Canadian Breast Cancer Foundation ONTARIO

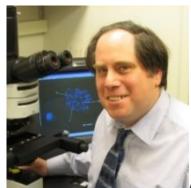


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CBCF-FUNDED RESEARCH FINDS NEW GENETIC MUTATIONS WHICH MAY CAUSE BREAST CANCER



An internationally recognized researcher who has authored more than 100 scientific publications and holds several patents has found new genetic mutations that are considered to be cancer-causing, thanks to a grant awarded by Canadian Breast Cancer Foundation.

Dr. Peter Rogan, Canada Research Chair in Genome Bioinformatics, Department of Biochemistry, Western University, is one of eight researchers across Canada who received funding in the first CBCF National Grants Competition on Earlier Detection of Breast Cancer in 2012. The grants support projects aimed at advancing new technologies to find cancer at its earliest stages, discovering or validating markers and understanding the psychosocial ramifications of earlier breast cancer detection.

Dr. Rogan's research is focused on trying to determine what genetic mutations might be causing breast cancer for patients with a family history of the disease, but who have tested negative for mutations in BRCA1 and BRCA2 genes – genes which when mutated are known to significantly increase breast cancer risk. His team's hypothesis is that even though some people test negative, this may be because their harmful genetic mutations occur in parts of these and other breast cancer genes that just haven't been analyzed yet.

"With the generous assistance of CBCF, our team of researchers, clinicians, molecular diagnostics laboratory directors, and genetic counselors is working together to develop a new paradigm for genetic testing of individuals at risk for breast cancer," said Dr. Rogan. "We aim to provide the most comprehensive analysis of disease-causing gene variants in genes that are known to cause inherited breast

cancer."

While Dr. Rogan is only in the first year of his three-year grant, he has already detected a number of previously unknown mutations that affect normal gene expression in previously screened patients. While further research is still needed, Dr. Rogan believes these mutations are likely pathogenic, or cancer-causing.

Dr. Rogan hopes that they will soon be able to confirm these findings, with the end result of being able to provide patients with more information about their risk of cancer. This would enable women who may have had previously inconclusive tests to know for certain about their genetic risks, allowing them to make informed decisions about prevention options.

For more information on the Earlier Detection of Breast Cancer grants, <u>click here</u>.