

Other news from the Team

Arrivals

As you may notice with the photograph shown on the front, our little team has been expanding. Two additional neurologists: Dr Cristian Leyton, from Chile, and Dr James Burrell, from Sydney, joined FRONTIER for their PhD studies this year. Cristian is investigating language presentations in FTD and James is researching cortical excitability in FTD patients. Felicity Leslie (research assistant), Cathy Rienmuller (administrative assistant), Bonnie Lam (Honours student) and Claire O'Callaghan (Master's student) also joined us. Eneida successfully completed her PhD thesis and is now officially Dr Mioshi.

Thanks

Prof John Hodges, Dr Olivier Piguet and their team would like to thank all the participants for their continuing participation in our research projects during this past year. Your time commitment and help with our research is an integral part to our success.



Right: Zoe Hornberger (honorary lab member) supporting the FRONTIER poster presentations in Vienna 2009.



Annual Newsletter

December 2009



FRONTIER team 2009 (left to right)
sitting: Michael Hornberger, David Foxe, Cristian Leyton;
standing: Sharon Savage, Patricia Lillo, Eneida Mioshi, Felicity Leslie, Sharpley Hsieh, Cathy Rienmueller, Sarah Homewood, Emma Schofield;
back row: James Burrell, John Hodges, Olivier Piguet.



Research News

Research Progress

A busy 12 months at FRONTIER has seen our research activities progress in leaps and bounds. We are excited to report having seen 146 new participants this year, including 30 healthy members of the community who kindly volunteered their time to be part of our control group. In addition to all our new participants, it has been our pleasure to invite back some of our participants from 2008 for a 1-year follow up, to investigate changes in emotion processing and memory over time.

MRI scanning recommenced in January after a 6-month interruption. We have managed to catch up with our backlog and have now scanned over 200 participants. These scans allow us to measure various brain structures with great accuracy, measurements that can be related to clinical changes present in frontotemporal dementia (FTD).

The first phase of our research on emotion and cognition in motor neurone disease (MND) is now complete with over 100 families included in this survey to date. The second part of this MND project will include neuropsychological assessment and brain imaging. If you would like to participate in this phase, please do not hesitate to contact Dr. Patricia Lillo on (02) 9399 1636 or via email (p.lillo@powmri.edu.au).

We have also been working on some word retraining using computer-based exercises with patients who have difficulties remembering the names of everyday objects. Results are promising and show that with regular practice, words that have been forgotten can be relearned.

Sharpley started her PhD this year. Her project will be investigating whether the enjoyment of music and memory for tunes changes in FTD. Interestingly,



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the results show that in many instances these abilities are well preserved. Sharpley will be presenting some of her findings at conferences in Mexico and Seattle next year.

Lastly, to update on our study of blood protein levels to see if it can help identify the various subforms of FTD - we have now collected 130 blood samples to investigate changes in proteins in the brain that can be traced in the blood. Two proteins, progranulin and amyloid beta, are promising in differentiating patients with semantic dementia or FTD with motor neuron disease to those with corticobasal degeneration or progressive supranuclear palsy. We are currently investigating another protein called Tar-DNA binding protein that we think will help to separate subgroups further.

Conference Presentations and Other Activities

In 2009, findings from our research projects have been presented at national (Sydney, Melbourne, Gold Coast) and international (Paris, Vienna, Kolkata) scientific meetings. We also organised two meetings for carers of patients with FTD, which were well received.

New Collaborations and New Projects

In 2010, three new research projects will commence, for which we have received funding from the National Health and Medical Research Council and the Australian Research Council. These projects involve new collaborations with A/Prof Kirrie Ballard of Sydney University and Prof Skye McDonald of the University of New South Wales. Other national and international collaborations on research projects with colleagues in Melbourne, the UK and the USA are continuing. Next year will also see the commencement of some carer intervention groups. Stay tuned to hear further about this!

