



Quarterly Newsletter
July 2019

Welcome From Our Chairperson Josephine Gagan

It's June already! It feels like the year has just begun. And yet here we are, with our warm coats and our umbrellas ready to face the weather.

This newsletter gives up-to-date information on the work that we do. So have a read, and if you want to know more click the link provided or contact Mind for Minds.

Best wishes everyone,
Josephine Gagan



Josephine Gagan
Minds for Minds Chairperson

He waka eke noa Better Together 2019 Workshop

Dr Jessie Jacobsen recently presented at the He waka eke noa Better Together 2019 workshop. More than 160 researchers engaged in the Better Start, E Tipu e Rea National Science Challenge met to present and bring together their research results. Jessie presented initial results from the jointly funded Cure Kids/A Better Start National Science Challenge project. This project aims to sequence 300 New Zealanders with autism spectrum disorder while developing methods and protocols for transitioning this approach into the clinic. More information about this National Science Challenge can be found at: <http://www.abetterstart.nz>

Results From Dr Sarah Leadley's Feeding Study

This study evaluated a behavioural intervention model for nine children with tube dependency, conducted in family homes. Four of the children had a diagnosis of autism. Caregivers participated during psychologist-led sessions, and then implemented their child's intervention strategies following training. Seven of nine children achieved sustained improvements in the consumption of varied foods and reductions in tube feeding. By the final 12-month follow-up, six children had ceased tube feeding. Caregivers and health professionals provided strong ratings of satisfaction with treatment goals, procedures, and outcomes. More information can be found [here](#).

Prof. Andrew Whitehouse's Visit



We were honoured to host Professor Andrew Whitehouse in November 2018 for our Minds for Minds ASD research workshop and public seminar jointly organised with the Centre for Brain Research and Autism New Zealand. Andrew is the Angela Wright Bennett Professor of Autism Research at the Telethon Kids Institute and Professor of Autism Research at The University of Western Australia. He is also Chief Research Officer of the Cooperative Research Centre for Living with Autism (Autism CRC) and Adjunct Professor at Curtin University and Edith Cowan University.

Andrew shared results from the large CRC autism initiative in Australia, including their work on very early interventions – with a focus on parent-infant communication skills to create a socially-rich environment. He also discussed ideas about maximising educational and employment opportunities for those on the spectrum. The video of his public presentation can be viewed [here](#).

We also had an informative and very popular Q&A session with Dr Greg Finucane, Dane Dougan, Dr Rosamund Hill, Joanne Dacombe and Liz Fairgray, all of whom kindly contributed their diverse expertise and experiences to the audience.

Genetics Project Update

For those of you who have kindly participated in our genetics research project, rest assured the team has been working hard to analyse all the results. The co-funded Cure Kids/A Better Start National Science Challenge project is one of our key research projects for autism spectrum disorder. Progress of the project is outlined below:

- We have formally consented ~200 families with ASD
- We have developed a custom gene panel, inclusive of all the genes known to contribute to autism
- We have sequenced and analysed 100 families
- We have identified biologically-relevant variants in up to 45 of the 100 participant families, well exceeding our initial estimate
- Some variants are already in the process of being clinically translated and delivered to families
- The results provide evidence that this approach is sensitive (in regards to the breadth of autism genes and genetic variants that can be analysed) and specific (in regards to filtering and identification of putative variants)

Please get in touch with the genetics team if you have any questions relating to this project.

Gut-Related Drug Trial For Autism In Auckland

As recently featured in several NZ newspapers, including the NZ Herald (link to article [here](#)) there is currently a trial related to the gut and ASD taking place in Auckland. For those potentially interested in enrolling their children in the study, contact details for the clinic are provided in the article.

Common Genetic Variants Contribute To Autism Spectrum Disorder: An Important Research Paper For Autism Genetics

Paper title: Identification of common genetic risk variants for autism spectrum disorder.

Published in: Nature Genetics. 2019 Mar;51(3):431-444. doi: 10.1038/s41588-019-0344-8.

Summary: This is an excellent study that makes a significant contribution to our understanding of the underlying genetics and biological pathways contributing to autism spectrum disorder (ASD). Unlike our work that is targeted at identifying single genes and variations directly responsible for the condition in individual families, this study investigated a very large population of Danish people (18,381) with ASD and comparing them with 27,969 controls. They used a methodology that compares the frequency of DNA variations between the ASD and control groups. This method looks for subtle genetic effects or common risk variants that predispose people to ASD. They were successful and found 5 regions in the genome (a person's DNA sequence) that passed the very stringent statistical threshold. These results were then confirmed in another population. These discoveries are valuable as understanding the function of the genes in these five locations can provide more evidence for the root causes of ASD, and are a great starting point on the road to improved clinical management. The researchers went on to test for relationships between ASD and other related conditions, including ADHD, depression and Schizophrenia.

Click [here](#) to read the full paper.

Chapter In The Encyclopedia Of Autism Spectrum Disorders

Minds for Minds researcher Peter Dowrick and collaborator Holly Smith from the University of Canterbury recently had a chapter titled ***New Zealand and Autism*** published in the Encyclopedia of Autism Spectrum Disorders. This chapter explores autism in New Zealand, including prevalence, services (both Government funded and non-profit), interventions, advocacy, and research (including Minds for Minds). Read the chapter [here](#).



Speaking Circuit

Remember, if you would like any one of our scientific team to speak to your group or conference about Minds for Minds and its research, please email us at: info@mindsforminds.org.nz.

