

Ηράκλειο 21 Σεπτεμβρίου 2022

ΠΑΡΟΥΣΙΑΣΗ ΔΙΠΛΩΜΑΤΙΚΗΣ ΕΡΓΑΣΙΑΣ

Της φοιτήτριας **Χρυσούλας Μαθιουδάκη**, θα γίνει τη

Παρασκευή 23/09/2022 και ώρα **9:00**

στην αίθουσα Α2 του Κτιρίου Επιστήμης Υπολογιστών

Επιβλέποντες: Ανθή Ρανέλλα και Ιωάννης Ρεμεδιάκης

Θέμα Διπλωματικής:

**«IN VITRO ΜΕΛΕΤΗ ΚΥΤΤΑΡΟΣΥΜΒΑΤΟΤΗΤΑΣ ΥΔΡΟΓΕΛΩΝ
ΒΑΣΙΣΜΕΝΩΝ ΣΕ ΕΞΩΚΥΤΤΑΡΙΑ ΜΗΤΡΑ ΓΙΑ ΝΕΥΡΙΚΗ
ΑΝΑΓΕΝΝΗΣΗ»**

Abstract:

Neurodegeneration after injury or due to neurological diseases could cause devastating consequences as it eventually results in the progressive loss of neural tissues and functions that ultimately leads to death. In recent years, the fields of neural tissue engineering and regenerative medicine have made significant advancements regarding neural stem cell therapies in order to promote neuroregeneration. Neural tissue regeneration and the restoration of the peripheral and especially the central nervous system have been a scientific challenge because of the high complexity of the nervous tissue. The use of biomaterials as scaffolds that could simulate the extracellular environment is proven to be promising. In this study neural stem cells, NE-4C cell line, were cultured on adipose-derived extracellular matrix (ECM) hydrogels. After immunofluorescence staining and observation with fluorescence and confocal microscopy, we studied the cell adhesion, survival, differentiation and generally the interaction of the neural stem cells that were cultured on top of ECM-based hydrogels.