UNIVERSITY OF BIRMINGHAM

College of Medical and Dental Sciences

Closing date: 17 August 2016
Job reference: 36126

Chair in Biomolecular NMR

The University

The University of Birmingham is one of the largest civic universities in the UK with over 7,000 staff and 32,000 students. Our research, education, worldwide reach and reputation, combined with our purposeful, pragmatic and pioneering approach, are making us the standard against which others are measured. Our heritage as the original 'redbrick', is combined with one of the most compelling and ambitious agendas in higher education. Quite simply, at Birmingham we are making important things happen. Home to world-class researchers, whose work in everything makes a real difference to people's lives, from developing next generation engine technologies to spreading better understanding of poverty, mental health, and religious behaviour in the modern age, we provide innovative solutions to big problems. We think, recruit and compete worldwide.

Being named University of the Year for Graduate Employment in The Times and The Sunday Times Good University Guide 2015-16 places Birmingham as the UK's number one university for securing a graduate-level job and comes just two years after being named University of the Year in 2013-14. These coveted accolades recognise a transformative time in our history characterised by our bold, ambitious strategy and innovative approach to the challenges facing the sector. The University is a pioneer in sector-leading initiatives, including our 'Birmingham Fellows' programme, which has so far seen around 70 of the world's best early career academics join us; and the much-emulated unconditional offers strategy for exceptional students. We have a clear vision for the future, ambitious leadership, world-leading academic strengths and a secure financial base. With an annual turnover of more than £520 million, we use our financial strength to invest in the intellectual and physical future of the University. Judicious planning has enabled us to embark on a £500 million capital development programme including a new library, a major sports centre, outstanding new student accommodation and a state-of-the-art student services hub.

The spirit of innovation which is a key feature of the University's history continues today, exemplified by the new University of Birmingham School; providing an outstanding academic education for the city's young people and serving as a centre of teacher education in the region.

Birmingham is a leading member of the Russell Group and a founder member of the Universitas 21 global network of research universities (www.universitas21.com) of which our Vice-Chancellor is the current Chair.

The University's Strategic Framework – Making Important Things Happen builds on the aims and achievements of the last five years and sets out our ambition to 2020.
www.birmingham.ac.uk/strategy2020

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Exceptional Research

At the University of Birmingham we have created a research environment in which academic rigour, innovation and delivery are made possible by brilliant people, outstanding facilities and strong collaborative networks. The University is one of the UK's most successful institutions in terms of attracting research funding. We have a portfolio of over 2600 live projects with an award value to the University of £594 million.

More than 81 per cent of all research carried out at Birmingham is rated as internationally excellent or world-leading, according to the latest UK-wide research quality survey (REF 2014). The results also showed that 87 per cent of our research activity has a global impact, confirming our position among the world's top universities for research in a broad range of areas, from History and Education to Chemical Engineering and Psychology.

The University's arts and humanities researchers are among the very best in the UK, highlighting our world-class research programme. Philosophy, History, Classics, Theology and Religion, and West African Studies are amongst the top ranked departments in the country and recognised for bringing significant benefits to society.

In the Physical Sciences we boast outstanding academic and research credentials, including in Chemical Engineering, in which we were recognised with a Queen's Anniversary Prize in the Jubilee year, and in Physics, where we have just received investment of £80 million to develop Quantum Technologies. Our substantive links with industry include receiving a £60 million investment from Rolls-Royce and the Higher Education Funding Council for England (HEFCE) for the world-leading High Temperature Research Centre.

In Medicine the University has a long established record in pioneering work, combining cutting edge laboratory work, clinical expertise and first-class surgical facilities all housed in one vast life sciences campus. This tradition continues today in the form of the Institute of Translational Medicine due to open later this year.

In the Social Sciences we have developed a broad range of initiatives, focused on enhancing, supporting and developing public sector services across the city and nationally. The Public Service Academy (PSA) brings together the University's teaching, research, consultancy and knowledge transfer expertise in public services with a focus on key themes including cohesion, health and wellbeing and localisation.

Our research helps to shape the national political agenda too. The ground-breaking Birmingham Policy Commissions bring together key figures from the public, private and third sectors with our academics to generate new thinking on contemporary issues of global, national and civic concern. Commissions to date have included reports on the shape and nature of local public services in a 'big society', the future of nuclear energy in the UK, the security impact of drones and an investigation into doing cold energy smarter.

