinical training, NIHR Clinical Lecturers will be able to further develop their academic skills and will be encouraged to apply for funding to support further Post-Doctoral or educationalist training. Over the four years post holders, in discussion with the training committees and academic supervisors, will be able to undertake clinical duties in order to complete their clinical training. Post holders will be expected to spend 50% of their time undertaking specialist clinical training and 50% undertaking

research or educationalist training. The appointment will be for a fixed term of four years. However, if training is completed during the four years the appointment will end six months after completion of CCT.

Informal enquiries can be made to Prof Antonio Belli (a.belli@bham.ac.uk). All enquiries will be treated in strict confidence; they will not form part of the selection decision.

Main Duties

The post holder will spend 50% of time undertaking research and academic training over the duration of the contract. This does not necessarily mean this amount of time is set aside each week but will be made up, for example, by being given a period of weeks or months of concentrated time for research.

(a) Clinical

- Clinical attachments will be in full approved training posts at the relevant NHS Trust in the West Midlands Deanery.

(b) Research

- To engage in advanced study or research.
- To contribute through research activity, publication and securing external funding to maintaining the overall standard of the department.

(c) Teaching

- To teach through university lectures, seminars and practical classes as requested by the Head of Institute (Hol) or any other person nominated by Hol.
- To supervise graduate students.
- To engage in university examining.

(d) Management and Administration

- To co-operate in the administrative work of the Department in both term and vacation under the direction of the Head of Department or any such person nominated.
- To undertake such other duties as may from time to time be determined by the Hol or any such person nominated.

(e) Study and Training:

- This post is attached to an NTN(a). Post-holders will undergo an ARCP/RITA assessment on an annual basis to assess the quality of their clinical and academic training. An academic appraisal will also take place. They will be encouraged to go on relevant courses of postgraduate education covering the important skills required of a future clinical academic, namely, clinical, research, teaching, examining and management. Orientation within research or clinical attachments will be the responsibility of the relevant department.

Knowledge, Skills, Qualifications and Experience Required

QUALIFICATIONS

Applicants must have:

- MBBS or equivalent medical qualification
- Successful completion of MRCS or equivalent at time of application

- Successful completion of a higher research degree (PhD, MD or equivalent in a relevant subject)
- Evidence of achievement of Foundation competences or equivalent.
- 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.
- Be eligible for full registration with, and hold a current licence to practise from, the GMC at intended start date
- Have evidence of achievement of foundation competences from a UKFPO-affiliated foundation programme or equivalent in line with GMC standards/Good Medical
- Evidence of achievement of ST1 competences in Neurosurgery at time of application and ST2 competence in Neurosurgery by time of appointment, supported by evidence from work-based assessments of clinical performance (DOPs, Mini-CEX, CBD, ACAT) and Multi Source Feedback or equivalent. Candidate must be at ST3 or above.
- Advanced Life Support Certificate from the Resuscitation Council UK or equivalent by intended start date
- Candidates that have already completed one NIHR Clinical Lectureship may not apply for another
- Candidates may only apply if they have already submitted their PhD or MD thesis at the time of application.
If the candidate's thesis has not been submitted by the application closing date, then they are ineligible to apply in this round. Successful candidates may not take up their post until their PhD or MD had been fully awarded. If this will not be awarded until after the 31st March 2017 deadline, then the candidate is ineligible to apply in this round

The College of Medical and Dental Sciences

College Overview and Structure

The College of Medical and Dental Sciences (MDS) is the largest of the University's Colleges with over 1500 members of staff ensuring teaching and research excellence across a wide range of pre-clinical and clinical disciplines.

The College is structured into 8 Institutes:

- [Institute of Applied Health Research](#)
- [Institute of Cancer and Genomic Sciences](#)
- [Institute of Cardiovascular Sciences](#)
- [Institute of Clinical Sciences](#)
- [Institute of Immunology and Immunotherapy](#)
- [Institute of Inflammation and Ageing](#)
- [Institute of Metabolism and Systems Research](#)
- [Institute of Microbiology and Infection](#)

Our Institutes are focused academic units in identified areas of high-performing research and teaching excellence, each with an ambitious strategy and empowered leadership. Drawing together outstanding academic, clinical and professional services staff around coherent and highly collaborative themes. The Institutes are responsible for driving the further development and delivery of priority themes identified in the institutional Life Sciences Strategy (see below). They are championing interdisciplinary collaboration across the University's Colleges and in partnership with our regional NHS Trusts. Each Institute contributes to our translational pipeline, supporting fundamental research excellence through to clinical and applied health programmes. This strategy ensures that our research delivers real impact in health and wealth generation and that our educational programmes are informed by our research strengths. Co-location and core focal points for each of the Institutes ensure cohesion, whilst at the same time promoting cross-Institute working and collaboration. This is further enabled through access to key College-managed facilities and resources and the provision of high quality professional services support including core academic administration in support of teaching and research delivery.

