Senior Research Technician

Department of Psychology (York Neuroimaging Centre)

Closing date: 24 July 2018

Interview date: To be held late August/early September

Vacancy reference: 6836
INTRODUCTION

York Neuroimaging Centre (YNC) is a state-of-the-art facility at the University of York that provides researchers access to techniques to assess the structure, function and chemistry of the human brain. YNC also supports educational programmes, run by the Department of Psychology, that rely on the use of neuroimaging. The role we seek to fill of Staff Scientist is to provide technical support for the centre and users of it. The key responsibilities of this role are: To lead implementation of technical infrastructure to support the day-to-day organisation and operation of the research and teaching facilities at York Neuroimaging Centre; to provide guidance, training and theoretical/scientific/ technical support to project students, postgraduates, academics and research staff within and external to the University. To meet these responsibilities we seek an individual with scientific training to at least Masters level or equivalent, knowledge of neuroimaging and how to support it and keep it up-to-date. It is desirable for the role holder to have knowledge and experience of operating neuroimaging equipment and computer programming. The role holder would also be expected to provide training to others and be able to support research, teaching and clinical use of YNC.
Main purpose of the role
To lead implementation of technical infrastructure to support the day-to-day operation of the research and teaching facilities at York Neuroimaging Centre; to provide guidance, training and theoretical/technical support to project students, postgraduates, academics and research staff within and external to the University.

Key responsibilities
(Role holders will be required to undertake some or all of the duties below)

- Undertake experimental work as required, and manage work with limited input from principal investigators (PIs) and/or supervisors.
- Undertake and/or collaborate in the development and implementation of innovative and novel techniques; design and conduct experiments or methods to test hypotheses/theories, synthesise results and communicate findings.
- Provide technical and scientific training, guidance and support to undergraduate and postgraduate students, project students, project team members, postgraduates and academic/industrial collaborators.
- Support the Manager of Imaging Services with the day-to-day operation and housekeeping of the centre, associated machines and equipment; ensure compliance with laboratory health & safety procedures and best practice.
- Be responsible for the maintenance and operation of complex laboratory machines and equipment, and provide operational training, instruction and supervision to students and researchers both within and external to the University.
- Ensure that legislative and regulatory safety testing of all laboratory apparatus and equipment is carried out and relevant documentation is completed.
- Supervise and train laboratory technicians.
- Maintain data sets in an appropriate manner to ensure data integrity and accessibility; present research findings at review meetings, and take part in debates and discussions to inform on scientific aspects of the research projects.
- Maintain up-to-date knowledge of the field; investigate and propose additions and improvements to services; help keep the laboratory up-to-date with best working practices and new scientific protocols.
- Contribute to the management and preparation of patients during clinical scanning sessions.

JOB DESCRIPTION

At a glance
Salary: Grade 6 / £31,604—£38,832 a year
Hours of work: Full time / 37 hours a week
Contract type: Open Contract
Based at: Heslington Campus West

Supervision to students and researchers both within and external to the University.

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# PERSON SPECIFICATION

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>A Masters or equivalent degree in a relevant science subject</td>
<td>Essential</td>
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<td>Phd in a relevant field</td>
<td>Desirable</td>
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## Knowledge

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<tr>
<td>Specific knowledge of the operation of neuroimaging facilities; awareness of health and safety issues</td>
<td>Essential</td>
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<td>Thorough, up-to-date theoretical and practical knowledge of the designated techniques associated with the centre</td>
<td>Essential</td>
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<td>Knowledge of the interaction between academia and research-led industrial companies</td>
<td>Essential</td>
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<td>Knowledge and understanding of scientific research methodology</td>
<td>Essential</td>
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<td>Knowledge of up-to-date design, acquisition and analysis techniques in neuroimaging</td>
<td>Essential</td>
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<td>Knowledge of at least one relevant programming languages (e.g. Python, MATLAB)</td>
<td>Essential</td>
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## Skills, abilities and competencies

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<td>Proven track record in the application of the advanced technical skills associated with neuroimaging research</td>
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<td>Proven ability to work independently and creatively, using problem solving and analytical skills</td>
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<td>Excellent Computer skills over a wide range of appropriate software</td>
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<td>A high standard of written and verbal communication skills in English</td>
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<td>Excellent time-management skills; ability to prioritise own work in response to deadlines</td>
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<td>Ability to present complex ideas in a clear and concise manner and communicate with a wide range of people, such as colleagues, students and non-scientists</td>
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<td>Proactive in determining customer requirements</td>
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<td>Ability to programme in at least one of Python or MATLAB</td>
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<td>Ability to develop policy and training documentation</td>
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## PERSON SPECIFICATION

