Dr Marie-Jo Moutin - CNRS Research Director at the Grenoble Institute of Neurosciences, Inserm U1216/Univ. Grenoble Alpes, France.

PhD in Biochemistry, Biophysics (1988).

Habilitation to Direct Research in Biochemistry, Cell biology, Neurobiology (2003).

Research domain.

Cytoskeleton and neuronal functions, degeneration, microtubules and their post-translational modifications. Expert in the tyrosination cycle of α -tubulin, cellular readers of this modification, and link to microtubule dynamics. The lab identified long sought-after detyrosinating enzymes, established their structure-function relationship, and developed numerous tools including KO models.

References.

VASH1-SVBP and VASH2-SVBP generate different detyrosination profiles on microtubules. J Cell Biol 2023.

Tubulin tyrosination regulates synaptic function and is disrupted in Alzheimer's disease. Brain 2022.

Defective tubulin detyrosination causes structural brain abnormalities with cognitive deficiency in humans and mice. Hum Mol Genet 2019.

Structural basis of tubulin detyrosination by the vasohibin-SVBP enzyme complex. Nat Struct Mol Biol 2019. Vasohibins/SVBP are tubulin carboxypeptidases that regulate neuron differentiation. Science 2017.