Professional Services

A diverse range of committed and high-performing Professional Services staff, managed through integrated College-wide teams, underpin and provide support to the establishment, development and delivery of all aspects of the College's activity. They support academic staff and student activity, provide core functions and support services, and deliver more specialist and technical services. The model of central management with localised focus and delivery provides high-quality support both understanding of, and directed according to, academic need. The teams operate in close and effective partnership with colleagues across campus and in the NHS.

University of Birmingham Life Sciences Strategy

The Life Sciences Strategy (LSS) has been developed following detailed engagement both internally and externally. The LSS identifies the priorities for the University as an outstanding, distinctive centre for [Life Sciences research](#) and education focused on areas relevant to human health including clinical and biomedical sciences and human biology.

The LSS is focused on building our research and teaching activities in this area across the whole campus. It will help to deliver the region's ambition to establish Birmingham as one of the UK's pre-eminent locations for the Life Sciences sector delivering improved healthcare, economic growth and making the UK the best place to invest in life sciences research.

College Location

The principal base of the College lies immediately between the main campus of the University in Edgbaston and the new Queen Elizabeth Hospital Birmingham (QEHB), University Hospitals Birmingham NHS Foundation Trust (UHBFT), with a number of other key buildings both on and off campus, including the new Birmingham Dental Hospital and School of Dentistry at Pebble Mill just a mile from the central campus. Other NHS Trust partners are also on the same campus including Birmingham Women's Hospital and the Barberry (Psychiatric) Hospital.

Research

With over 1000 academic staff and around £60M new research funding per year, MDS represents a major international centre for biomedical research.

Our overall research objective is to develop and promote excellence in basic and clinical science with an ultimate goal of delivering improvements in human health. We take pride in a truly translational pipeline, delivering cutting edge clinical trials and patient studies, underpinned by cell and molecular biology research on both model organisms and humans.

Our research is supported by peer-reviewed multi-million-pound funding from Research Councils UK, medical research charities such as Wellcome Trust, Cancer Research UK (CRUK), Bloodwise, the British Heart Foundation (BHF), the National Institute for Health Research (NIHR) and Department of Health, as well as the European Union, together with strategically important support from other government bodies (Health Protection Agency (HPA), Defence Science and Technology Laboratory (DSTL)) and industrial partners including large pharmaceutical companies (e.g. GSK, Novartis) and SMEs (e.g. Oxford Immuntotec, Inhibtex).

The University of Birmingham was ranked in the top 100 universities worldwide for Clinical Medicine and Pharmacy in 2015 by the [Academic Ranking of World Universities \(ARWU\)](#), also known as the Shanghai Ranking.

Clinical Medicine at the University of Birmingham has also been ranked 82nd in the Performance Ranking of Scientific Papers for World Universities 2015, (also known as the National Taiwan University Ranking).

Our Institutes

Our Institutes focus on our scientific strengths and are targeted to areas of major clinical significance.

The [**Institute of Applied Health Research**](#) is focused in two broad areas: (i) primary care & population health research; (ii) healthcare evaluation & methodology. There is expertise in the main community focused clinical disciplines public health, primary care and occupational medicine. Methodological expertise encompasses biostatistics, health economics, clinical trials, evidence synthesis, medical ethics, health psychology and qualitative research. The Birmingham Clinical Trials Unit (BCTU) which includes the Primary Care Clinical Research and Trials Unit (PC-CRTU) is internationally renowned and delivers both specific discipline related research and provides an exceptional collaborative framework for developing and delivering translational outputs from the University of Birmingham's wider research portfolio.