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<td>Relevant laboratory research experience in an applied research group</td>
<td>Essential</td>
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<td>Experience of working within an academic research environment</td>
<td>Essential</td>
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<td>Experience of training others (eg, students) in laboratory techniques</td>
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<td>Running projects and working within allocated resources</td>
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<td>Experience of disseminating technical knowledge</td>
<td>Essential</td>
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<td>Experience of liaising with instrument manufacturers and instrument maintenance contractors</td>
<td>Desirable</td>
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<td>Experience of handling cryogens</td>
<td>Desirable</td>
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<td>Experience of operating MRI, MEG, EEG or TMS scanners</td>
<td>Desirable</td>
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<td>Experience of implementing algorithms for neuroimaging analysis in at least one of Python or MATLAB</td>
<td>Desirable</td>
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### Personal attributes

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<tr>
<td>Highly self-motivated; willing to learn new techniques and keep abreast of developments in own field</td>
<td>Essential</td>
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<td>Flexible attitude towards work (tasks and hours will depend on the workload of the centre)</td>
<td>Essential</td>
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<td>Disciplined with regard to confidentiality and security at all times</td>
<td>Essential</td>
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The University of York is a member of the Russell Group of research-intensive universities. The York Neuro-imaging Centre (YNiC), where this post is based, is part of the University's Department of Psychology reflecting the pivotal role of sensory and cognitive neuroscience in contemporary experimental psychology. YNiC was established in 2004 with funding from the Wolfson Foundation and the SRIF initiative. In addition to a Director and Deputy Director who are faculty of the Department of Psychology, YNiC has seven staff who conduct and support research and who provide a service to patients who are referred for clinical assessment. YNiC houses a TMS laboratory alongside MRI and MEG facilities with two, 3T MRI scanners, installed in 2005 and 2016, and a 4D whole-head MEG system with 288 channels.

The Department of Psychology wishes to enhance its provision for neuroimaging by investing in a post that will manage the imaging facilities and services provided by YNiC. The successful applicant will join an ambitious team at YNiC that provide excellent research and clinical imaging.

The Department of Psychology

The Department of Psychology is leading research being ranked 4th in the most recent Research Excellence Framework. It has international strengths in Cognition, Communication, Child Development, Language, Auditory and Visual Perception, and Experimental Social Psychology. Staff in each of these areas conduct some or all of their research at YNiC. Their work is supported by grants from BBSRC, MRC, ESRC, ERC, the EC, the Wellcome Trust, the Wolfson Foundation, the Leverhulme Foundation, the Waterloo Foundation, the Templeton Foundation, and the Stroke Association. Details of the staff and their research interests can be found at www.york.ac.uk/depts/psych/. The Department has an outward looking perspective that allows it to leverage collaborations such as the one with the Department of Chemistry described here and others with national and international reach.

The Department includes 50 faculty and teaching fellows and 25 support staff. It supports approximately 600 undergraduates, 100 masters students, 40 PhD students, and 25 post-doctoral fellows. The Department offers two undergraduate programmes (a 3-year BSc and a 4-year MPsych), four taught masters programmes, and a master-of-research programme. YNiC has shaped these programmes insofar as one of the three specialised pathways in the MPsych is in Cognitive Neuroscience and two of the taught masters programmes (MSc in Cognitive Neuroscience and MSc in Developmental Cognitive Neuroscience) address the interests of students in sensory and cognitive neuroscience.

The Department’s achievements in research and teaching are
THE DEPARTMENT


Athena SWAN

The Department of Psychology is committed to a policy of ensuring that all members of staff achieve their full potential in a supportive and responsive work environment. It has enthusiastically adopted the Athena SWAN charter of good employment practice for women working in science, technology, engineering, mathematics, and medicine. In 2007 the Department was awarded the first Athena SWAN Silver Award for a psychology department, in recognition of its commitment to supporting women in science. The award was renewed in 2011 and 2016.
Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2018 it is the home of more than 17,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world’s leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and are ranked 16th in the Times & Sunday Times league table (2017). The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding 12 awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we’ve worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.
The City of York

Internationally acclaimed for its rich heritage and historic architecture, York’s bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford’s Tower and the Shambles - just a few of the many attractions.

But York isn’t just a great place to visit - it's also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit www.visityork.org for more information on the city of York

Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

Great location

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online

- Go to https://jobs.york.ac.uk
- Find this job using reference 6836
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 23 July 2018

What will I need?

We will ask you for details of:

- your employment history
- relevant qualifications
- two referees

You need to be ready to show us how you meet the requirements of the job, either in a written statement and / or by answering questions.

Help and assistance

Direct any informal queries to Prof Tony Morland (antony.morland@york.ac.uk, tel. 01904 32 2860) and Dr Andre Gouws (andre.gouws@york.ac.uk, tel. 1904 43 5327)

If you have any questions about your application, contact the HR Services team:

recruitment@york.ac.uk
+44 (0)1904 324835