

# **SINAPSE – The Stirling Story**



#### **SINAPSE**

SINAPSE provides major benefits to researchers interested in neuroimaging in the Department of Psychology at Stirling.

- •The University has no medical school of its own; as a result access to fMRI and PET facilities across Scotland is a significant step forward.
- •SINAPSE also benefits Cognitive Electrophysiology UK (CEUK), a Stirling based national EEG/ERP research group.
- •Stirling has a significant number of PhD students working on neuroimaging projects; the addition of SINAPSE funded students adds to this critical mass.

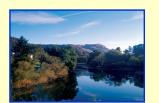
### The University of Stirling



Stirling is a campus University established in 1967.

Built on Airthrey loch (left and below), Stirling is an inspiring setting at the heart of Scotland – an ideal location for network events that require students to get together.





#### What will Stirling offer SINAPSE?

Stirling has a state-of-the art electrophysiology facilities – the Psychological Imaging Laboratory.

The lab includes three 64 channel EEG recording chambers, a suite of data processing and analysis PCs, and dedicated technical support.





The lab supports PhD students investigating topics as diverse as memory, language, individual differences, ageing and genetics.

www.pil.stir.ac.uk

#### SINAPSE FUNDED PROJECTS

**An EEG researcher**: The aim is to develop protocols and procedures that can be used across the network, encouraging interaction between EEG labs, and allowing greater integration with other methods.

PhD studentships: Several students will be working at Stirling, involved in new collaborations with the Dept of Psychology at Aberdeen, and the Dept of Psychiatry at Edinburgh, working on projects associated with the reliability and validity of EEG measures within and across labs, and integrating EEG data with fMRI data.

## **COGNITIVE ELECTROPHYSIOLOGY UK**

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Although the Wallace Monument

known attractions, the University

also has Internationally recognised

expertise in neuroimaging research.

This includes neuropsychological,

(left) is one of Stirling's best

ageing, and EEG research.

CEUK is a network of ERP researchers, funded by an ESRC grant, that meets regularly in Stirling for training and research seminars.

- •SINAPSE provides greater opportunity for collaboration across Scottish ERP researchers, and will ensure that the CEUK network continues to organise events for students and senior researchers.
- •Stirling will provide specialist training in EEG/ERP methods, and aims to contribute to the integration of imaging methods.

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#### **SINAPSE: Neuroimaging @ Stirling**

By measuring brain activity using EEG, it is possible to examine the neural basis of cognitive abilities, including memory and language.

> The figure shows a pattern of brain activity (ERPs) that reflects the encoding of information into memory.