The [**Institute of Cancer and Genomic Sciences**](#) represents our major academic strengths in fundamental cancer research, particularly around cell biology, haematology, genetics and genomics, bioinformatics and cancer clinical trials. The latter of these is driven through our [**CRUK Cancer Clinical Trials Unit**](#), which is the national lead for paediatric cancer trials. Additional key infrastructure includes an Experimental Cancer Medicine Centre, and the success of academic Haematology has provided a model for the development of a Bloodwise-funded Trials Acceleration Programme (TAP) via Birmingham that links research nurses in 13 UK leukaemia centres, part of our wider status as a national Bloodwise Centre of Excellence. A key driver for our future development will be the West Midlands Genomic Medicine Centre, the largest in the UK and linking all 18 regional NHS Trusts, with academic leadership based within this Institute.

Our [**Institute of Cardiovascular Sciences**](#) is a developing area of strength, focused around two key themes: Vascular Inflammation, Thrombosis and Angiogenesis; and Clinical and Integrative Cardiovascular Sciences. Major awards centre on the regulation of platelet and leukocyte responses in vascular diseases, and the pathogenesis of cardiac diseases particularly atrial fibrillation. With a BHF Chair and a number of senior BHF Fellows, this is a highly collaborative cluster of activity, particularly championing interdisciplinary strengths through partnerships such as the EPSRC Physical Sciences for Health integrated Centre for Doctoral Training and the NIHR Surgical Reconstruction & Microbiology Research Centre (SRMRC).

The [**Institute of Clinical Sciences**](#) consists of a number of Schools dedicated to the delivery of research and education including:

- [Medical School](#)

- [School of Pharmacy](#)
- [School of Nursing](#)
- [School of Biomedical Sciences](#)
- [School of Dentistry](#)
- [Graduate School](#)

Benefitting from a highly interdisciplinary approach, it works closely with all other College Institutes to ensure delivery of teaching excellence and high quality research outputs. Some of the main focusses of research within the Institute include:

- Dentistry - The School of Dentistry had an outstanding performance in REF2014 in its unit of assessment, ranked first in the country for research recognised as internationally excellent (4*/3*). Research in the School of Dentistry is focussed into two overarching themes, clinical and experimental oral sciences and regenerative and rehabilitative science.
- Nursing - Research from our School of Nursing specifically looks at end of life care, child, maternal and family health, and organisation and delivery of services.
- Pharmacy - The main research themes stem between two complementary research areas namely, pharmaceutical science, discovery and delivery, and clinical pharmacy practice.

The [Institute of Immunology and Immunotherapy](#) builds on the longstanding tradition of immunology research at the University of Birmingham. This was reflected in the 15 year tenure of the Medical Research Council (MRC) Centre for Immune Regulation which is now driving translational outputs through closer integration with leading clinical expertise. The NIHR Liver Biomedical Research Unit (BRU) forms another key focus around which we are leading both nationally and internationally, with the establishment of our Advanced Therapies Facility providing state of the art cell and gene therapy suites with pharmacy facilities designed for gene, cell and biological therapies. Our Clinical Immunology Service supports a range of national cancer trials, and led our recent £7.3M MRC Clinical Infrastructure award to provide 'deep' immunophenotyping of patients with a wide range of clinical problems.

Our [Institute of Inflammation and Ageing](#) benefits from a highly collaborative leadership team focused on translational outputs, based within a dedicated wing of the QEHB. The strength of their vision is represented by a number of major national awards, including the MRC-Arthritis Research UK Centre for Musculoskeletal Ageing Research (with Nottingham University); Arthritis Research UK Centre of Excellence in the Pathogenesis of RA (The Universities of Glasgow and Newcastle); Arthritis Research UK Experimental Arthritis Treatment Centre; NIHR SRMRC; NIHR Healthcare Technology Cooperative (Trauma); and the Healing Foundation Burns Centre, as well as our key role in the NIHR Translational Research Partnership on Joint & Related Inflammatory Disease.

The [Institute of Metabolism and Systems Research](#) (IMSR) offers a highly multi-disciplinary collaborative environment that combines leading excellence in metabolic,

endocrine and reproductive research with mass spectrometry-based and computational systems science approaches. The IMSR drives strategic leadership for the University of Birmingham Metabolomics Core, which comprises unique expertise and technological approaches delivered by the Phenome Centre Birmingham (recent £7.3M MRC Clinical Infrastructure award), the Steroid Metabolomics Core, the Metabolic Tracer Analysis Core, the NERC Metabolomics Node, and the Advanced Mass Spectrometry Facility. Our researchers employ a combination of *in vitro* and *in vivo* models, human *in vivo* physiology, innovative metabolome and imaging approaches, experimental medicine studies and clinical trials. Our science is translated into health via the Birmingham Health Partners Centre of Endocrinology, Diabetes and Metabolism (CEDAM), the Centre for Women's and New-born Health (CNWH) and the recently established National Tommy's Centre for Miscarriage Care and Research.

