

studies will be presented which will provide perspective in drug discovery and comparative biotherapeutics. This will include the establishment of Scopolamine model of amnesia, Abeta induced animal model of Alzheimer's Disease, PPA model of retinal injury, laser injury model of retinal injury and NMDA induced RGC depletion model followed by their respective validation using modern histopathological and imaging technologies. The data from standardization of lineage negative BMSCs and those derived from Umbilical cord blood would be discussed and variations in routes, doses and types of stem cells in the perspective of their screening and discovery will be brought out by sharing our experience from a Quality Assurance conscious laboratory. Additionally Morris Water Maze and Active Avoidance will be described with the help of videos and the data generated from our lab while working with Indian herb, *Bacopa Monniera*, will be presented to highlight the primacy of behavioral Neuroscience for drug discovery and translation in Neuroscience.

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EFFECT OF INTERFERON- α 2b ON THE ATP'S-ACTIVITY OF MUSCLES

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Interferons (IFN) are peptides that belong to the family of cytokines with pleiotropic effects. They suppress the viral replication, cellular proliferation and activation of the immune system in the body. Receptors for IFN's are expressed on all cells of the body.

These properties cause the widespread use of IFN's in medicine for the therapy of viral infections and malignant neoplasm's. During the application of IFN's there are a number of side effects, which include myalgia. The aim of our study was to determine the influence of recombinant interferon $\alpha 2b$ on adenosinetriphosphate activity of the actin-myosin complex of laboratory mice muscles. At first, we extracted actin-myosin by Ter-Markossian S. A. (1992). 0.2 ml of actin-myosin solution (contained 2 mg of protein) was added to the liquor with a solution of ATP and interferon (with an activity of 100,000 IU, 1000,000 IU and 3000000 IU). After 30 minutes, the enzymatic reaction was terminated by adding trichloroacetic acid. The protein concentration of actin-myosin was determined by Biuret reaction. We evaluated ATP's activity by the amount of the formed inorganic phosphate during the reaction (Fiske C., Subbarow, 1925). The results of our research showed that the addition of recombinant interferon $\alpha 2b$ entails an average reduction of $93.9 \pm 0,95$ % ATP activity of myofibrils of laboratory mice muscles (in relation to assay without addition of interferon with different activity). The obtained data indicate that IFN's affects the actin-myosin complex. This is due with the antiviral properties of this medicament, because IFN's suppress "assemble" the viruses protein components. We consider that interferon's inhibit the hydrolysis of ATP. This makes it impossible to complete the work of Ca^{2+} - ion channels. Therefore, the activity of the actin-myosin complex is significantly reduced. This may explain the occurrence of myalgia phenomena during the uses of interferons drugs during therapy.

Ключові слова: interferon- $\alpha 2b$, actin, myosin, heart perfusion

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