CILI-CURE 2018 Data

Section 1105-31

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**Cell Count Figure**

Figure 1: Mean cells counted in the control and treatment *Tetrahymena* environments. (n=3; p=1.27E-07). The treatment includes microplastics (polypropylene) to see if it would affect the number of cells.

**Optical Density**

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Figure 1: Mean of optical density’s measured through a spectrophotometer on the control and treatment *Tetrahymena* environments. (n=7; p= 0.00201419). This treatment includes the degree to which a refractive medium retards transmitted rays of light.

**Swim Speed**



Figure.1. Polypropylene effects on *Tetrahymena* speed (mm/s). Experimental Group contains 0.5g Polypropylene in a solution containing 5.0g proteose peptone, 5.0g tryptone, 0.2g of K2HPO4, and 0.1L of distilled water. Control Group contains no amount of Polypropylene. (P-Value=1.271e-07, n=60).

**Directional Change**

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Figure 4: Mean of directional changes measured in the control and treatment *Tetrahymena* environments (n=10; p= 0.01517873). This treatment includes the microplastics (polypropylene) to see if it would affect the number of times the *Tetrahymena* would change directions in timed increments.

Figure 5: Mean of time spent spinning measured on the control and treatment *Tetrahymena* environments (n=10; p= 0.025340203). This treatment includes the microplastics (polypropylene) to see if it would affect the amount of time the *Tetrahymena* would spend spinning in the same spot.

**Vacuole Formation Figure**

Figure 5: Mean of vacuoles formed in the control and treatment *Tetrahymena* environments. (n=10; p=0.07). The treatment includes microplastics (polypropylene) to see if it would affect amount of vacuoles formed.