Creating an Electromagnetic Suit to Simulate Gravity and Electromagnetism Effects on Dugesia tigrina

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Can an electromagnetic glove section with an electromagnetic field inhibitor material be created after testing the effects of electromagnetism on planaria? Since astronauts experience bodily atrophy in space, an electromagnetic suit in an electromagnetic corridor can be worn with an inhibitor material to block the harmful effects of electromagnetism in the human body. The engineering goal was to test the effects of electromagnetism on planaria and materials that inhibit the effects of electromagnetism on the planaria as well as creating a complete electromagnetic suit section with an inner lining of the electromagnetic field inhibitor material and applying a computer program to the suit section to simulate the effects of gravity. The planaria were exposed to an environment with a constant electromagnetic field at different heights with and without the inhibitor material. Without the material, the planaria experienced less mobility and other atypical behavior, signaling decreased neurotransmission. Morphological changes included less neoblasts, signaling decreased cell regeneration. These effects decreased when inhibitor material was present. This material was integrated into a glove section with various electromagnets, sensors, and power supplies and put into an electromagnetic corridor section. A computer program controlled glove components. The glove was put through series of calibration and experimental tests. As the glove moved in the electromagnetic corridor, the program used sensor data to change the current flowing through the various glove electromagnets to compensate for the force differentiation. The glove and inhibitor material were successful in blocking the electromagnetic field and also simulating the effects of gravity.

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