



Hugues DUFFAU (MD, PhD) is Professor and Chairman of the Neurosurgery Department in the Montpellier University Medical Center and Head of the INSERM 1191 Team "Plasticity of the central nervous system, human stem cells and glial tumors" at the Institute of Functional Genomics of Montpellier (France). He is an expert in the awake cognitive neurosurgery of slow-growing brain tumors, as low-grade gliomas, a routine which he has developed since more than twenty years. His fundamental approach is centered on the concepts of the brain connectomics and neuroplasticity, breaking with the traditional localizationist view of cerebral processing. For his innovative work in neurosurgery and neurosciences, he was awarded Doctor Honoris Causa six times, and he was the youngest recipient of the prestigious Herbert Olivecrona Award from the Karolinska Institute in Stockholm. He has written four textbooks and over 454 publications in international journals ranging from neurosurgery and neurooncology to fundamental neurosciences, including cognitive sciences and brain plasticity, for a total of more than 36,000 citations and with an h-index of 103. He gave more than 560 invited lectures, and was invited as a visiting professor in more than 58 institutions. He is member of Editorial boards of many journals (as *Brain* and *Language*, *Neurosurgery* or *Neuro-oncology*) and ad-hoc reviewer for around 100 journals (over 950 reviews) including: *New England Journal of Medicine*, *Lancet Oncology*, *Nature Medicine*, *Nature Reviews Neuroscience*, *Nature Reviews Neurology*; *Annals of Neurology*, *Brain*, *Cerebral Cortex*, *Trends in Cognitive Science*, *Current Biology*, etc. He is member of many societies, such as the French Academy of Medicine, the French Academy of Surgery, the Royal Academy of Medicine of Belgium, the World Academy of Neurological Surgery, the Young Neurosurgeons Award Committee of the World Federation of Neurosurgical Societies, the Scientific Committee of the European Association for Neurooncology,...

10 main publications:

- . **Duffau H**. Lessons from brain mapping in surgery for low-grade glioma: insights into associations between tumour and brain plasticity. **Lancet Neurol**. 2005;4:476-86
- . **Duffau H**, Gatignol P, Mandonnet E, Peruzzi P, Tzourio-Mazoyer N, Capelle L. New insights into the anatomic-functional connectivity of the semantic system: a study using cortico-subcortical electrostimulations. **Brain**. 2005;128:797-810.
- . Thiebaut de Schotten M, Urbanski M, **Duffau H**, Volle E, Levy R, Dubois B, Bartolomeo P. Direct evidence for a parietal-frontal pathway subserving spatial awareness in humans. **Science**. 2005;309:2226-8
- . De Witt Hamer PC, Robles SG, Zwinderman AH, **Duffau H**, Berger MS. Impact of intraoperative stimulation brain mapping on glioma surgery outcome: a meta-analysis. **J Clin Oncol**. 2012;30:2559-65
- . Tate MC, Herbert G, Moritz-Gasser S, Tate JE, **Duffau H**. Probabilistic map of critical functional regions of the human cerebral cortex: Broca's area revisited. **Brain**. 2014;137:2773-82
- . **Duffau H**. Stimulation mapping of white matter tracts to study brain functional connectivity. **Nat Rev Neurol**. 2015;11:255-65
- . Herbert G, Maheu M, Costi E, Lafargue G, **Duffau H**. Mapping neuroplastic potential in brain-damaged patients. **Brain**. 2016;139:829-44
- . Herbert G, Moritz-Gasser S, Boiseau M, Duvaux S, Cochereau J, **Duffau H**. Converging evidence for a cortico-subcortical network mediating lexical retrieval. **Brain**. 2016;139:3007-21.
- . Rech F, Herbert G, Gaudeau Y, Mézières S, Moureau JM, Moritz-Gasser S, **Duffau H**. A probabilistic map of negative motor areas of the upper limb and face: a brain stimulation study. **Brain**. 2019;142:952-65.
- . Herbert G, **Duffau H**. Revisiting the functional anatomy of the human brain: Toward a meta-networking theory of cerebral functions. **Physiol Rev** 100:1181-1228, 2020