Peter B Barker

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Peter Barker, D.Phil., is a Professor of Radiology and Oncology at the Johns Hopkins University School of Medicine in Baltimore, Maryland, USA. He has been active in magnetic resonance research for 35 years, since starting his graduate studies on the development of techniques for high resolution NMR spectroscopy in Professor Ray Freeman's group in Oxford in 1982. After a post-doctoral fellowship at HMRI/Caltech, he moved to Johns Hopkins in 1989, where his primary research interest has been the development and applications of physiological MR techniques (in particular proton magnetic resonance spectroscopy (MRS) and MR perfusion imaging) in neuroradiology.

Current research interests include developing methods to non-invasively map out neurochemical and neurotransmitter levels using MRS in patients with oncological, neurological and psychiatric diseases. A recent focus has been on the development of MRS spectral-editing techniques, as well as techniques for use at high magnetic field strengths (i.e. 7 Tesla) in humans. He has authored approximately 250 original, peer-reviewed papers on MRS and MRI, approximately 40 book chapters, review articles and other non-peer reviewed papers, and has also edited 3 books for Cambridge University Press on MR spectroscopy, MR perfusion imaging, and physiological clinical MR neuroimaging.