



The Engineering Institute of Canada

2024 Award Citation

EIC Fellow



Elise Fear

Nominated by IEEE Canada

Dr. Elise Fear is Professor and Associate Head Research in the Department of Electrical and Software Engineering in the Schulich School of Engineering at the University of Calgary. She is a recognized international expert in medical applications of microwaves. Her team has developed a fast, accessible, safe, and cost-effective new method for breast cancer screening using low-power microwaves that is now being implemented with participant and patient groups.

Her research has received funding from the Canadian Breast Cancer Foundation, the Alberta Cancer Foundation, Alberta Innovates, and NSERC. In 2020, she co-founded Wave View Imaging to take her technology to market to improve women's health. In 2023, she received an Alberta Science and Technology (ASTech) Award honouring her "leadership and significant contribution through the discovery, application and/or implementation in the medical or healthcare/management sectors that advance science or technology."

Dr. Fear was the Alberta Innovates iCORE Strategic Chair in Multimodality Imaging and Sensing from 2013-17 and was a prestigious Killam Annual Professor in 2018-19. A senior member of IEEE, she has contributed to many IEEE committees and conferences, and served as Associate Editor of IEEE Transactions in Biomedical Engineering.

Ladies and gentlemen, and Ms. President, please welcome Elise Fear as a Fellow of the Engineering Institute of Canada.