The [**Institute of Microbiology and Infection**](#) draws together one of the largest groups of academic expertise in this area nationally, expert microbiologists, immunologists, biochemists and chemists, with technical expertise in next generation sequencing, genomics, proteomics, molecular and structural biology, biotechnology and modelling. Diverse research programmes encompass fundamental science of model organisms to the biochemical and biophysical analysis of microbial components to translational research on key pathogens of medical and veterinary importance. Major interests include pathogenomics, chromosome architecture and gene regulation, plasmids and mobile DNA, physiology and adaptive response, cell wall structure and membrane proteins, pathogenesis and host-pathogen interactions, infection and host-immune response, antibiotic and antimicrobial resistance and environmental biotechnology.

Education

Each year the College trains approximately 370 medical students including the Graduate Entry course (around 120 medical students are able to intercalate on a choice of programmes after the second, third or fourth year of their course), 70 dental students, 20 biomedical materials science students, 150 biomedical science students, 125 nursing students, 70 pharmacy students and 60 physician associate students. Teaching takes place at all hospitals in Birmingham and many of the hospitals across the region.

There are also approximately 450 postgraduate taught students and 400 research students in the College, managed by a cross-College Graduate School. The College has excellent library and reference facilities including the Barnes library and Doug Ellis Learning Hub, which complement the wider facilities available to students on campus.

The Institute of Clinical Sciences provides a clear focus for integrating our education and training programmes, co-ordinating all teaching, student engagement and related activity across the College to deliver a high quality student experience. The Institute also supports increased recognition of the value of education and teaching contribution through an enhanced emphasis on pedagogy.

The Complete University Guide 2016 ranked Birmingham for Dentistry in 7th position and Nursing in 3rd position in the UK.

The Guardian University League Tables 2016 also ranked Dentistry at Birmingham at 8th, in the UK.

Our employability rates within the College are excellent, with some notable alumni in influential positions all around the world. The University is also proud to have been awarded the University of the Year for Graduate Employment in *The Times* and *The Sunday Times* Good University Guide 2015-16.

Highlights from the 2015 National Student Survey included:

- 98% of our BDS (Hons) Dentistry students were satisfied with the overall quality of the course
- 91% of our Medicine and Surgery MBChB students were satisfied with the overall quality of this programme and 94% said they were satisfied with the teaching on the course.
- 94% of our Pharmacy MPharm students were satisfied with the overall quality of the programme.

Partnerships

Our partnerships with regional NHS Trusts are exemplified through [Birmingham Health Partners \(BHP\)](#), an exciting collaborative platform between the University, University Hospitals Birmingham NHS Foundation Trust (UHBFT), Birmingham Children's Hospital NHS Foundation Trust (BCH) and Birmingham Women's Hospital Foundation Trust. BHP enables the rapid translation of laboratory discovery to patient benefit, fostering new therapeutic and healthcare innovations by creating an integrated environment for researchers and clinicians. This University-NHS strategic alliance led to the largest single renewal grant from NIHR of £12.8m for the Birmingham NIHR Wellcome Trust Clinical Research Facility (NIHR-WT CRF), which supports a paediatric facility at BCH, a satellite facility in the Centre for Translational Inflammation Research (CTIR; located within the QEHB) and gene and cell therapy programmes within our Advanced Therapies Facility (ATF).

The ATF incorporates the [Human Biomaterials Resource Centre \(HBRC\)](#) which works with a large number of NHS Trusts in the region and acts as the hub for a number of collaborative initiatives such as the 100,000 Genomes Project (West Midlands Genomic Medicine Centre [GMC]). The West Midlands GMC draws upon our unique population demographic through a collaboration of 18 NHS Trusts co-ordinated by our partnership with the West Midlands Academic Health Science Network (WM AHSN). The WM AHSN brings together NHS commissioners, providers of NHS services, industry, academia and representatives of the people of the West Midlands to support the spread and adoption of innovation across the region.

