Meet Our Editorial Board Member

Massimo Avoli

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Massimo Avoli is a Physician Scientist who performs research as a Faculty member of the Montreal Neurological Institute of McGill University. He is a Professor in the McGill University's Departments of Neurology & Neurosurgery and of Physiology as well as Professor of Human Physiology in the Department of Experimental Medicine at the *Sapienza* University of Rome. Dr. Avoli's main interests are directed to the fundamental abnormalities that lead to the generation of seizures by employing electrophysiological recording in *in vivo* and *in vitro* experimental models of epilepsy.

M. Avoli

Born in Italy, Dr. Avoli received his Medical Degree (1975) and Neurology training (1979) from the *Sapienza* University of Rome, and his PhD in Neurophysiology (1982) from McGill University. His thesis, which was carried out under the supervision of Dr. Pierre Gloor, described the contribution of the thalamocortical system to the generation of absence seizures that characterize the so called *Petit Mal* epileptic syndromes. In 1983, he spent some time in Dr. Per Andersen's laboratory at University of Oslo analyzing the mechanisms underlying long-term potentiation of synaptic transmission in the *in vitro* hippocampal slice preparation. Later, he also trained in clinical EEG at the Department of Neurology and Neurosurgery of McGill University. During over the three decades of independent work, he has trained more than 50 undergraduate, graduate and postdoctoral fellows, published more than 250 scientific papers and edited four books. His work has been awarded many honors, including the prestigious Stiftung Michael Prize for Epilepsy Research in 1995 and a call for *Chiara Fama* from the *Sapienza* University of Rome in 2001.

In his current research, Dr. Avoli explores the role played by inhibitory and excitatory mechanisms in the synchronicity of neuronal networks of the limbic system, and thus in seizure initiation. He is also addressing the changes in excitability that contributes to epileptogenesis in temporal lobe epilepsy as well as the mechanisms of action of anti-epileptic drugs.

SELECTED PUBLICATIONS

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- [11] Panuccio, G., Guez, A., Vincent, R., Avoli, M., Pineau, J. Adaptive control of epileptiform excitability in an *in vitro* model of limbic seizures. *Exp. Neurol.*, **2013**, *241*, 179-83.
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