# Alberta Health Services

Hospital

## **Research, Innovation & Technology Development**

"Joining State-of-the-Art Research with State-of-the-Art Care"



#### **Recent Publications**

**Kim ES**, \*Suleman S, & Hopper T. (2018). Cognitive effort during a short-term memory (STM) task in individuals with aphasia. *Journal of Neurolinguistics*, 48, 190-198. https:// doi.org/10.1016/ j.jneuroling.2017.12.007.

**Kim ES**, \*Figeys M, Hubbard HI & \*Wilson C. (2018). The impact of aphasia camp participation on quality of life: A primary progressive aphasia (PPA) perspective. *Seminars in Speech and Language, 39*(3), 270-283.

\*ALHarbi M, Armijo-Olivo S, & **Kim ES.** (2017). The current level of evidence for using transcranial direct current stimulation (tDCS) to improve naming ability in poststroke aphasia: A critical review. *Behavioural Brain Research, 332(14)*, 7-15.

**Kim ES**, Rising K. Rapcsak SZ & Beeson PM. (2015). Treatment for alexia with agraphia following left ventral occipito-temporal damage: Strengthening orthographic representations common to reading and spelling. *Journal of Speech, Language, and Hearing Research,* 58, 1521-1537.

### Esther S. Kim, PhD, RSLP

- Associate Professor, Faculty of Medicine & Dentistry, Department of Communication Sciences & Disorders, University of Alberta
- Research Affiliate, Glenrose Rehabilitation Hospital

The ultimate goal of Dr. Kim's research program is to improve the quality of life for individuals affected by acquired language disorders. Research in Dr. Kim's Lab includes studies designed to investigate cognitive mechanisms underlying language processing, developing evidence-based treatments, examining methods for increasing neural plasticity and promoting quality of life through Life Participation Approach for Aphasia (LPAA) based interventions.

Her research uses a combination of behavioural and clinical methods to

examine cognitive (e.g. attention, working memory) and linguistic (e.g. semantic orthographic, phonologic) processing in adults with acquired and progressive language disorders, and health aging populations. Non-invasive brain stimulation techniques, specifically transcranial direct current stimulation (tDCS) - in conjunction with behavioural speech-language treatment to investigate neural plasticity in aphasia is also used.

#### **Inspiration/Vision Statement:**

To understand how cognitive and linguistic factors support language processing, and how to increase treatment-induced neural plasticity, towards the end of rehabilitating those with acquired communication impairments.

### **Clinical Implications of Research:**

Knowledge of cognitive and linguistic processes in normal adults and those with acquired brain injuries aids in the development of treatments to remediate language disorders in individuals with aphasia. Ultimately, investigating the efficacy of these treatments contributes to the evidence-based for clinicians providing services to those affected by acquired language disorders.