

Valentina ZECCA - CV

Valentina Zecca is a PhD Fellow at La Sapienza University in "Mathematical models for engineering, electromagnetism and nanosciences". Her research activity takes place at the MRI Unit of Core Facilities of the Istituto Superiore di Sanità. Her research project focuses on the absolute quantification of brain metabolites through Proton Magnetic Resonance Spectroscopy (^1H -MRS) in preclinical animal models of neurodegenerative diseases (mainly, diseases of aging and depression); diffusion tensor imaging (DTI) and Magnetic Resonance Imaging (MRI) are also applied to obtain information on structural integrity and on possible brain atrophies. She completed her Master's degree in "Cellular and molecular biology and biomedical sciences" at the University Tor Vergata in 2022 with a thesis titled "Pilot study for the preparation and conservation of *Moringa oleifera* microvesicles and the effects on bacterial growth". In this context, the ability of plant microRNAs to control the growth of cancerous cells in humans and to inhibit bacterial growth was evaluated. After her Master's degree, Valentina worked within the topic "Identification of disease markers and response to treatment in preclinical models, via PET imaging" at the Institute of Bioimages and Molecular Physiology (IBFM).