

An automated test of recognition memory in rodents

Researchers at Durham University seek collaborators to further develop and validate their semi-automated 'continual trials' apparatus for spontaneous object recognition tasks.

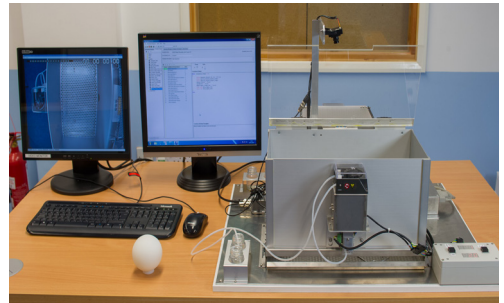
What could the Solution be used for?

The continual trials apparatus enables an animal to complete numerous trials in a single session (rather than the typical single trial) and for multiple trials to be run simultaneously. Combined with a camera and prototype behaviour scoring app, testing sessions can be scored faster than standard methodologies. This technology can be used to determine behavioural phenotypes of rodent models and assess the effects of interventions hypothesised to influence memory function.

Need for collaboration

Partnership is sought with users who can help further develop and validate the apparatus in the following ways:

- Assessing the feasibility of a single experimenter running multiple apparatuses simultaneously
- Maximising the data that can be extracted from the recorded behaviour
- Further validation of the technology in different use settings
- Providing advice and feedback about the behavioural scoring app



3Rs impact assessment

This apparatus makes performance more reliable, reducing by up to half the number of animals required to achieve statistical significance in studies of spontaneous recognition. The researchers have reduced the number of animals used in their research group by approximately 100 animals in the last three years. The apparatus also provides a marked refinement, as animals do not undergo handling between or within trials.

For more information or to contact the Solution provider: <https://crackit.org.uk/developing-automated-test-recognition-memory-rodents>