Centre of Research Excellence in Speech and Language

The CRE-SLANG team wish to thank all families and clinicians for your ongoing participation and collaboration. Without your help this important and exciting research could not happen!

Latest News

Genetics of Stuttering Study

On 17th April 2018 our researchers launched the landmark Genetics of Stuttering study. Winner of The Voice Australia 2013 Harrison Craig, who has lived with stuttering since childhood, kindly lent his voice to the campaign. We were very fortunate to have Harrison and study spokesperson Tushar Kumar visit the MCRI for the launch for a jam packed day of media interviews and filming!

Participation in this study involves completing an online survey and providing a saliva samples for DNA analysis. We have been thrilled with the progress to date with over 550 adults and children registering for the study since April. Recruitment is ongoing and we have recently expanded the work to recruit from the United Kingdom and the Netherlands.

Those who wish to volunteer or learn more, can head to the study website here: www.geneticsofstutteringstudy.org.au or email the researchers at geneticsofspeech@mcri.edu.au

2018 Past & Upcoming Events

April 17

Genetics of Stuttering Study Launch

April 28

Walk for Talk (Melb) – Raising awareness for Childhood Apraxia of Speech

July 9

CRE UCL Conference

August 19

Speech Pathology Week

October 26

Australian Speak Easy Association Conference

About Us

The Centre of Research Excellence in Speech and Language is an international collaboration of experts in the fields of speech pathology, paediatric neurology, neuroscience, genetics, and bioinformatics whose core vision is to transform speech pathology practice by identifying, understanding and targeting the underlying causes of developmental speech and language disorders.

Genetics of Speech & Language Disorders study

We have been recruiting children and families where there is a strong family history of speech disorder as well as families where only one child has a striking speech condition.

Children and families have been generously donating their time to allow us to study their speech and language profiles at the Murdoch Children's Research Institute. We have also recently expanded our work to include assessments over Skype so that we are able to reach families living all across Australia and overseas. Many families have provided DNA samples and our genetic statisticians and clinical geneticists are working on solving the genetic puzzle of speech disorder.

Twins study

Postdoctoral research fellow and speech pathologist, Dr. Amanda Brignell, has been leading the twins arm of our research program. Amanda has been busy conducting speech and language assessments with twins and their families to help better understand the causes of developmental speech and language disorders. Recruitment for this study is ongoing and we welcome queries from families of twins who may be interested in taking part. Eligibility criteria for this study is as follows:

- identical and non-identical twin pairs
- aged 5 to 11 years
- one or both twins have a history of speech disorder.

Recent Publications

Early brain development genes implicated in speech disorder

Our team recently collaborated on a paper which identified a set of genes usually expressed in early brain development to be disrupted in some children with childhood apraxia of speech. This work has been published in Molecular Psychiatry and can be found here: https://www.nature.com/articles/s41380-018-0020-x

Speech and language abilities in *NRXN1*

We have also been working to understand the speech and language abilities of children with *NRXN1* gene mutations to help families and clinicians to better support communication skills in this group.
https://onlinelibrary.wiley.com/doi/full/10.1002/ajmg.b.32664

Childhood apraxia of speech – clinical practice update for paediatricians

Together with Dr. Richard Webster, neurologist from the Westmead Children's Hospital in Sydney, we have written a practice update for paediatricians on childhood apraxia of speech to help increase awareness of the clinical features of the condition and to support paediatricians to recognize the disorder and refer children for genetic testing where relevant. See:
https://onlinelibrary.wiley.com/doi/full/10.1111/jpc.14150

Speech and Language – Centre of Research Excellence

Contact Us

Participating families - are your contact details up to date?

If you have changed your email, phone number or address please get in touch with the researchers at:
geneticsofspeech@mcri.edu.au
T: (03) 9936 6334

How to get involved

If you or someone you know has a speech disorder (such as childhood apraxia of speech, stuttering) and may be interested in taking part in our project we would love to hear from you.

Get in touch with the researchers:
E: geneticsofspeech@mcri.edu.au
T: (03) 9936 6334

Walk for Talk – Raising awareness for Childhood Apraxia of Speech

By Gillian Neumann (parent)

The first Walk for Talk took place on 17th April 2018 and we had around 30 people (and almost as many dogs) join in for a lap around the Tan. The highlight for us as a family was seeing so many T-shirts that our son designed; he was incredibly proud of this and was happy to lead the way in his own T-shirt. It turned out to be a pretty lovely day for a walk and it was great to be walking and talking with a community that have shared our journey with CAS thus far and who care so much about these kids. The lack of awareness surrounding CAS motivated this walk to occur and we're hoping to be involved in future awareness walks with MCRI in the future. We'd like to see it grow and become more of a recognised event within the community.

Neurobiology of Speech and Language Disorders: Genetic and MRI Advances Symposium at UCL

On the 9th of July this year, the CRE hosted a one day workshop at the University College London (UCL) Institute of Child Health and Great Ormond Street Children's Hospital with invited international guests Professor Simon Fisher from the Donders Institute for Brain, Cognition and Behaviour, Netherlands; Professor Kate Watkins from Oxford University and Professor Faraneh Vargha-Khadem from UCL invited to speak. A number of our Australian team kindly presented also. The conference was well attended by clinicians from a variety of backgrounds including speech pathologists, neuropsychologists, neurologists and neuroscientists, and served to raise awareness and education around the genetic and brain bases of childhood speech and language disorders.

Arnold Huddart Medal

Congratulations to PhD student Jess Boyce, who was recently awarded the Arnold Huddart Medal at the Craniofacial Society of Great Britain and Ireland Annual Scientific Conference. This award was established in 1990 for the encouragement of original and promising research papers presented at the conference. Jess' research found that school aged children with non-syndromic cleft lip and/or palate had language abilities that were similar to that of their non-cleft peers. These results have positive implications for children with clefts and their families.

Cold Spring Harbour Laboratory (CSHL) Genetics & Neurobiology of Language meeting

Congratulations to post-doctoral fellow and bioinformatician Dr. Victoria Jackson and PhD candidate and speech pathologist Ruth Braden who were awarded prizes (Helmsley Fellowship and Nancy Lurie Marks Family Foundation stipend respectively) to attend the Cold Spring Harbour Laboratory meeting on the 30th July – 5th August this year. Prof. Angela Morgan was invited to speak at this forum. This is a prestigious scientific meeting for genetics because this institution was one of a number of centres who played a central role in the development of molecular genetics and molecular biology. We are pleased that the genetics of speech and language is an area of scientific enquiry supported by the CSHL.