Hugo Vrenken, PhD, is an Associate Professor at VU University Medical Center in Amsterdam, the Netherlands. After completing Master’s degrees in both Physics and Applied Physics at the University of Groningen, the Netherlands, he started a PhD project on quantitative magnetic resonance imaging (MRI) in multiple sclerosis (MS) at VU University Medical Center, where he has remained after obtaining his PhD in 2005.

Dr Vrenken is co-author of over 100 peer-reviewed papers and has an ISI Web of Science H-index of 28. He has supervised 9 PhD candidates as co-promotor, and teaches at bachelor to postgraduate levels on image processing and MRI. He is a member of the Steering Committee of MAGNIMS and Secretary of the White Matter Study Group of ISMRM.

The Structural Brain Imaging Group led by Dr Vrenken focuses on quantification of brain pathology from MRI, especially in MS and dementia. The group develops and validates analysis methods, as well as applying them in clinical research. It forms a link between the department of Physics and Medical Technology and the department of Radiology and Nuclear Medicine. The embedding in the multi-disciplinary VU University MS Center Amsterdam and the close links with the Alzheimer Center Amsterdam provide a motivating and rich work environment.

Recent projects at the SBIG group include projects focusing on improving the measurement and pathological understanding of grey matter (GM) atrophy in MS, understanding the relation of GM atrophy with lesional and non-lesional WM pathology in MS, and improving the reliability of WM lesion quantification and of non-brain tissue removal for atrophy analysis.

**Selected papers:**


[^a]: http://www.magnims.eu/
[^b]: http://www.ismrm.org/chapter-study-groups/study-groups/studygroup13/