

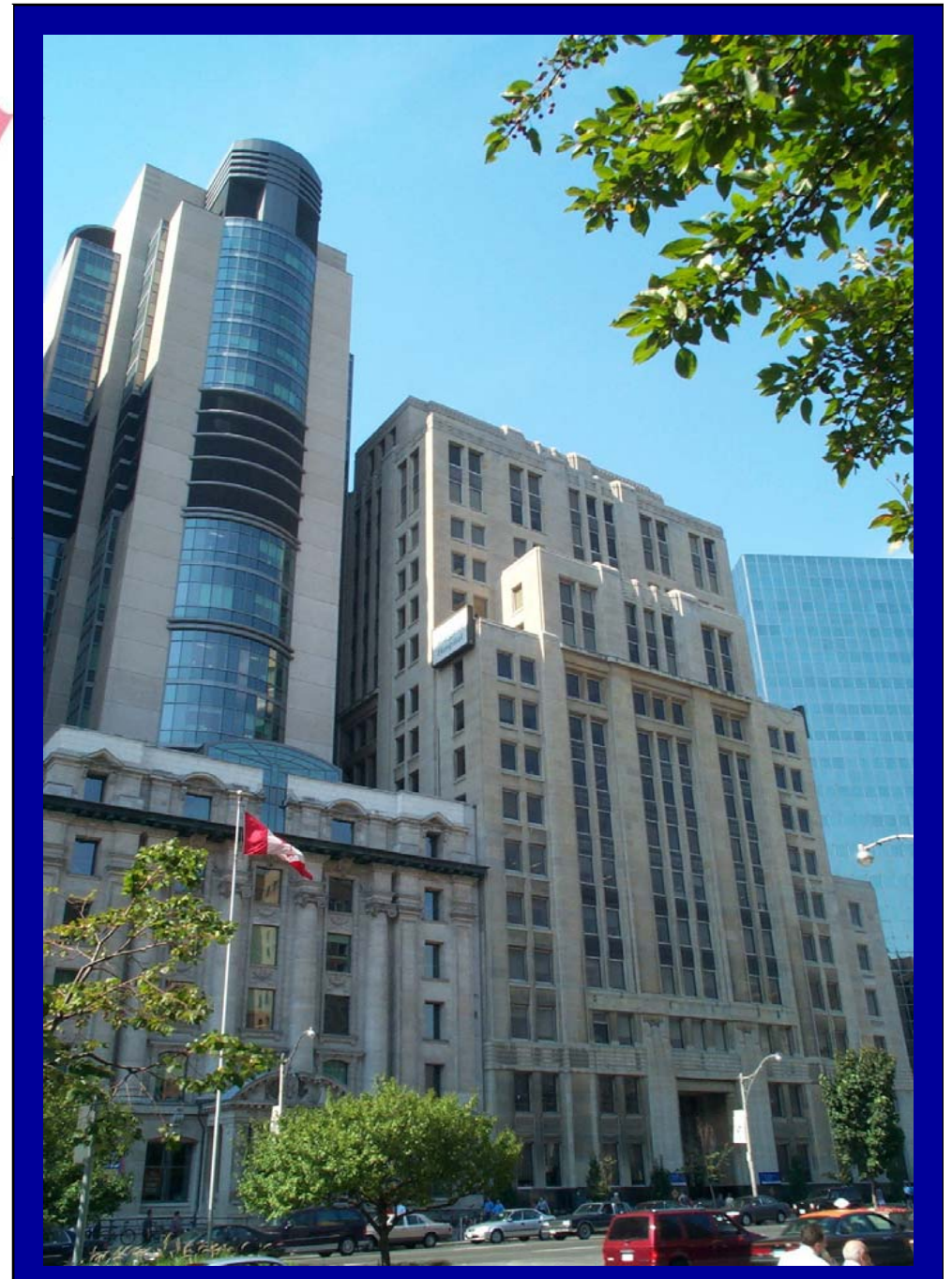
THE CAMPBELL FAMILY

Institute for
Breast Cancer Research
at Princess Margaret Hospital



MISSION

- To understand breast cancer through basic and clinical scientific research
- To translate our understanding into novel preventative and therapeutic strategies

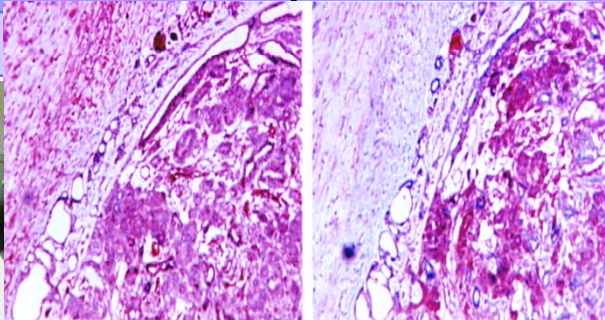


Campbell Family Institute for Breast Cancer Research Campbell Family Institute for Drug Development

