Prof. Grzegorz Stanisz

1980 - 1985	M.S. Physics, Jagellonian University, Cracow, Poland
1986 - 1990	Ph.D. Physics, Jagellonian University, Cracow, Poland
1991 – 1999	Research Physicist, Imaging Research, Sunnybrook & Women's
	College Health Science Centre
2010 – present	Academic Director, MRI, Odette Cancer Centre, Sunnybrook Hospital
2011 – present	Academic Director, Small Animal Imaging Centre, Sunnybrook
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2011 – present	Professor, Department of Medical Biophysics, University of Toronto

## Członkostwo

Member of International Society for Magnetic Resonance in Medicine Member of Collaborative Program in Neuroscience, University of Toronto Program Director, Diffusion Study Group, ISMRM White Matter Disease Study group, ISMRM

Funding

43 granty, ciągłe finansowanie od 2000 r w tym 21 jako PI

## Recenzent

Magnetic Resonance in Medicine NMR in Biomedicine Journal of Magnetic Resonance Imaging NeuroImage Wellcome Trust Medical Physics Department of Defense

Dorobek

66 artykułów w czasopismach recenzowanych

IF 486 H 27

26 zaproszonych wykładów i 111 referatów na konferencji

Zainteresowania naukowe obejmują:

- Proposed an analytical model of the diffusion processes in neural tissue.
- Proposed a model of tissue relaxation and magnetization transfer (MT) describing combined MT-T2 MRI experiments. This study showed that the MT effects in white matter are mainly mediated through myelin-associated water.
- Measured orientation anisotropy of a variety of MR parameters in many tissues.
- Demonstrated that the quantitative MR T2 and Magnetization Transfer measurements in neural tissue correlate very well with quantitative histopathological assessment of myelin and inflammation (First paper in literature to show it).
- Pioneered non-invasive techniques to measure apoptosis following cancer treatment in animal models of disease and humans.
- Developed new diffusion techniques for more robust measures of tissue microstructure base on combination of standard pulsed gradient spin echo (PGSE) and novel oscillating gradient echo technique (OGSE).
- Developed novel quantitative methods of chemical exchange saturation transfer (CEST) data analysis. Demonstrated that CEST data reveals tumour metabolism in animal models of cancer and is a non-invasive method to measure intracellular pH.
- Demonstrated feasibility of measuring changes in neurotransmitter levels (GABA, glutamate, NAA and serotonin) in brain following probiotic diet in mice.