

## **Marius Wits**

Project title: Therapeutic Targeting of the Activator Protein-1 complex in Fibrodysplasia Ossificans Progressiva

Duration	4 months
Short Bio	I am a molecular biologist interested in TGF-β signaling and TGF- β associated disorders. Following my bachelor in Biology and my masters in Biomedical Sciences, I currently work as a PhD- student. In my projects I study the molecular profiles within two rare genetic diseases: Fibrodysplasia ossificans progressiva and Hereditary Pulmonary arterial hypertension.
Home Institution	Leiden University Medical Center (LUMC), the Netherlands
Host institution	Universitat de Barcelona (UB), Spain
Project description	Fibrodysplasia ossificans progressiva (FOP) is a devastating and ultra-rare genetic musculoskeletal disorder with no curable therapy so far. In order to find novel therapies, we mapped the molecular profile downstream of the diseased signaling pathway. Our preliminary results showed that the Activator Protein-1 complex is dysregulated in FOP. Therefore in this project, we hypothesize that targeting the Activator Protein-1 complex in FOP might prevent disease development. Here, we have treated FOP mice targeting Activator Protein-1 and assessed safety and efficacy.
Personal statement	This EJP RD Mobility Fellowship allowed me to develop into a more translational oriented researcher. Further, it allowed me to live abroad, experience different cultures and meet many interesting people. This collaboration has helped strengthen the ERN BOND and increased the scientific value of my research.



