

ESTRUTURA CURRICULAR DAS DISCIPLINAS
DO PROGRAMA DE PÓS-GRADUAÇÃO EM CIÊNCIAS BIOLÓGICAS (FARMACOLOGIA) DO IBB/UNESP

DISCIPLINA: FARMACOLOGIA CELULAR E MOLECULAR DA JUNÇÃO NEUROMUSCULAR

Nº DE CRÉDITOS: 4

DOCENTE RESPONSÁVEL: Dra. Márcia Gallacci

EMENTA : Formar docentes e pesquisadores capazes de planejar e desenvolver pesquisa em farmacologia da junção neuromuscular e para atingir este objetivo abordará aspectos bioquímicos, eletrofisiológicos e farmacológicos, referentes às drogas agonistas e antagonistas dos receptores sinápticos colinérgicos..

BIBLIOGRAFIA:

- ALBUQUERQUE, E.X.; RASH, J.E.; MAYER, R.F.; SATTERFIELD, J.R. An electrophysiological and morphological study of the neuromuscular junction in patients with myasthenia gravis. *Expl. Neurol.*, v. 51, p. 536-563, 1976.
- BOWMAN, W.C.; PRIOR, C.; MARSHALL, I.G. Presynaptic receptors in the neuromuscular junction. *Ann. N.Y. Acad. Sci.*, v. 604, p. 69-81, 1990.
- BOWMAN, W.C.; RAND, M.J. Striated muscle and neuromuscular transmission. In: *Textbook of Pharmacology*, 2a. ed.. Oxford: Blackwell Scientific Publications, pp. 17.1-17.56, 1980.
- CECCARELLI, B.; HURLBUT, W.P. Vesicle hypothesis of the release of quanta of acetylcholine. *Physiol. Rev.*, v. 60, p. 397-442, 1980.
- CHANGEUX, J.P.; DEVILLERS-THIÉRI, A.; CHEMOUILLI, P. Acetylcholine receptor: an allosteric protein. *Science*, v. 225, p.1335-1345, 1984.
- CONTI-TRONCONI, B.M.; RAFTERY, M.A. The nicotinic cholinergic receptor: correlation of molecular structure with functional properties. *Ann. Rev. Biochem.*, v. 51, p. 491-530, 1982.
- FATT, P.; KATZ, B. An analysis of the end plate-potential recorded with an intracellular and electrode. *J. Physiol.*, Lond., v. 115, p. 320-370, 1951.
- FLETCHER, P.; FORRESTER, T. The effect of curare on the release of acetylcholine from mammalian motor nerve terminals and an estimate of quantum content. *J. Physiol.*, Lond., v. 251, p.131-144, 1975.
- GALLACCI, M.; OLIVEIRA, A.C. Mechanisms of hexamethonium-induced tetanic fade in the isolated rat muscle. *Arch. int. Pharmacodyn.*, v. 305, p. 111-22, 1991.
- GALLACCI, M.; OLIVEIRA, A.C. Pre- and postsynaptic mechanisms involved in tetanic fade induced by pancuronium in the isolated rat muscle. *Pharmacology*, v. 49, p.265-270, 1994.
- GALLACCI, M.; NUNES, E.C.; MOREIRA, E.G.; NASCIMENTO, N.; ROGERO, J.R.; VASSILIEFF, V.S. Reduction of crotoxin-induced neuromuscular blockade by gamma-radiation. *Toxicon*, v. 36(6), p. 941-945, 1998.
- KATZ, B.; MILEDI, R. Transmitter leakage from motor nerve endings. *Proc. R. Soc. Lond.*, Ser. B, v. 196, p.56-72, 1977.
- KUFFLER, S.W.; YOSHIKAMI, D. The number of transmitter molecules in a quantum: an estimate from iontophoretic application of acetylcholine at the neuromuscular synapse. *J. Physiol.*, Lond., v. 251, p. 465-482, 1975.
- MAGAZANIK, L.M.; VYSKOCIL, F. Desensitization at the motor endplate. In Rang, H.P. (ed.), *Drug receptors*. London: MacMillan, p. 105-119, 1973.
- NEHER, E.; SACKMANN, B. Single channel currents recorded from membrane of denervated frog muscle fibers. *Nature*, Lond. v. 260, p. 799-802, 1976.
- OLIVEIRA, A.C. & GALLACCI, M. Transmissão neuromuscular esquelética. Aspectos morfológicos, fisiológicos e farmacológicos. In: *Myasthenia Gravis*. São Paulo: Ed. J.L. Assis, p. 121-159, 1990.

ESTRUTURA CURRICULAR DAS DISCIPLINAS
DO PROGRAMA DE PÓS-GRADUAÇÃO EM CIÊNCIAS BIOLÓGICAS (FARMACOLOGIA) DO IBB/UNESP

RANG, H.P.; RITTER, J.M. The relationship between desensibilization and the metaphilic effect at cholinergic receptors. *Mol. Pharmacol.*, v. 6, p.383-390, 1970.

WESSER, I. Acetylcholine at motor nerve: storage, release and presynaptic modulation by autoreceptors. *Int. Rev. Neurobiol.*, v. 34, p.283-384, 1992.