

Team Number: MELHS42

School Name: Melrose High School

Area of Science: Physiology, Psychology

Project Title: Infant PTSD

Problem:

When traumatic events occur in an infant's life, it can cause drastic changes in the brain which can carry out into their adult life. Both physical harm and neglect will disrupt the normal flow of the brain. The interesting aspect is how these things can stay with the child as they grow into their adult life.

Problem Solution:

Using NetLogo, I plan to model a map of an infant's brain. I want to isolate certain events, map where they occur on the brain, what functions that area of the brain is responsible for, and display how those areas will be effected as the child grows. My map will be color coordinated based on events and the map will be sectioned off to show how complex and high functioning the human brain is. Finally, through immense amounts of research, I hope to achieve an optimal and accurate model of a baby's brain and relay a message of how serious mental and physical disorders can be and how we can hope to prevent them.

Progress to Date:

I have been unable to spend much time on my project to date, but I am sure that now that I'm finished with some of my college level courses at school that I'll have more time to dedicate to the project in the days ahead. I intend to be "caught up" by the time we present to the local judges in the spring.

Expected Results:

The importance of this project is to display how mental and physical disorders can start. According to The American SPCC, 72.9% of child abuse victims die from neglect, and 43.9% die from physical abuse. Those that survive, suffer long term consequences that affect their lives in multiple ways. **Explain how your program will help lower those statistics.**

Citations:

Team Members: Andrea Martin

Teacher: Alan Daugherty