

## Curriculum vitae

Nicola Toschi

Nicola Toschi is an Associate Professor in Medical Physics at the University of Rome "Tor Vergata" and a Visiting Assistant Professor and assistant in Neurology at the Athinoula A. Martinos Center for Biomedical Imaging (Harvard Medical School).

His research is focused on MR physics and developing image processing and modeling techniques able to extract quantitative biomarkers of investigative, diagnostic and prognostic value in a clinical context, where the main clinical domains of application have been diagnostic imaging, neurology and psychiatry, neuroendocrinology, cardiology and anesthesiology.

His early research was in molecular modeling and in vitro/in vivo behavioural neuroendocrinology, while his current work focuses on MRI physics, the development of mechanistic and statistical models for understanding physiological phenomena (i.e. central regulation of autonomic nervous system activity, causal brain connectivity, cardiovascular mechanics, tissue-field interactions in noninvasive neuromodulation), advanced image processing (e.g. longitudinal deformation-based morphometry, multimodal image fusion, and image registration for subcortical and brainstem segmentation), time-frequency approaches for quantifying autonomic activity, the application of non Gaussian diffusion imaging in neurodegenerative disease, and the predictive estimation of intraoperative cardiovascular risk.

He is the author or co-author of over 100 peer-reviewed publications in these fields, which have been cited approximately 2500 times since year 2000 with a total Impact Factor of over 300.

Full Publication List:

[https://www.researchgate.net/profile/Nicola\\_Toschi](https://www.researchgate.net/profile/Nicola_Toschi)