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Mentor: Lihsia Chen, Genetics,
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An Analysis of Genetic Suppressors of the GTL-2 TRPM Channel

SAX-7 is the *C. elegans* homologue of the L1 cell adhesion molecule, which is associated with the neurological CRASH syndrome. Previous studies revealed a genetic interaction between *sax-7* and *gtl-2*, which encodes for a TRPM ion channel, the functions of which are not well characterized. To better determine *gtl-2* functions and the *sax-7/gtl-2* interaction, a screen for genetic suppressors of the *sax-7 gtl-2* double mutant animals was performed. This study focuses on a genetic analysis of the three suppressors that were isolated. I determined that these suppressors are dominant extragenic suppressors specific for *gtl-2*. Moreover, they do not appear to be informational suppressors. Currently we are mapping the genetic location of the suppressors via Snip-SNPing with the eventual goal of cloning them. The identity of these suppressors will allow us to better dissect the mechanistic roles of *gtl-2*.



Poster Number: Session: