



Altered Neocortical Rhythmic Activity States in a Mouse Model of Females with Fragile X Syndrome

Aleya Shedd, Biology, Spring 2020

Intellectual Achievement and Research

SUMMARY

AMGEN Scholars Program
UT Southwestern
Summer 2019

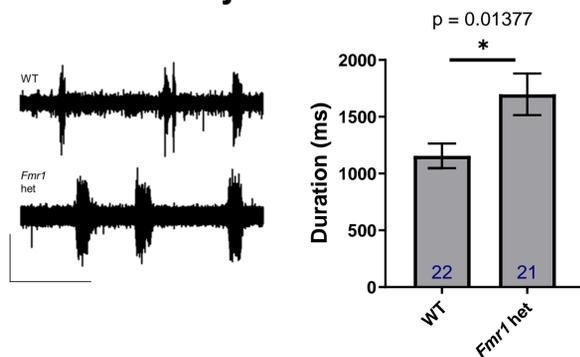
Purpose:

Characterize the phenotype of Female mouse model for Fragile X Syndrome, *Fmr1* heterozygous.

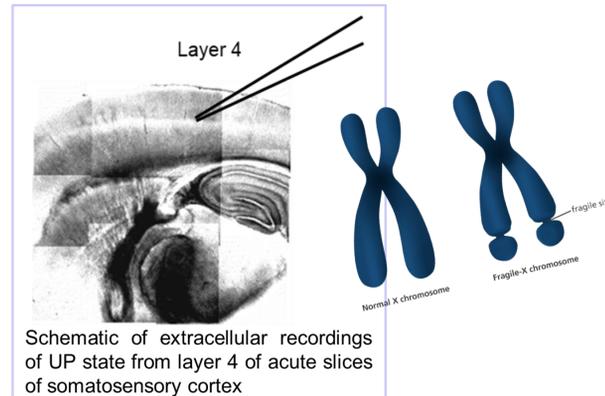
Methods:

Electrophysiologic recordings of UP states in acute brain slices of somatosensory cortex.

Major Results:



Fmr1 heterozygous females have longer duration of UP states than their wildtype littermates



SPICES

Intellectual Achievement and Research:

I was able to complete an independent research project and add information to the body of knowledge

HERBS

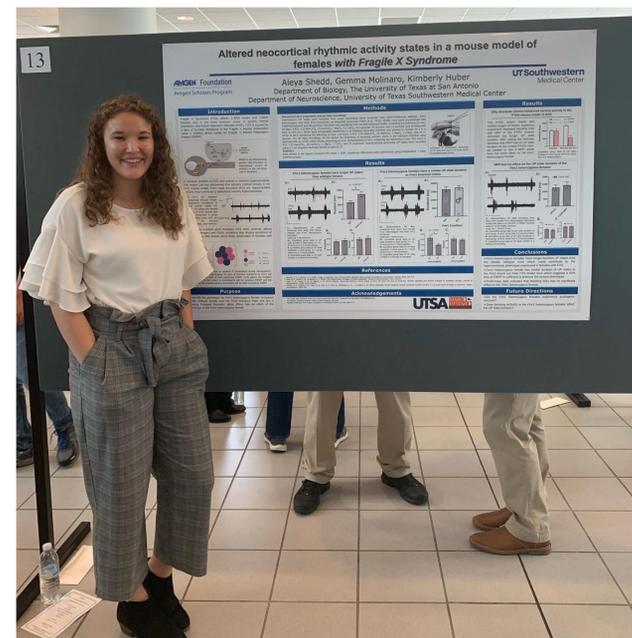
Honorable: To produce accurate results

Resilient: Through mistakes and road bumps

Supportive: Having a system to lean on and learn from

LEARNING OUTCOMES

This experience allowed me to grow my critical thinking, technical, and presentation skills through research. My work led to the development of new knowledge. I am now more prepared to apply for and obtain a PhD and has increased my ability and confidence as a researcher.



IMPACT

This experience allowed me to grow as a scientist and researcher by increasing my confidence and skill set, providing me with leadership development, and networking opportunities. I was able to make my own discovery which could potentially be used in further research and lead to therapeutics for autism.

ADVICE

Work hard and spend as much time in the lab as you can because summer experiences do end. Do your best to make a meaningful connection with people there especially if you intend to apply to that institution in the future.