

Enhanced Technological Ecosystem To Shape Precision Neurosurgery

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Brain diseases are growing fast. Better imaging, a broader understanding of the brain functional anatomy and pathogenesis are essential to improve patient outcomes.

Current neurosurgical practice for diagnostics and therapy is not yet empowered to maximize and tailor therapeutic effectiveness according to the individual clinical stage and molecular profile throughout the course of the disease.

This lecture is aimed at exploring recent advancements in multimodal pre-surgical diagnostics, intra-operative imaging and mechatronics, investigating their impact and potential to shape neurosurgery in an era when precision medicine looms.