## 90923 NEUROBIOTECHNOLOGY

Elective course Prof. Rossella Breveglieri, PhD Neurophysiology

- At the end of the course, the student knows the mechanisms of perception and elaboration of the sensory information, the mechanisms beneath integrated functions of the CNS, the more recent experimental models used to study these functions.
- This knowledge will allow the student to study the most complex functions and to know the related physiological mechanisms.

## topics

• Methodological approaches in System Neuroscience research.





## topics

• Sensory receptors-Transduction processes in different types of receptors.



## topics

- Primary sensory cortices. Afferent pathways.
  - Visual perception: From the eye to the primary visual cortex.
  - Somatosensory pathways
  - Movement control: from the frontal lobe to the muscles.

- Functions of the parietal lobe
- Functions of the frontal lobe



- Neural bases of attention, emotions, language, memory and learning
- Transcranial magnetic stimulation
- Brain-machine interfaces.



