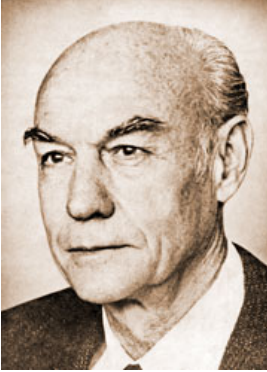




Roger Sperry



Hartford, CT, USA, 20 Aug. 1913 - Pasadena, CA, USA, 17 Apr. 1994

Title Professor of Psychobiology, California Institute of Technology, Pasadena, USA. Nobel laureate in Physiology or Medicine, 1981

Nomination 17 Apr. 1978

Summary of scientific research

Showed: (a) nerves are not functionally interchangeable as long supposed and (b) the central nervous system is hardwired in many respects; (c) brain connections are grown in selectively by chemoaffinity guidance ultimately traceable to genetic control; (d) electric field theory of brain function does not hold up under experimental test; (e) the corpus callosum serves to integrate higher cognitive functions between left and right hemispheres of the brain (with Ronald Myers); (f) right and left hemispheres have different cognitive modes (with Jerre Levy and others); (g) mental states can control brain states through emergent interaction and downward causal control; the result reverses the scientific status and treatment of subjective phenomena, transforms scientific views of human and nonhuman nature, and proposes a changed (macrodeterminist) conceptual foundation for science.