

## *Brief Biography*

### **Richard Frayne, PhD**

Hopewell Professor of Brain Imaging  
University of Calgary/Foothills Medical Centre

Richard Frayne is a Professor (with tenure) in the Departments of Radiology and Clinical Neuroscience, a member of the Hotchkiss Brain Institute (HBI) and an associate member of the Libin Cardiovascular Institute of Alberta (LCIA), all in the Cumming School of Medicine at the University of Calgary. He is also the Scientific Director of the Seaman Family Centre, Foothills Medical Centre, Alberta Health Services. From 2000-2010, he was supported by the Alberta Heritage Foundation for Medical Research (AHFMR), from 2003-2013, he was a Canada Research Chair in Image Sciences and, in 2010, he was appointed to the Hopewell Professorship in Brain Imaging.

Dr Frayne's research interests are in the development and application of new imaging techniques and tools in humans for the study, detection and treatment of neurovascular disease. Current specific interests include angiography, perfusion/permeability and quantitative iron imaging in stroke and small vessel disease, and applications of these and other imaging techniques to human clinical trials. Dr Frayne is also interested in advanced image reconstruction and signal processing strategies. Previously at the University of Wisconsin-Madison (1994-1999) he helped develop time-resolved contrast-enhanced MR angiography. He actively collaborates with other researchers, particularly in imaging of concussion, and epilepsy.

He holds a BAsC (Electrical Engineering, 1989) from the University of Waterloo and PhD from the University of Western Ontario (Medical Biophysics, 1994). Dr Frayne has over 20 years of experience in pursuing imaging research in a clinical research environment. He has over 146 published peer-reviewed publications, over 110 invited talks and over 450 scholarly presentations (*h*-index: 38, >6,600 citations, Google Scholar). In addition, he has 20 international patents and has had technology successfully commercialized. He is very active in the training of high quality people and has educated over 100 undergraduate students and medical students, 15 MSc, 10 PhD and 10 post-doctoral fellows. He was on the Steering Committees for the Canadian Institutes for Health Research (CIHR)-funded Canadian Atherosclerosis Imaging Network (CAIN) and the Medical Imaging Trials Network of Canada (MITNEC). He directed the Training and Translation committees for both networks. Dr Frayne currently directs the Calgary-based NSERC CREATE International and Industrial Imaging Training Program (I3T) Program.

The AHFMR (now AI-HS), Canadian Foundation for Innovation, CIHR, Heart and Stroke Foundation of Canada, The US National Institutes for Health, and the National Science and Engineering Research Council of Canada and, currently fund or have funded his research. In 2015, he received a 7-year Foundation Award from the CIHR to continue efforts in imaging aging, stroke, and small vessel disease.

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