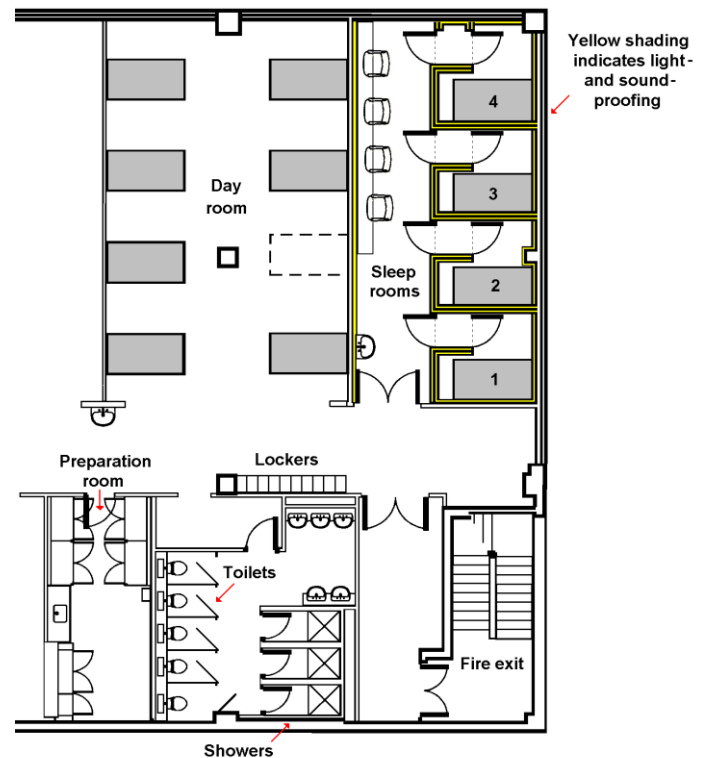


## Sleep studies

We have 2 sleep units, each with 4 bedrooms – some with an en-suite toilet and shower; others (see right) with facilities close by. Other features include:

- high-level sound-proofing, with acoustic boards, acoustic tiles and 10 cm thick fibre insulation;
- no windows;
- an entrance lobby, to maintain sound- and light-proofing when entering the room;
- remote-controlled air-conditioning, and ventilation;
- electrical trunking with separate channels for mains and low-voltage cables;
- shielding of all mains cables, and wooden beds, to prevent electromagnetic interference;
- infra-red light, and video camera;
- controlled light for <5 lux waking environment;
- microphone;
- external port for remote intravenous blood sampling; and
- Embla N7000 polysomnography system (PSG) with: EEG, EOG, ECG and EMG electrodes and leads; and oximeter, respiratory effort, body position, nasal cannula, thermistor and snoring sensors



**Floor plan of our sleep unit and adjacent facilities**



**Embla PSG equipment**

We have 4 acquisition PCs. Each one is protected by an Uninterruptable Power Supply (UPS), and stores data on mirrored RAID hard drives. We copy the data across the network to our file server, which we back up every night. Then we copy it again to a review PC where we process it before copying the final version to external media (eg CD/DVD) or sending it to a sponsor across the internet (eg WWW/FTP).

We validate PSG equipment in accordance with 21 CFR part 11. We have trained staff and links with academic units experienced in sleep research.

We work according to AASM-recommended technical standards, to produce data acceptable for peer-reviewed publication and regulatory approval.

We can:

- assist with study design; and
- provide onsite data analysis for interim results and final reports.

In addition to the sleep unit, we have:

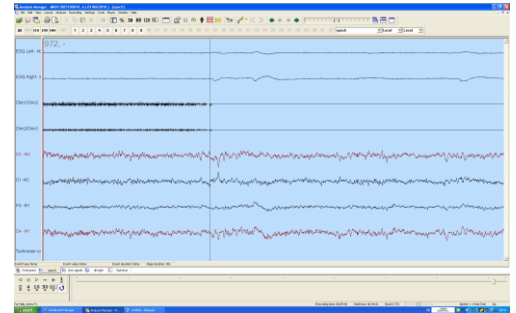
- extensive experience in phase 1 studies of novel CNS compounds, including first-in-man studies;
- extensive experience of other CNS procedures, such as psychomotor tests, coordination tests, and cognitive function;
- MIA(IMP) to manufacture sterile and non-sterile products; and
- MHRA Phase 1 Supplementary Accreditation.

To discuss your needs, please contact:

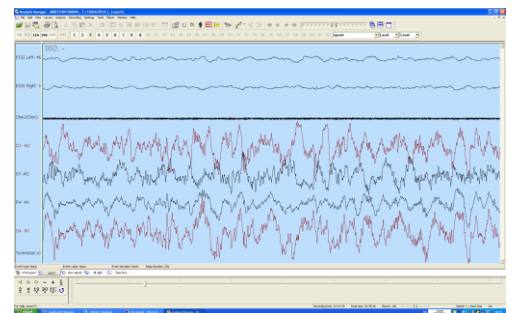
Malcolm Boyce, Medical Director  
[mboyce@hmrlondon.com](mailto:mboyce@hmrlondon.com)

020 8961 4130

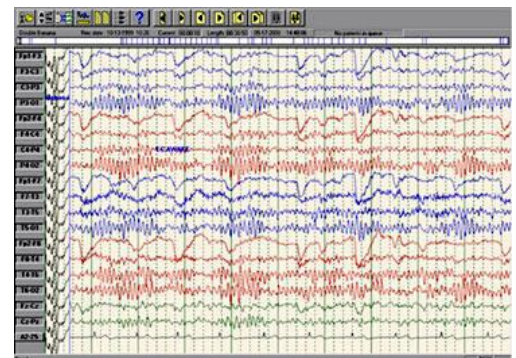
**Hammersmith Medicines Research**  
**Cumberland Avenue**  
**London NW10 7EW UK**



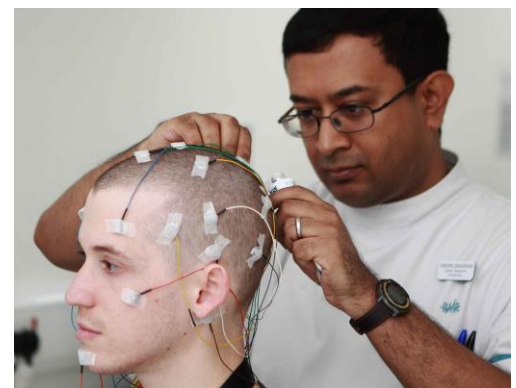
**REM**



**S4 –slow wave-deep sleep**



**EEG recording**



**Electrode placement for PSG**