

RADU MUTIHAC

Prof. Emeritus Radu Mutihac is Chair of Medical Physics Section, University of Bucharest, and works in Neuroscience, Signal Processing, Microelectronics, and Artificial Intelligence. As postdoc/research associate/visiting professor/full professor, he run his research at the University of Bucharest, International Centre for Theoretical Physics (Italy), Ecole Polytechnique and Institut Henri Poincaré (France), KU Leuven (Belgium). Data mining and exploratory analysis of neuroimaging time series were addressed during two Fulbright Grants in Neuroscience (Yale University, CT, and University of New Mexico, NM, USA). His research in fused biomedical imaging modalities was carried out at the Johns Hopkins University, National Institutes of Health, and Walter Reed Army Institute of Research, MD, USA.

In 2008, Prof. Mutihac was nominated PhD student supervisor in the field of Physics at the University of Bucharest, Romania.

Prof. Mutihac is member of the ISMRM, ESMRMB, OHBM, Romanian US Alumni Association, and fellow of Signal Processing and Neural Networks Society IEEE, as well as referee for several journals of the Institute of Physics (London, UK), Neural Networks (Elsevier), IEEE Transactions on Image Processing, and evaluator/expert for the ISMRM, OHBM, ARACIS, CNCSIS, UEFISCDI, The Romanian – U.S. Fulbright Commission, and the European Commission (FP7, H2020).

Prof. Mutihac published over 120 scientific papers in reputed peer-reviewed journals, 12 monographs, and contributed with chapters in other 10 textbooks published by renowned scientific publishing houses. He participated in more than 150 scientific meetings with posters and oral presentations, seminars, invited and plenary lectures, as well as acting as member of the organizing committees, special session organizer, chairperson, and keynote speaker.

Following his scientific activity, Prof. Mutihac has been nominated scientific referee for 12 journals, such as IOP, IEEE journals and alike, as well as Member of the Editorial Board of several journals in the field of Neuroscience: J. Romanian College of Medical Physicists, J. Childhood and Developmental Disorders, J. Neurology and Clinical Neuroscience, Medical and Clinical Reviews, J. of Translational Neurosciences, Epilepsy J., The Neurologist - Clinical and Therapeutics J., Advances in Neurology and Neuroscience., and J. of Neuroscience and Neurological Surgery.

EXPERTISE AND RESEARCH INTEREST

Fundamentals of Neuroscience;
Functional Neuroimaging and Fused Imaging Modalities – fMRI, DTI, PET, SPECT, CT;
Neurological Disorders and Brain Dysfunction;
Spatiotemporal Dynamics of Brain Connectivity – Connectomics;
Artificial Intelligence and Machine Learning;

Natural and Artificial Neural Networks – Modeling and Simulation;
Pattern Recognition and Facial Recognition;
Essentials of Biostatistics;
Data Mining and Exploratory Data Analysis;
Digital Image and Signal Processing;
Evolutionary Computation – Simulated Annealing (SA) and Genetic Algorithms (GA);
Ethics in Scientific Research;
Health and Medicare Policy;
Micro- and Nanoelectronics – Analysis and Design of VLSI Circuits.