Our research strength is founded on an established and developing network of collaborations including a signature collaboration with the University of Nottingham, important relationships with partners in the university, health and public sectors, close links with companies such as Rolls-Royce and a global network of partnerships in Europe, Brazil, China, India and the US.

The University of Birmingham's award winning reputation campaign Birmingham Heroes: Research that matters communicates our areas of excellence and highlights our leading academics can be viewed here www.birmingham.ac.uk/heroes

Over the past five years we have delivered a programme of major academic investments and established signature collaborations at home and overseas. Our goal now is to do more and better research, tackling the great challenges facing the world.

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Outstanding Students

At Birmingham we support our exceptional and ambitious students to become independent problem solvers and natural leaders, enthusiastic about knowledge and learning and able to get things done. Our graduates are in demand across the world. As a result we attract students with the finest academic credentials and year on year applications for our undergraduate places are growing rapidly and more impressively than they are nationally or for comparable universities. This year we will welcome approximately 8,000 undergraduate and postgraduate students. We are committed to delivering a first-class experience for our students in every aspect of their university life. This is also why the University was ranked in the Top 20 of the Times Higher Education Student Experience Survey 2015 and 18th out of 123 UK universities in The Complete University Guide for 2016 and in The Guardian University Guide 2016. These latest league table results further strengthen Birmingham's position as a Top 20 university and reflect our recent performance in other highly-regarded league tables, such as The Times and Sunday Times Good University Guide 2016, which ranked the University in 17th place overall.

Global Outlook

Rated 76th in the QS World University Rankings 2015-16, the University has a significant international presence. The breadth of our research in China, and particularly in the Guangzhou region, is testament to the success of our collaboration with the local government and universities there. In Brazil, the Universities of Birmingham and Nottingham are working together in a unique collaboration to develop a network of strategic partnerships with Brazilian universities, as well as the oil and gas industry. In North America, the University has a major collaboration with the University of Illinois at Urbana Champaign underpinned by a flourishing network of faculty-faculty relationships. Our partnerships in India continue to develop and have been strengthened by our Chancellor,
Indian-born entrepreneur and Cross-Bench Peer Lord Bilimoria of Chelsea. We also have partnership agreements with many of the world's leading universities; an office in New Delhi and a presence in Brussels. More information about our strategic global engagements and international research focus can be found on our website (www.birmingham.ac.uk/International/global-engagement/index.aspx)

Cultural Assets

The University's many cultural assets take in the Shakespeare Institute at Stratford-upon-Avon, which has direct working links with the Royal Shakespeare Company; the Ironbridge Institute in Shropshire, and the Barber Institute of Fine Arts - our own art gallery that houses works by many of the greatest artists in the western tradition. The Edgbaston campus also includes Winterbourne House and Garden, a unique Edwardian heritage attraction that is home to more than 6,000 plant species from around the world. Our cultural profile was significantly enhanced with the opening of the Bramall Music Building in 2013. This houses the Elgar Concert Hall, named after our first Professor of Music, Sir Edward Elgar, and is a striking venue that complements our global reputation in music, attracting some of the most talented musicians from across the world to study here.

Sport

Sport is integral to life at Birmingham and we are ranked third in the UK for the quality of student sport. Our new sports development, also due to open early next year, will include the city of Birmingham's first 50-metre swimming pool – an asset not only for our students and staff but for the wider community.

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Future Investment

Our plans for the future are underpinned by long-established financial probity. We contribute more than £1 billion a year to our region's economy. Our surpluses and substantial philanthropic support are re-invested into the intellectual and physical fabric of the institution, enabling us to plan with confidence for the future and to continue to invest in the facilities and services that are required for high-quality research, and an outstanding student learning experience.

Led by our Vice-Chancellor, Professor Sir David Eastwood, the University is structured for swift decision-making, enabling us to capitalise on our academic range and financial strength as well as the opportunities that emerge in the fast-changing global HE environment.

The City of Birmingham

Birmingham is the UK's second city and a major European centre as well as being the only place in the UK listed in the Rough Guide's Top 10 places in the world to visit in 2015. It is a city of historical interest and contemporary vision and has a rich and diverse community that creates a vibrant, multicultural and exciting place to live and work. In the recent Sunday Times/Zoopla report 'Best Places to live in Britain' three areas of Birmingham, Harborne, the Jewellery Quarter and Moseley all made the top 50 best places to live in Britain with Moseley being voted the overall winner.

