



## Job description

<b>Post title and post number</b>	MEG Support Officer - 57534
<b>Organisation advertising Description</b>	School of Psychology

### Job summary

The post holder will be required to provide a service (as defined below) in support of researchers in the Centre for Human Brain Health (CHBH), Life and Environmental Sciences at UoB. The core responsibility of the support officer will be to establish and develop the new laboratory. To manage, conduct and administer the day-to-day operation of the MEG, including liaison with users and instrument companies, design and conduct of experiments, development of new methods, maintenance and support of the MEG, supervision and training of new and existing laboratory members on both the MEG and EEG.

### Main duties

- Manage the day-to-day operation and administration of the MEG, EEG and sleep laboratories at the CHBH including customer and instrument company liaison, experimental design, the prioritisation of data collection, and the resolution of conflicts arising from the use of space and equipment.
- Maintain the liquid helium recycling system of the MEG and train other technical staff on how to use it.
- Create, develop and implement quality control protocols for the MEG system and the electronic active shielding system, including sensor tuning.
- Resolve technical problems associated with software, hardware and cryogenics of the MEG system and liaise with the MEG company to solve serious problems.
- Develop and support hardware for the MEG console room and computer systems.
- Develop the peripherals associated with stimulation and recordings in relation to the MEG and EEG systems including eye tracking system, movement tracker, visual delivery systems, analog-to-digital computer interface systems, audio stimulus delivery systems and button boxes.
- Develop the EEG and sleep laboratories to ensure they can be utilised by a broad range of users.
- Provide quality assurance checks of amplifiers, electrodes and other similar pieces of equipment.
- To provide sound advice on hardware (use and care) and software (use and applicability). Software support to include acquisition software and presentation software.

- Provide expert advice on technical problems encountered by staff and students ensuring it is tailored at an appropriate level depending on user knowledge and requirements.
- To create and develop the user base of the EEG, MEG and sleep laboratories by acting proactively as the first point of contact for new internal and external users. This includes developing and implementing training programs to allow users to develop and run projects. This may involve the full range of tasks from paradigm development, implementation, development of peripherals in liaison with other CHBH users and staff as appropriate.
- Ensure the laboratories are fully equipped with the correct
- materials for performing recordings
- Participate proactively in developing the technical infrastructure of the CHBH in collaboration with the research staff to meet the needs of emerging research needs .
- Create, develop and update documentation, user guides and provisions of training appropriate to the laboratories and user requirements.
- Hands on approach to investigate IT and network related issues, resolving problems and referring more complex problems as appropriate.
- Investigate network related issues and computer problems associated with the electrophysiological laboratories, resolving matters and referring more complex problems as appropriate.

## Skills and Experience

- Degree or equivalent in relevant subject area
- Practical experience of applying the relevant skills and knowledge
- Substantive experience in MEG, EEG and associated computer hardware and software including specialist applications such as Matlab, E-Prime, Presentation. A good working knowledge of Linux and Windows.
- Ability to develop and build simple electronic devices
- Training technical and academic staff on the maintenance and use of the MEG system and associated laboratories.
- Ability to work in a fast paced environment and prioritise competing/conflicting demands
- Ability to communicate effectively with both experienced and inexperienced users
- Ability to analyse information with a high level of accuracy and communicate effectively
- Ability to access and organise resources successfully

## Equal Opportunities

The University of Birmingham is an equal opportunities employer and we welcome applications from currently under-represented groups. The School of Psychology has a Bronze Athena SWAN award. It strives to maintain a flexible and supportive environment that enables its staff to flourish.