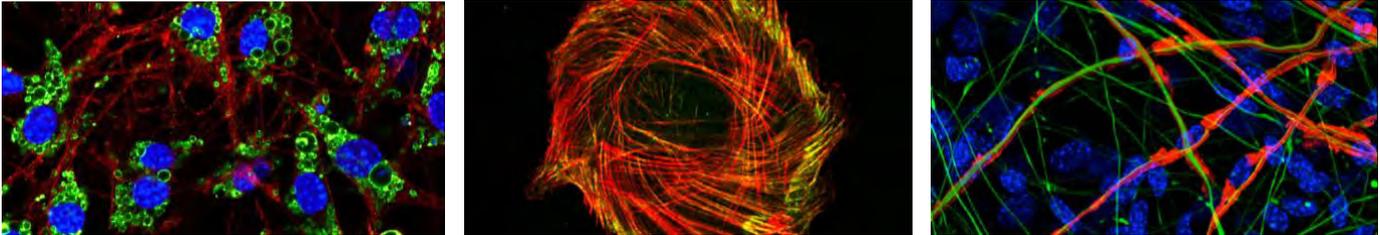


**Human Inherited Neuropathies Unit
Division of Neuroscience
San Raffaele Scientific Institute, Milan-Italy**



Subject area Neuroscience, Cell Biology.

Description

Two positions, *one post-doctoral research fellow and one pre-doctoral research fellow positions*, are available in the laboratory of Alessandra Bolino to work in the field of myelin biology and inherited disorders of the peripheral nervous system (PNS).

Research work in our laboratory integrates basic and clinical research through a translational approach. We aim at i) understanding the mechanisms underlying inherited peripheral neuropathies, particularly those characterized by aberrant myelin and myelin/axon degeneration, and ii) defining therapeutic approaches to treat these disorders.

Therapeutic strategies currently under validation/evaluation in our lab are:

- to replace the gene of interest using AAV9-mediated viral transduction strategies;
- to interfere with key signalling pathways regulating Schwann cell development and myelination using drug replacement strategy or using novel drugs obtained in collaboration with key industrial partners.

Efficacy of these strategies is assessed using neurophysiological, morphological and biochemical analyses, including responsiveness of potential disease biomarkers that we identified or will identify using unbiased transcriptomics and proteomics strategy.

Key recent references from the lab

- Sawade et al., *Nature Communications*, Jun 5;11(1):2835 (2020).
- Pareyson et al., *Annals Neurology*, 86: 55-67 (2019).
- Bolino A., et al. *EMBO Molecular Medicine* 8:1438-1454. (2016).
- Nosedà R., et al. *PLoS Biology*. Apr 12;14(4):e1002440 (2016).
- K. Hnia, et al. *Trends in Molecular Medicine*, 18: 317-327 (2012).

Eligibility criteria

We are looking for highly motivated candidates who wish to advance in their academic career. Previous research experience in cell biology and/or molecular biology is required.

Salary

Salary will be based on experience and expertise of the applicants.

To apply

Please send your application including a synopsis of research interest, Curriculum vitae, and at least one contact for reference by email to:

Prof. Alessandra Bolino, e-mail: bolino.alessandra@hsr.it