UNIVERSITY OF BIRMINGHAM

UKMRM Meeting, Oxford - June 2016

HWB·NMR

Henry Wellcome Building for Biomolecular NMR Spectroscopy

www.nmr.bham.ac.uk

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Equipment of interest

****5mm TXO 600 MHz Z-PFG cryogenic probe (with cooled SampleJet)**
for $^{13}C/^{15}N$-optimised & ^{1}H-sensitive direct detection
(cooled ^{1}H, ^{13}C, ^{15}N, ^{2}H preamplifiers)
"proton-less" NMR

5mm QNP 600 MHz Z-PFG cryogenic probe (with cooled SampleJet)
for ^{31}P NMR of DNA/RNA samples;
interactions of membrane proteins with phospholipid bilayer

1.7mm TCI 600 MHz Z-PFG cryogenic probe (with cooled SampleJet)
for mass-limited samples
e.g. metabolomic studies and ligand screening (only 30 µl volume required)

4mm HR-MAS HCD 500 MHz Z-PFG RT probe
for intact biological tissue samples

****5mm TCI 900 MHz Z-PFG cryogenic probe**
for ^{1}H-optimised & $^{13}C/^{15}N$-sensitive direct detection
(cooled ^{1}H, ^{13}C, ^{15}N, ^{2}H preamplifiers)
shaped tube compatible (optimum sensitivity for salty samples, 350 µl volume)

**** Open access Wellcome Trust-funded use (shared use: 70% of available time)**

Access

Availability (academic):

70 % shared access (B900)

~20 % shared access (all other magnets)

Access Modes:

Spectrometer time (hands-on)

Collaborative

Contract research

Cost (academic):

free* – Wellcome Trust-funded 900 & 600 TXO probe

direct costs only – collaborative use

fEC (+ staff help) – all other spectrometers & modes of access

* currently until Dec 2017

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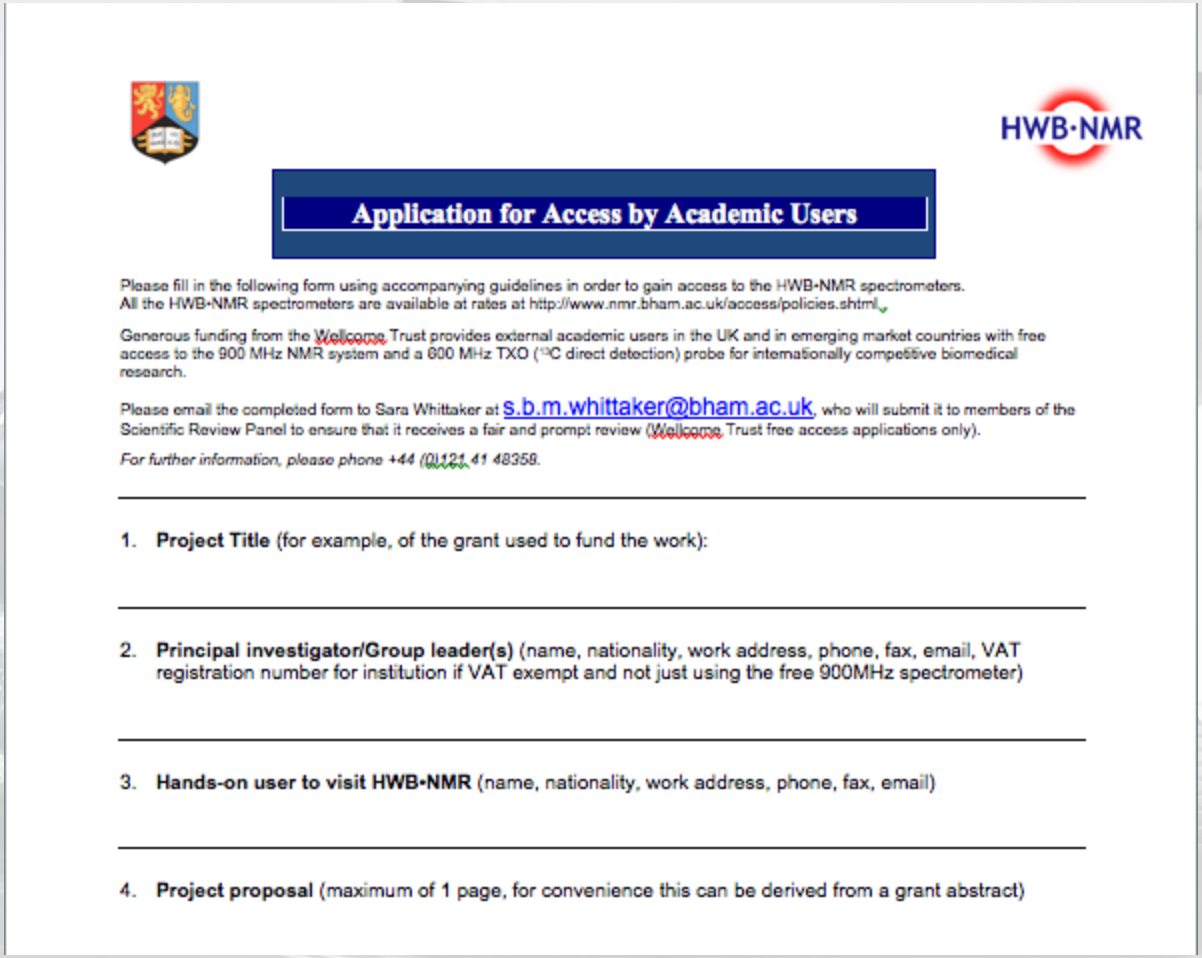
Access Form



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Application for Access by Academic Users

Please fill in the following form using accompanying guidelines in order to gain access to the HWB-NMR spectrometers. All the HWB-NMR spectrometers are available at rates at http://www.nmr.bham.ac.uk/access/policies.shtml

Generous funding from the Wellcome Trust provides external academic users in the UK and in emerging market countries with free access to the 900 MHz NMR system and a 600 MHz TXO (^{13}C direct detection) probe for internationally competitive biomedical research.

Please email the completed form to Sara Whittaker at s.b.m.whittaker@bham.ac.uk, who will submit it to members of the Scientific Review Panel to ensure that it receives a fair and prompt review (Wellcome Trust free access applications only).

For further information, please phone +44 (0)121 41 48358.

1. **Project Title** (for example, of the grant used to fund the work):

2. **Principal investigator/Group leader(s)** (name, nationality, work address, phone, fax, email, VAT registration number for institution if VAT exempt and not just using the free 900MHz spectrometer)

3. **Hands-on user to visit HWB-NMR** (name, nationality, work address, phone, fax, email)

4. **Project proposal** (maximum of 1 page, for convenience this can be derived from a grant abstract)

Access form available at: http://www.birmingham.ac.uk/facilities/nmr/access/apply-for-time.aspx

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NMR systems

Bruker 900 MHz

Varian 800 MHz

Bruker 600 MHz

Bruker 600 MHz

Bruker 500 MHz

Bruker 500 MHz

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Capital Investments funded by: