



European
Reference
Networks



Funded by
the European Union

Eszter Levai

The role of PARK7 in mesothelial and vascular endothelial barrier integrity and function in peritoneal dialysis

Duration	6 months
Short Bio	I am a PhD student and pediatrics trainee, especially interested in the field of pediatric nephrology and dialysis. Most of my projects till now has involved a basic or translational science aspect, trying to bring new possibilities in peritoneal dialysis from bench to bedside. My goal is to deeper understand the peritoneal membrane changes during dialysis and to be able to enhance the efficacy of this treatment. I work primarily in the Pediatric Center of Semmelweis University, Budapest, Hungary, but happy to maintain a close working connection with Center for Pediatric- and Adolescent Medicine, University of Heidelberg, Germany through common projects, after the EJPRD Research Mobility Fellowship.
Home Institution	Pediatric Center, Semmelweis University
Host Institution	Center for Pediatric- and Adolescent Medicine, University of Heidelberg, Heidelberg, Germany
Project Description	My project focused on the deeper understanding of the role of a multifunctional, antiinflammatory and antioxidant protein, PARK7 in the greater scheme of peritoneal membrane structural and functional changes during peritoneal dialysis. We wanted to see the aspects how the presence and level of this protein influence mesothelial and endothelial barrier integrity and function in PD and to see the possibility of modulation of these processes through this molecule.
Personal Statement	The EJPRD fellowship without a doubt was an incredible possibility to learn new methods and aspects in basic research, have a close look on a well-working laboratory and be a part of fantastic, prospering scientific community with great people. The new impulses skyrocketed the inspiration that one can have in this early stage of a research career and motivated me further, on one hand to stay in touch and work closely with the people I got to know through this possibility, and also to pursue new projects, ideas and to continue learning on the field of nephrology. It has helped to establish the newly learnt methods in my home institution and to weave the cooperations tighter between the two centers. I would definitely recommend to seize this great opportunity!