

5 Galen or the brain as a sound processor

- A short history of the essential breakthroughs in brain research from the old Greeks up to nowadays is given.
- The acoustic sensors transduce the stimulus energy and transmit the signals to the central nervous system.
- Physiological aspects of information processing (neurons, synapsis) is treated in order to understand the functioning of the brain.
- Magnetic resonance images of brain areas are presented in connection with language, speech and singing.
- Common and discriminating aspects of the human brain and computers are discussed in order to position the role of robotics.