It is home to the internationally renowned Birmingham Royal Ballet and one of the world's greatest concert venues, the Symphony Hall. The City Museum and Art Gallery houses the world's finest collection of Pre-Raphaelite paintings, alongside a major collection of Old Masters, Modern and Contemporary pictures, while the iconic Bullring is one of the largest dedicated shopping facilities in Europe. Sports and recreation are also well served; the city offers international Test cricket, top-flight football, international championship golf and top-class rugby. As a multicultural city, Birmingham is also renowned for the breadth of its cuisine and has more Michelin starred restaurants than any other English city outside London.

Birmingham is within an hour's drive of Stratford-upon-Avon and the Cotswolds, and little over an hour from Oxford. From Birmingham International Airport, more than 50 different airlines operate scheduled services to 100 destinations worldwide. The University has its own dedicated railway station, while 50 million passengers a year use Birmingham New Street Station, which will be at the centre of the proposed high-speed rail network. London is 80 minutes away by shuttle service, with trains every 20 minutes.

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The College of Medical and Dental Sciences

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.

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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).

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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).

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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*** is another rapidly-developing area, drawing on longstanding strengths in endocrinology and reproductive health as well as metabolomics to create an integrated translational environment. As well as a key role in the MRC-ARUK Centre for Musculoskeletal Ageing Research, excellence in rare disease is recognised through our leadership of the UK paediatrics theme in the NIHR Office for Clinical Research Infrastructure (NOCRI) Translational Research Collaboration 'Rare Diseases'. This Institute also provides much of the academic drive for our NIHR-Wellcome Trust Clinical Research Facility, with facilities both at University Hospitals Birmingham and Birmingham Children's Hospital, and recipient of the largest national NIHR award in the last round of funding.

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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 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.

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.

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 will also see the opening of a 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**

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Job outline

Full-time
Duration of post – Tenured
Post is open to internal and external candidates
Grade – Professorial
Salary – To be negotiated

Informal Enquiries – Informal enquiries can be made to the Professor Malcolm Taylor, Director of Institute on 0121 414 4471 or email **a.m.r.taylor@bham.ac.uk**

The appointment

We wish to appoint an academic leader to the Chair in Biomolecular NMR. The appointee, as Director of the HWB-NMR facility, will contribute to the continued development and success of the facility at the University of Birmingham and will in particular bring an international reputation in research and leadership in structural biology. The appointee will be able to develop his/her own research programme within this state-of-the-art facility and the Institute of Cancer & Genomic Sciences. The post holder will have access to other excellent facilities at the University of Birmingham.

The successful candidate will be a leader in the application of biomolecular NMR to structural biology (or have the potential to be), with an excellent track record in research, publishing in high quality international peer-reviewed journals, and will have proven success in securing substantial grant income. Research interests focussing on the use of NMR in biomedical research, and exploiting the substantial high-resolution NMR infrastructure available at HWB-NMR, will be favourably considered. The applicant will have a clear vision for the future direction of HWB-NMR and, as Director of a national facility, show a keen interest in engaging with the NMR community in both the UK and Europe, contributing to policy-making, strategy-building and consultation processes. Following appointment, the successful applicant would be required to engage with the Wellcome Trust as soon as possible, in order to submit a preliminary application for renewal of the Biomedical Resources grant that funds open access to the 900 MHz NMR spectrometer, by the next call deadline (anticipated to be November 2016).

Established as a national facility for biomedical research in 2004 by the Wellcome Trust and the Higher Education Funding Council for England, the purpose-built, RIBA-commended Henry Wellcome Building for Biomolecular NMR Spectroscopy (HWB-NMR) offers open access to six high-field solution state NMR spectrometers (500-900 MHz), with the aim of supporting internationally competitive research throughout the UK in fields such as structural biology, signal transduction, membrane trafficking, cancer mechanisms, drug discovery and metabolic profiling of human disease. The facility has its own dedicated wet-lab for NMR sample preparation, and provides terabyte data storage/backup and access to a network of locally-hosted Linux workstations (linked by gigabit ethernet), as well as access to a central high-performance >1000 core Linux computing cluster.

