Shirin Abbasinejad Enger is an Assistant Professor in the Gerald Bronfman Department of Oncology, Division of Radiation Oncology and head of the Novel Patient-Specific Brachytherapy and Detector Technology lab at McGill University. She joined McGill University in August 2014.

Dr. Abbasinejad Enger's research involves development of applied technology addressing current limitations in radiation oncology and imaging. Her research group has developed a novel radiation delivery system, AIM-Brachy that enables intensity modulated brachytherapy, and a complete Monte Carlo based treatment planning system, for brachytherapy applications. One of the detectors developed by her group, will allow dynamic positron emission tomography imaging to be performed in greater number of clinics and provide early diagnosis of cancer and earlier cancer treatment outcomes to a larger number of patients. Her innovations have led to several patents and received more than 2.3 million dollars in competitive funding. In 2018, her AIM-Brachy project was selected by the European Society for Radiotherapy and Oncology as one of five innovative projects in the research area of brachytherapy. During May 2019 one of the detectors developed in her group received the Marika Zelenka Roy Innovation Prize at the McGill Clinical Innovation Competition. She has received multiple awards from Uppsala Innovation Center for her outstanding research with commercial development opportunities in the field of Monte Carlo calculations in medical physics. Dr. Abbasinejad Enger is the recipient of the Moses and Sylvia Greenfield Award for the best paper published in Medical Physics in 2014. She is chair of the AAPM TG 337 and a member of the Working Group on Model-Based Dose Calculation Algorithms in Brachytherapy.