



FACULDADE DE MEDICINA
CENTRO DE PÓS-GRADUAÇÃO
Av. Prof. Alfredo Balena 190/sala 533
Belo Horizonte – MG - CEP 30.130-100
Fone: (031) 3409.9641 FAX: (31) 3409.9640
E-mail: cpg@medicina.ufmg.br



CIR 840 Neurotransmission in Anesthesiology

Workload: 30 h

Credits 02

Nature: Optional Master and PhD

Professor: Renato Santiago Gomez

Discipline Syllabus: The objective of the course is to study the mechanism of action of general anesthetics and their interference in the release of neurotransmitters from the central and peripheral nervous system. Factors that interfere in excitatory and inhibitory neurotransmission and, through review journals, the current knowledge regarding the effects of general anesthetics on neurotransmission will be discussed. The cellular and molecular mechanism of anesthesia will specifically address the action of anesthetics in sodium, potassium, calcium channels as well as the intracellular concentration of second messengers (calcium, protein kinase, etc.).

Bibliographic References:

Fernandes F. Bases Farmacológicas da Anestesia. Rev. Bras. Anest., 44:3-12, 1994.

Griffiths R, Norman, RI. Effects of anaesthetics on uptake, synthesis and release of transmitters. Br. J. Anaesth., 71:96-107, 1993

Hudson RJ. Basic principles of clinical pharmacology, em: Barash PG, Cullen BF, Stoelting RK, Clinical Anesthesia, 3rd Ed, Philadelphia, Lippincott-Raven, 1997; 221-242.

Rang HP, Dale MM, Ritter JM. Farmacologia, Quarta Edição, Rio de Janeiro, Guanabara Koogan, 2001; 2-77.

Schwinn, DA, Leslie JB, Watkins WD. Princípios Básicos de Farmacologia e Anestesia, em: Miller RD, Anestesia, Terceira edição, São Paulo, Artes Médicas, 1993; 27-50