The HWB-NMR facility is currently part of the Institute of Cancer & Genomic Sciences, a large School within the College of Medical & Dental Sciences, but has a wider cross-campus significance for the recently developed University of Birmingham Life Sciences Strategy (LSS) that identifies the priorities for the University as an outstanding, distinctive centre for Life Sciences research and education. The LSS will help to deliver the ambition to establish Birmingham as one of the UK's pre-eminent locations for the Life Sciences sector.

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Main responsibilities

Research

The University would wish to appoint a researcher with appropriate academic stature and profile.

It is anticipated that the appointee would show evidence of successful leadership of a multidisciplinary research group.

In addition, appropriate academic profile nationally and internationally would be expected - as evidenced by committee membership, journal editorship, speaking invitations and speciality working groups, etc - in national/international bodies.

The primary responsibility of the appointee will be to establish, develop and sustain a research programme of excellence.

The post holder will:

- Develop collaborations across the breadth of academic colleagues. These collaborations are likely to involve colleagues from across the College and extend to cross-College collaborations. Such networks will provide strong platforms for research applications to the Research Councils.
- Bring their own programme of research, which will make important contributions to the research activity of the Institute of Cancer & Genomic Sciences.
- Provide high-level expertise and leadership in research.
- Establish, develop and sustain competitive, externally-funded research programmes.
- Produce high quality original research and publications.

Teaching

Contributions to the core teaching activities of the College will be anticipated to include the MBChB and BSc Medical Science undergraduate programmes. Senior academic staff also typically contribute to graduate teaching, especially through supervision of graduate research students.

Enabling and Management

The post holder will have:
- An international reputation in research, evidenced by publications in high quality journals and research income,
- An ongoing commitment to producing high quality research outputs,
- A postgraduate qualification in academic research,
- Excellent communication skills,
- An ability to motivate and provide research leadership,
- Significant experience in leading research projects and programmes,
- An international reputation as an outstanding scholar,
- Academic leadership qualities.

The post holder will also be:
- Capable of building strong and effective professional relationships with colleagues,
- Able to gain confidence and trust from others,
- Able to respond to and cope with change,
- Demonstrate honesty and integrity.

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The candidate profile

The applicant must be committed to academic structural biology as a research discipline and to the training of undergraduates and postgraduates. The successful candidate will have an excellent track record in research, as well as prior experience of managing an NMR facility to a high standard in an open, friendly and inclusive manner.

The applicant will need to demonstrate a clear vision of the direction of his/her future academic work and the leadership qualities required to build and sustain an internationally competitive research programme. A track record of obtaining research funding from national or international agencies is required. As well as having an existing academic profile nationally/internationally, the quality of research plans will be the over-riding criterion in determining the choice of appointee, an important factor being the potential for the applicant to enhance the Institute's research strengths and the international profile of HWB-NMR. To this end the applicant should have a clear understanding of how he/she might interact and forge collaborations, both nationally and internationally that will exploit the excellent environment for multidisciplinary research that exists in Birmingham.

Person specification

Education
- Higher Degree

Research Experience
- International reputation in research relevant to structural biology, using high resolution NMR spectroscopy
- Academic profile nationally and internationally, with the potential for (or ongoing) research collaborations.
- Experience in collaborative research projects
- Proven success in research leadership
- Significant success in raising research funding
- Successful supervision of research students, particularly PhD students, through to timely completion
- Experience on journal editorial boards and/or grant awarding bodies

Teaching Experience
- Evidence of experience in undergraduate and postgraduate teaching

Skills and Knowledge
- Specialist knowledge of structural biology-related research.
- Expertise in NMR method development, desirable
- Excellent communication skills
- Experience running an NMR facility
- Experience of application and development of techniques in the field of NMR, beyond structural biology, desirable
- Interdisciplinary expertise

Chair in Biomolecular NMR

Personal Attributes

- An academic leader
- Excellent interpersonal skills
- Ability to work in a multidisciplinary team
- Capable of building strong and effective professional relationships with colleagues
- Gains confidence and trust from others
- Able to respond to and cope with change
- Demonstrates honesty and integrity
- Demonstrated leadership skills
- An interest and enthusiasm for teaching and an openness to develop new teaching approaches
- Experience working in a cross-disciplinary environment

How to apply

Applicants are invited to submit their application online to us. Further information is available via **www.hr.bham.ac.uk/jobs**, reference 36126.