



NEUROVEGETATIVE PHYSIOLOGY

M-PSI/02 - 6 CFU - 1° Semester

Teaching Staff

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LEARNING OBJECTIVES

- Gain a clear understanding of the cellular mechanisms and network that allow the nervous system to process and edit information.
- Understand the regulation of autonomic homeostasis.
- Acquire a basic understanding of the neural substrates of autonomous functions.
- Understand the cellular and functional aspects that underlie the neuropathological alterations and recognize the neurophysiological bases of dysautonomias.

DETAILED COURSE CONTENT

General part

- Homeostasis
- Intercellular communication and modulation of signal transduction.
- Control systems: Feedback Loops and Reflex
- Neurotransmitters and hormones

REGULATORY SYSTEMS

- The Hypothalamus: An Overview of Regulatory Systems
- Central Control of Autonomic Functions: Organization of the Autonomic Nervous System
- Neural Regulation of the Cardiovascular System
- Neural Control of Breathing
- Food Intake and Metabolism
- Water Intake and Body Fluids
- Neuroendocrine Systems
- Circadian Timekeeping
- Reward, Motivation, and Addiction
- Dysautonomias: overview of some clinical disorders of the Autonomic Nervous System

TEXTBOOK INFORMATION

1. Dee U. Silverthorn. FISILOGIA UMANA. UN APPROCCIO INTEGRATO. Ed. Pearson
 2. Larry Squire, Darwin Berg, Floyd Bloom, Sascha du Lac, Anirvan Ghosh, Nicholas Spitzer.
FUNDAMENTAL NEUROSCIENCE (THIRD EDITION) Elsevier
 3. Purves D., Augustine G.J., Fitzpatrick D., Katz L.C., LaMantia A.S., McNamara J.O., Williams S.M.
NEUROSCIENZE (seconda edizione 2004) - Ed. Zanichelli
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