



Differences between subchondral and trabecular bone microporosities beneath the bone-cartilage interface at the knee joint



www.biomat.uliege.be

laura.muller@uliege.be

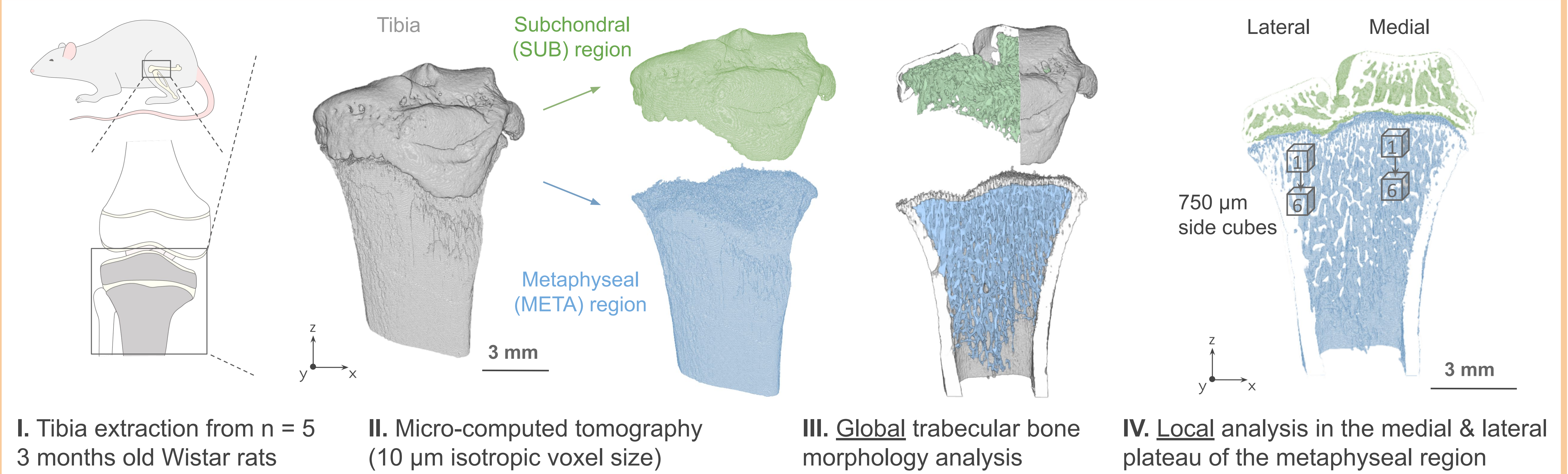
L Müller¹, A Tits¹, E Plougonven², P Drion³, E Dall'Ara⁴, HG van Lenthe⁵, D Ruffoni¹

¹ Mechanics of Biological and Bioinspired Materials Laboratory, ULiège, BE - ² Chemical Engineering Department, ULiège, BE - ³ Experimental Surgery Unit, GIGA and Credec, ULiège, BE - ⁴ Department of Oncology and Metabolism, University of Sheffield, UK - ⁵ Department of Mechanical Engineering, KULeuven, BE

