RenalToolBox – Project Description

ESR Number:	ESR10	**Host:**	LUMC
Project Title:	Investigating MoA of RMTs by determining their effect on renal vascular endothelial and proximal tubular cells		
Research Field:	Biological Sciences		
Contact Person:	Dr. Franck Lebrin		
Academic Supervisor(s):	Dr. Franck Lebrin Prof. Dr. Ton Rabelink		
Research Group / Department:	Department of internal medicine		
Group's website:	www.renaltoolbox.org		
Full Address:	Leiden University Medical Centre, LUMC Albinusdreef 2 2333ZA Leiden the Netherlands		
Expected Start Date:	01 January 2019		

Description:

The RenalToolBox is an EU-funded ITN that aims to develop novel tools and technologies to assess the safety and efficacy of cell-based regenerative medicine therapies for kidney disease. You will join a team of 15 Early Career Researchers (ESR) working across 10 different institutions towards this goal.

In this position you will be employed by LUMC, a University Hospital dedicated to patient care, teaching and translation of scientific findings to the clinic. Your role in the project will be to investigate the mechanisms of action of MSC by determining their effect on renal vascular endothelial and proximal tubular cells. More specifically you will:

- Develop ultrasound/2-photon intravital microscopy strategies for in vivo renal vasculature assessment
- Implement mouse models to study the effect of MSC on vascular endothelial and proximal tubule cells, including evidence for mitochondrial transfer
- Investigate repair mechanisms to determine the effect of MSC and MSC derived extra cellular vesicles on key signalling pathways implicated in vascular endothelial and tubular cell injury and repair.

The candidate will be enrolled as a PhD student at the LUMC. The average duration of a PhD tract in the Netherlands is 4 years. The candidate will be expected to spend periods of time with other partners in the consortium.

More information about this consortium and the project can be found in www.renaltoolbox.org.

Required Skills / Qualifications:
Essential: - MSc degree in a relevant subject (biomedical sciences, bioengineering, or other related subjects) - Excellent oral and written communication skills with well-developed interpersonal skills. - Ability to work effectively and collaboratively within a multidisciplinary team. - Enthusiastic, self-motivated individual, willing to take part in personal skills training, international travel and public outreach activities. - Demonstrated commitment to high-quality research. Desirable: - Research experience involving stem cells culture and preclinical imaging techniques. - Proficient in working with animal models, preferably in the possession of a certificate for animal handling.
Other requirements:
N/A