



**Keywords:** Neural science; Neuroscience; Brain; Nervous system; Cognition; Behaviour; Neurological disorders

## Introduction

Neural science, also known as neuroscience, is a multidisciplinary field that explores the intricate workings of the brain and the nervous system. It encompasses various scientific disciplines, including biology, psychology, computer science, and genetics, with the aim of

Neuroplasticity: The brain's remarkable adaptability one of the most intriguing aspects of neural science is the concept of neuroplasticity, which refers to the brain's ability to adapt and reorganize its structure and function in response to experiences, learning, and environmental influences. Research has shown that the brain is highly malleable, with neural connections being strengthened or weakened based on patterns of activity. This remarkable adaptability underlies learning,

- grammar guides attention and aids perception in real-world environments. *Curr Opin Psychol.* 29: 205–300.
7. Epstein R, Kanwisher N. A (1998) cortical representation of the local visual environment. *Nature.* 392: 598–601.
  8. Malach R, Reppas JB, Benson RR, Kwong KK, Jiang H, et al. (1995) Proceedings of the National Academy of Sciences of the United States of America. *Natl Acad Sci U S A* 92: 8135–9000.
  9. Bracci S, Ritchie JB, Kalfas I, Op de Beeck HP (2019) The Ventral Visual Pathway Represents Animal Appearance over Animacy, Unlike Human Behaviour and Deep Neural Networks. *J Neuroscience* 39: 651–2500.
  10. Ritchie JB, Zeman AA, Bosmans J, Sun S, et al. Untangling the animacy