Name: Elisabetta Indelicato

Project title: ***A Multiomics Approach to unsolved Rare Movement Disorders***

Duration	6 months (May-October 2023)
Short Bio	After completing my medical training in Rome, Italy, I was awarded with a postgraduate bursary that allowed me to visit the Department of Neurology of Innsbruck as a research fellow. During my stay I joined the research group on Rare Movement Disorders (Head: Dr. Sylvia Boesch) and I completed a clinical PhD with focus on inherited ataxias. Subsequently, I moved on to the residency in neurology at the same institution. Along this path, I seized the opportunity to join the European Reference Network for Rare Neurological Diseases (ERN-RND) when our center became a full member. Within the ERN-RND exchange programs, I completed two fellowships at European reference centers for neurogenetics: Besta Institute in Milan and the Institute of Human Genetics at the Technical University of Munich. Currently, I serve as a coordinator of the Ataxia/HSP DG of the ERN-RND and the neurogenetics panel of the European Academy of Neurology. Additionally, I am an active member of the Ataxia Study Group of the Movement Disorders Society, as well as several other international initiatives focusing on Rare Movement Disorders
Home Institution	Center for Rare Movement Disorders, Department of Neurology, Medical University of Innsbruck
Host Institution	Institute of Human Genetics, Technical University of Munich
Project Description	Within the present project, we aimed to unravel the etiology of a growing cohort of rare movement disorders collected at multiple tertiary referral centers in Europe which remained “unsolved” despite extensive clinical characterization and whole exome sequencing. To this purpose, I applied a multimodal approach including 1) whole genome sequencing as well as 2) transcriptomics and 3) proteomics techniques in patient-derived cells.
Personal Statement	The present fellowship allowed me to expand my clinical background with skills from the field of genetics and translational research, which I would have not acquire otherwise in my home institution. The acquired expertise will boost my career as researcher in neurogenetics and support a future leadership within the Innsbruck center as well as my role as an active member of the ERN-RND.