



Prof. PEDRO ANTONIO VALDES-SOSA

General Vice-Director for Research Cuban Neuroscience Center

Born in Chicago in March 1950, he is living in Cuba since 1962.

Prof. Valdes-Sosa studied medicine at the University of Havana and graduated in 1972. During his medical studies he was part of the team working developing ERP multivariate statistical software and the first Cuban microcomputer (1970).

He also got a B.Sc. in Mathematics in 1973. He obtained his Ph.D. in 1978. In 1979 he undertook his postdoctoral training on "Neurometrics and Computational Techniques" and "Biophysical Modeling of brain electrical activity" with Prof. E. Roy John at the Brain Research Lab of New York University USA.

He was the co-founder of the Cuban Neuroscience Center in 1990 as its general vice director for research.

He is the author of the VARETA inverse solution technique and other statistical and mathematical approach for the modelling and fusion of MRI, EEG, MEG, and fMRI signals. His papers (more than 180 with H index of 43) have appeared in many of the major electrophysiological and neuroimaging. In the *Proceedings of the IEEE* in 2015 he published one of his most recent paper "Tensor Analysis and Fusion of Multimodal Brain Images", which for the first time introduced Granger causal analysis of brain networks as a tensor regression problem, thus allowing the atomic decomposition of brain networks.

In 2011 the Cuban National Science Degree Council granted him a Doctorate in Science as a Lifetime Achievement Award for his pioneering contribution to Quantitative, EEG and Neuroimaging.

Since 2013 is a Distinguished Professor of Neuroinformatics at the University of Electronic Science and Technology of China. In 2015 he was awarded the "1000 talent foreign professorship" of China, and was designated as the Director of the *Joint China-Cuba Laboratory for Frontier Research in Translational Neurotechnology*. He is a senior professor of the Cuban Higher Institute for Medical Sciences, full member of the Cuban Academy of Sciences, full member of the Latin American Academy of Sciences and ex officio Program Chair of the Organization for Human Brain Mapping OHBM.

He organized for the Ministry of Public Health of Cuba the Human Brain Mapping Project, first stage 1990, second stage 2004 and co-founded in 2008 the Latin America Project of Human Brain Mapping LABMAN. In 2016, he co-chaired with Dr. Shekar Saxena, head of department of Mental Health at WHO, at its headquarters in Geneva, the first meeting of the International Brain Projects about its impact in public health. He is co-chair of the Global Brain Consortium GBC with Alan Evans from Montreal Neurological Institute Canada.