The proliferation of axonal fibers during the prenatal period establishes interhemispheric connectivity, and this process is fundamentally altered by early brain injury (Moses et al., 2000). Early injury also alters the degree to which each hemisphere contributes to language processing, with certain patterns of brain activity predicting better language outcome than others (Raja Beharelle, 2010), but to date the contributions of each hemisphere have been investigated without regard to how they interact. In the present study, we relate interhemispheric functional connectivity of frontal, parietal, and temporal brain regions to language outcome following early stroke.

**Results**

- The Corpus Callosum Displays Segment-Specific Atrophy Consistent With the Site of Injury
  - Figure 3: Volume for each CC segment for each person with injury, compared to the group mean of controls. Posterior lesions predominately resulted in atrophy in posterior segments 4 & 5.

**Conclusions**

- The CC shows regional atrophy consistent with injury site, and CC volume predicts receptive language
  - Table 1: People with injury were worse than controls on receptive language and non-verbal IQ, but were close to the normal range on some receptive language measures.

- For STGp, stronger interhemispheric functional connectivity during story comprehension predicts better receptive language in people with injury, but worse language in typical controls
  - Modification to interhemispheric connectivity suggests a mechanism of recovery from early brain injury
  - Table 3 and Figure 5. Table shows results of robust regressions predicting language from interhemispheric connectivity. For injury, lesion size is included in the model. Data reported for CIs that did not cover zero.