Four postdoctoral/scientist positions are open to join the ERA-Net project IMMOSCAN and work on the role of immune osteoclasts in cancer – implications for therapy.

Starting: between November 1st, 2022 and April 1st, 2023

Deadline for application: November 1st, 2022

Salary: according to the rules of the public services of the countries of each partner and depending on the experience. All positions are funded for 3 years.

Project: We are seeking highly motivated scientists/ post-doctoral researchers interested in osteoclast biology, bone cancer and osteoimmunology to join our consortium. Despite progresses in diagnosis and treatment, bone tumors remain incurable. In the bone, cancer cells disrupt the balance between bone-forming osteoblasts, bone-resorbing osteoclasts and immune cells, leading to excessive bone destruction by osteoclasts. However, osteoclasts have recently been identified as innate immune cells, some of which being immune suppressive, which might participate in cancer progression and resistance to immunotherapies. Our aim is to characterize these osteoclasts and their participation in immune suppression and tumor progression. This will be achieved by using state-of-the art technologies for transcriptomic and bone imaging, as well as functional assays in preclinical models and human biopsies. Novel therapeutic strategies to target immune suppressive osteoclasts will be explored in pre-clinical models.

Host laboratories: The positions are based in the following laboratories:

- Pr Hanna Taipaleenmäki's lab (Hospital of Ludwig-Maximilians-University Munich, Germany) will recruit a postdoc with strong experience in pre-clinical bone metastasis models to elucidate the function and therapeutic targeting of osteoclasts in breast cancer bone metastases.

- Pr Anna teti's lab (University of L'Aquila, Italy) will recruit a postdoc with expertise in in vitro and in vivo pre-clinical models to investigate the role of extracellular vesicles in mediating the immunosuppressive function of osteoclasts in the context of bone metastases.

- Pr Dominique Heymann's lab (University of Nantes, France) will recruit a postdoc with excellent background in cell and molecular biology and mouse pre-clinical models to decipher the role of osteoclasts in the pathogenesis and therapeutic response of osteosarcoma.

- Pr Claudine Blin-Wakkach's lab (Université Côte d'Azur, CNRS, Nice, France) will recruit a postdoc with excellent background in osteoimmunology and/or osteoclast biology and scRNAseq analysis to work on the characterization of osteoclast immune function, scRNAseq and immune phenotyping.

Partner laboratory: The recruited scientists/postdocs will visit other host and partner laboratories:

- Pr Thomas L. Andersen's and Christina M. Andreasen's lab (University of Southern Denmark, Denmark) specializing in molecular bone histology.

Requirements: in addition to technical skills corresponding to each project, strong experience in cell biology, preclinical models, animal experimentation is required. Ability to work independently, creativity and excellent team spirit, communication and organization skills are essential. English practice is mandatory.

To apply: send a CV, a motivation letter, a list of publication and the name and e-mail of 3 scientist who could be contacted for recommendation to all partners or to the one you are interested in :
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