



**B. Gino Fallone, OMRI, PhD,
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Dr. Fallone recently developed and built the first operational integrated linac-MR system (www.linac-MR.ca), the first whole-body pre-commercial linac-MR system and is presently completing the commercial/linac system. The linac-MR takes continuous MRI images to guide, in real-time, the linac radiation beam to the tumour avoiding healthy tissues. Since cancer tumours reside in soft-tissue, uncertainties in the tumour position due to breathing or motion is avoided by using MRI imaging which shows soft-tissue best. Although the merging of an MRI with a linac was believed impossible because of mutual interferences, Dr. Fallone and his team successfully demonstrated operation in 2008. A spin-off company (MagnetTx Oncology Solutions), of which Dr. Fallone is the CEO, has been created to commercialize the technology.

Dr. Fallone is senior author on over 60 peer-reviewed publications of the physics and engineering on the linac-MR integration. Dr. Fallone's work includes 230 peer-reviewed research articles, 100 peer-reviewed proceedings and book chapters, 331 published abstracts, 320 posters, 275 conference presentations, 125 externally invited conferences, and 10 patent groups, that involve international filing, directly supervised over 92 graduate students, 25 medical physics residents, and awarded research grants from the Canadian Institute of Health Research, National Science and Engineering Research Council, Whitaker Foundation, Canada Foundation for Innovation, Alberta Cancer Foundation, Alberta Innovates: Health Solutions, Western Economic Diversification (Canada), Economic Development and Trade (Alberta).

He has been very active in international research, educational and professional activities, receiving numerous international awards, the most notably, being Knighthood to the Order of Merit, Italy (highest recognition in Italy) for his contributions to cancer research, especially MR-guided Radiotherapy. He is currently Full Professor and Director of the Medical Physics Division (Dept of Oncology) at the University of Alberta, and Director, Medical Physics Department, Cross Cancer Institute, where he founded and currently directs three CAMPEP-accredited programs (Medical Physics graduate, Radiation Oncology Physics residency and Imaging Physics Residency programs)