



Human Inherited Neuropathies Unit Institute of Experimental Neurology Division of Neuroscience

IRCCS Ospedale San Raffaele, Milan-Italy

Two positions are immediately available in the laboratory led by Prof. Alessandra Bolino to work in the field of myelin biology and inherited disorders of the peripheral nervous system. 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.

Candidates will contribute to the following projects aimed at:

1- further clarifying how lipid-mediated cytoskeleton remodeling and myelin synthesis control myelin growth in the nerve. These mechanisms are of clinical relevance as these pathways represent targets for pharmacological intervention to treat inherited peripheral neuropathies (*Guerrero-Valero et al.*, **PNAS** 2021 Vol. 118 No. 10 e2009469118).

2- specifically decreasing PIKfyve lipid kinase activity to ameliorate aberrant myelin and fiber degeneration in inherited peripheral neuropathy models (*Guerrero-Valero et al.*, **PNAS** 2021 Vol. 118 No. 10 e2009469118; Sawade et al., **Nature Communications**, Jun 5;11(1):2835, 2020).

For both projects, a combination of *in vivo* and *ex vivo* models (Schwann cell/DRG myelinforming co-cultures and primary fibroblasts) will be used as well as several approaches including proteomic analysis, biochemistry, and cell biology.

Requirements

We are looking for highly motivated scientists who wish to advance in their <u>academic training</u> and consolidate the research experience in cell biology and neuroscience. A background in cell biology and/or molecular biology is required.

Salary

Both positions will be funded for 3-years. Salary will be based on seniority and expertise.

To apply

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

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