We have also established partnerships with other Universities. [The Centre of Membrane Proteins and Receptors \(COMPARE\)](#) is a collaborative project between the universities of Nottingham and Birmingham that will augment our position as a research powerhouse for academic drug discovery. COMPARE will harness cutting-edge developments in Super Resolution Microscopy that will enable researchers to visualise what happens when a drug binds to a cell surface receptor or protein in real-time.

We have a growing portfolio of projects with international partners including a large number of Horizon 2020 awards and more specialist strategic collaborations such as Universitas 21 and Sun Yat Sen University, China. We also partner with many other Universities both in the UK and overseas on collaborative research projects and more recently, split site PhD opportunities. These partnerships maximise our research outputs, and provide PhD students with opportunities to broaden their knowledge and skills across multiple world leading institutions.

In addition to the NHS Trusts in our immediate vicinity, the College works closely with many of the [teaching hospitals](#), clinical commissioning groups (CCGs), and training practices across the West Midlands. Students are encouraged to broaden their knowledge and experience by working across a wide range of organisations and experiencing the varied cultures and demographics of the West Midlands.

Our cross campus collaborations within the University are vital, to share expertise and knowledge across disciplines, as well as facilities, equipment and resources. We have strong relationships with all other University Colleges, most notably with the College of Life and Environmental Sciences in connection with the Life Sciences Strategy as outlined above. Other strong links are with the Business School, within the College of Social Sciences for education delivery, and with the College of Engineering and Physical Sciences for both teaching and research activity.

Facilities

The College has an impressive range of facilities and continues to develop, expand and improve them to support education delivery and research activity.

This includes the £35m Institute of Biomedical Research, the £11.8m Wolfson Centre for Medical Education, and a prosectorium facility for anatomy teaching incorporating 10 ventilated tables and high tech AV teaching aids.

Other investments include the refurbishment of the Medical School building foyer and Barnes library and more recently the Med Café, providing impressive visitor and student services facilities. Research technology developments include the state-of-the-art ATF which includes a purpose built HTA-compliant biorepository (HBRC) and a Cell and Gene Therapy Pharmacy, which is directly connected to our [NIHR/Wellcome Trust Clinical Research Facility \(CRF\)](#). The College also has a Health Research Bus; a mobile clinical research facility funded via Birmingham Science City. This was the first of its kind and a great development for clinical research in the College.

The £24m [Institute of Translational Medicine](#) (ITM) opened in 2015 adjacent to the University and QEHB. This investment (co-funded by the Department for Business, Innovation & Skills (BIS) and BHP) is an innovative development bringing together world class clinicians, scientists and clinical trials teams to accelerate access to new diagnostics, drugs and medical devices and enable patients to benefit more rapidly from breakthrough therapies and technologies. It incorporates our Centre for Rare Diseases, a Bioengineering Centre, an early-phase trial unit and commercial hub to host pharmaceutical companies and SMEs. It is expected to generate 600 new jobs in the first five years.

The [Biomedical Innovation Hub](#) opened in early 2015 on campus within the Birmingham Research Park. This new £6.8m facility, offers fully serviced laboratory and office space for growing Life Sciences businesses. Just 500 metres from the ITM, it will support a growing portfolio of medical spin-out companies from the University; deliver a further 35 new businesses and more than 500 new technology jobs.

Early 2016 saw the opening of the new £50m [Birmingham Dental Hospital and School of Dentistry](#). The hospital and school, at Pebble Mill, is the first integrated, stand-alone dental hospital and dental school to be built in the UK for almost 40 years and will be fantastic opportunity for our Dentistry staff and students to learn and practice.

Finally, we look forward to the opening of the Birmingham City Council's Life Science Campus adjacent to the University in 2017. The Life Sciences Campus will become the principal location nationally for parts of the Life Sciences sector providing a basis for growth bringing high value jobs to the city. It will provide a world class environment for business to start up and grow, as well as those which are expanding or wishing to relocate. The space will be suitable for research and development, clinical trials, pharmaceutical manufacturing, and regional headquarters, providing opportunities for export rich growth and employment.

These outstanding facilities and partnership working, combined with multi-disciplinary academic excellence across the University and a diverse regional population of over five million provide Birmingham with an outstanding opportunity to occupy a world-leading position in the rapidly evolving Life Sciences sector.

To find out more about our research, education and outstanding facilities, please visit our website: www.birmingham.ac.uk/mds