

## Alexander HAMMERS



Professor Alexander Hammers, a Neurologist, has taken up the Chair of Excellence in Functional Neuroimaging at the Neurodis Foundation in Lyon, France, in July 2009. He is a Visiting Reader in the Division of Neuroscience and Mental Health, Faculty of Medicine, Imperial College London, and Honorary Reader with the Institute of Neurology, UCL, London. His clinical subspecialty is Epilepsy.

After studies in Germany, France and Britain, he obtained a *summa cum laude* degree in Romance languages and literature in 1993 and qualified *summa cum laude* as a doctor at the Rheinisch-Westfälische Technische Hochschule, Aachen in 1994. He undertook postgraduate training at the Centre Hospitalier de la Côte Basque in Bayonne/Biarritz, France, the University Hospital in Essen, Germany, the National Hospital for Neurology and Neurosurgery, Queen Square, and Charing Cross Hospital, London, UK. He has been on the GMC Specialist Register for Neurology since 2004.

He earned an MD from the Rheinisch-Westfälische Technische Hochschule, Aachen in 1999 for morphological studies of the hippocampus in health and schizophrenia (work under Dr Klaus Niemann), and a PhD from the University of London in 2002 for PET investigations in focal epilepsy undertaken under Prof John S Duncan.

He is affiliated with the Deutsche Gesellschaft für Neurologie, the Association of British Neurologists, the British Branch of the International League Against Epilepsy, and the American Academy of Neurology.

Awards and distinctions include a Scholarship from the Studienstiftung des Deutschen Volkes (1989-1994), the Intercapital Prize in Epileptology 2002, and an MRC Clinician Scientist Fellowship (2004-2009).

His research has focussed on structural neuroimaging (magnetic resonance imaging, MRI) and functional neuroimaging (positron emission tomography, PET) of the epilepsies, and the development of new methodologies to quantify and compare neurotransmitter receptor concentrations, particularly automated volume-of-interest analysis. The goal is to understand both the structural basis as well as the pathophysiology of epilepsy and other neurological diseases, and to apply this knowledge clinically, particularly in the presurgical evaluation of patients with epilepsy.

His work at the Neurodis Foundation will strive to use neuroscientific methods for the benefit of individual patients. The main functional neuroimaging techniques used will be PET and MRI. While his main research focus will remain in the epilepsies, many of the methods lend themselves to being used in other diseases, for example diagnosis and follow-up of dementing diseases, and he expects to collaborate widely with Neurodis partners in Lyon, Grenoble, Saint-Etienne and Clermond-Ferrand, as well as pursuing existing and new national and international collaborations. He will aim to integrate PET, MRI, SPECT and MEG in the presurgical work-up of focal epilepsies, and will actively pursue research into novel PET tracers and optimal use of existing PET tracers.

Besides his clinical and research activities, Dr Hammers participates in regular student supervision and teaching, dissemination of knowledge through invited talks and workshops, and reviewer work for numerous journals and grant giving bodies.