



# Be a part of Autism and Asperger's research!

## Volunteer for our new study: How do people with ASD understand language?

We are a group of researchers at the Child and Family Research Institute at BC Children's Hospital, and the Department of Psychiatry at the University of British Columbia. We need participants to help us understand how people with Autism process language.

### In our study:

- you'll have an interview with us, and you parent(s) will have a separate interview with us
- we'll measure how you read and use everyday language
- you get to have an MRI scan and an EEG session to see which brain areas are active when you read

MRI is a safe way to scan your brain while it is working. MRI uses radio waves and magnetic fields to take different pictures of your brain and its activity as you read.

EEG is also a safe way to measure the electrical activity of your working brain. The electrical activity is detected by wearing a special cap while you read sentences.

### Who can participate?

#### Contact us if you are:

- Male or Female
- Between 14 and 40 years of age
- Left or Right-handed
- Speaking English as your first language and reading at a grade 5 level or above
- Currently living in BC
- Diagnosed with an ASD

Scheduling is flexible, and participants will be provided with an honorarium and reimbursement for travel costs.

**We're happy to answer any questions! Contact us by email ([keith.mclarren@ubc.ca](mailto:keith.mclarren@ubc.ca)) or by phone (604-822-4100).**

Understanding language processing in the brain may help us develop better interventions for kids with Autism Spectrum Disorders (ASDs).

**Help us discover the unique ways in which people with Autism process language!**



## How do people with ASD process language?

The Autism Research Group at the Department of Psychiatry at the University of British Columbia is looking for teenagers and young adults on the autism spectrum to take part in a study of how the brain processes language.

### Who can participate?

To take part you must be male or female, between 14 and 40 years old, live in the province of British Columbia, and have a diagnosis of an autism spectrum disorder. English must also be your first language. If you have any metal dental or surgical work in your body, please let us know before you volunteer. If you have epilepsy, Fragile X or Tuberous Sclerosis, please do not volunteer for this study.

### What is involved?

The study is in three parts:

- 1) On the first day, you will come to the BC Children's Hospital to complete some tests of language and reasoning abilities. Altogether this will take about 3 hours. Separately, your parent will be interviewed about your early developmental milestones and how you are now, and that will also take about 3 hours; this interview can be on a different day.
- 2) On the second day, you will have an interview with a member of the research team, and this will take 45 minutes up to an hour. Then we will have a go at the reading task in a practice MRI scanner for 10 minutes where you can get used to the machine and the tasks. It's really noisy, but most people can do the task anyway without any trouble. You will lie still in the scanner and read and respond to some sentences, or just relax.
- 3) On the final day, you will have some short MRI scans of your brain at the BC Children's Hospital research MRI to see which brain areas are active when you read, and how those areas are connected to each other. MRI uses radio waves and magnetic fields to take pictures of your brain. If you want, you can take a break between scans. The scanner is noisy so you will wear headphones, and if you are upset in any way, we can stop immediately. Altogether, the scans take about 1 hour. After the MRI scans, we will record your brain's reading activity using a different technique called EEG. Brain electrical activity is detected by wearing a special cap. You will read the same sort of sentences as in the MRI scanner. It will take about 20 minutes to carefully place the cap and to check to see that it is working, and then about 20 minutes to read the sentences. There will be a break between the MRI session and the EEG recording, but if you want you can have the EEG on a different day. After that, you are done!

We can reimburse you for your travel and parking expenses to the BC Children's Hospital. If you are interested in taking part, please contact Dr. Keith McLarren by emailing [keith.mclarren@ubc.ca](mailto:keith.mclarren@ubc.ca) or phone 604-822-4100.