LUXEMBOURG INSTITUTE OF HEALTH

LECTURE*

Maria A. Zuluaga

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EDISON - Room Katalin Kariko
1A-B, rue Thomas Edison,
L-1445 Strassen - Luxembourg

10:00 - 11:00

Unveiling the Brain Vessel Architecture: Methodological Advances and Clinical Questions

Changes in the brain's blood vessels are associated with diseases of high societal and economic burden, as well as with age-related cognitive decline. Yet despite this central role, the brain vessel tree remains a poorly characterized structure. Extracting, modelling and quantifying it from neuroimaging data at scale remains an open problem, and no tool currently exists to compare vascular architecture systematically across individuals or populations.

Within the ERC Consolidator Grant, CARAVEL, we are devising a radical new approach to build and provide the first population atlas of brain vascular ageing, encompassing multiple scales through the development of state-of-the-art AI tools. In this talk, I will discuss the challenges we address, our main achievements and the clinical questions that we are trying to answer with our clinical collaborators.

SPEAKER:

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HOST:
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