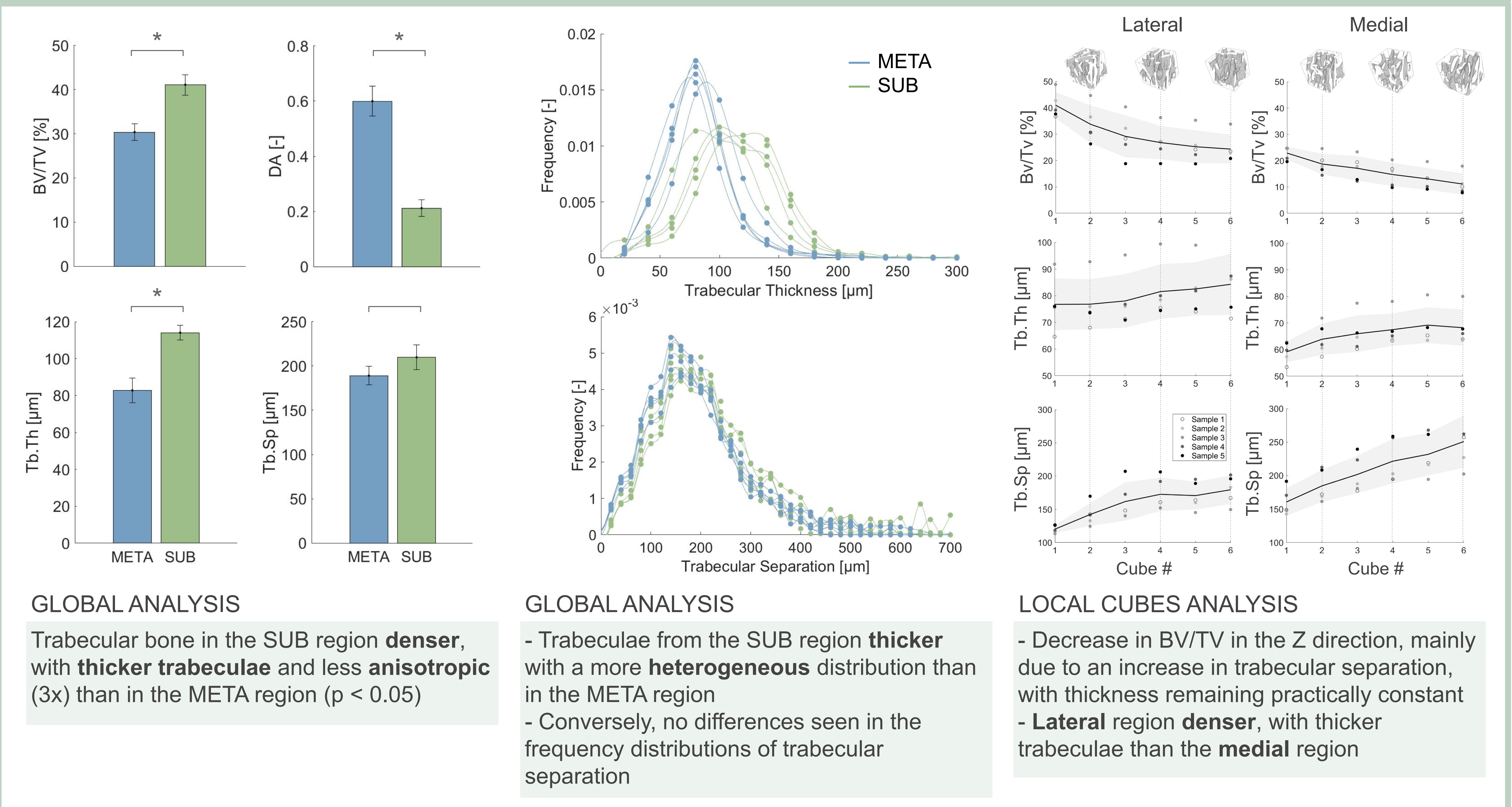
Introduction

Articular joints are complex structures integrating two strongly dissimilar tissues: the **hard bone** and the **soft cartilage**. Our objective is to characterize the spatial evolution of the microstructure of trabecular bone as it approaches articular cartilage in order to identify specific microstructural features to facilitate force transmission. We also investigate the microstructural interplay between mineralized cartilage and subchondral bone, both tissues being involved in cartilage degeneration.

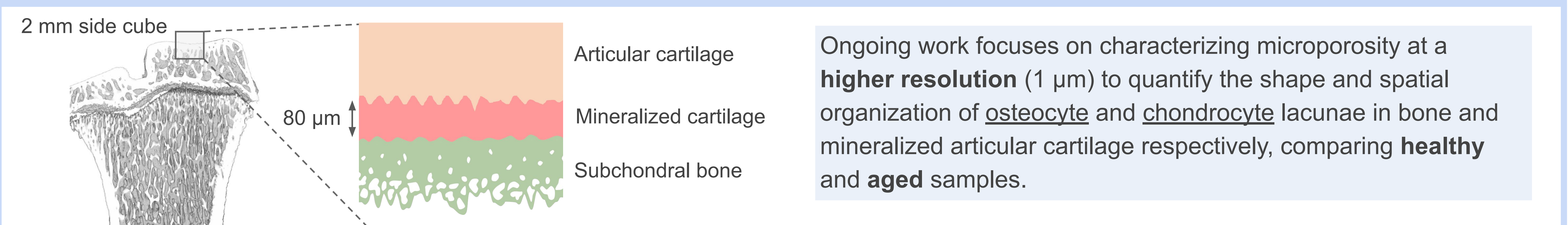
Methods



Results



Future perspectives



Acknowledgements: Laura Müller is a FRIA grantee of the Fonds de la Recherche Scientifique – FNRS (grant n°40008978)