Basic Research
Target Systems
Target Genes



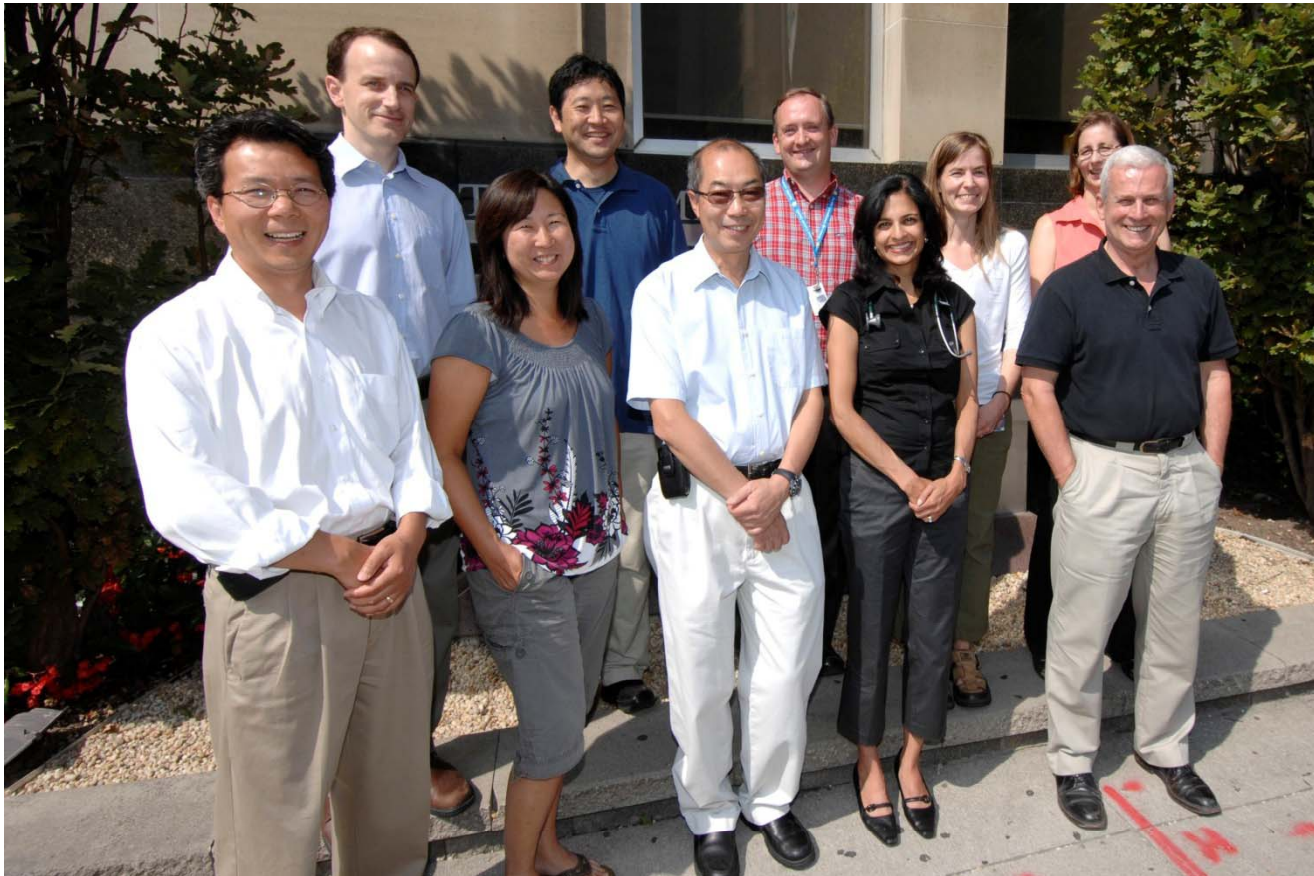
Translational
Research & Drug
Development



Clinical
Trials



Campbell Family Institute Team



PI: 10
Sci Assoc: 29
Students: 20
Fellows: 30
Techs: 40
Admin: 8
Total: 137

Campbell Family Institute Research Team

Dr. Tak Mak



Major Awards
Sloan GM Prize
King Faisal International Prize
The Gairdner Award
Order of Canada

Key Contributions:

- Uncovering key players in tumor metabolism; essential for growth
- Understanding the molecular pathways that contribute to breast cancer progression
- Primary breast cancer
 - Increase in DJ-1
 - Increase in active PKB/Akt

Campbell Family Institute Research Team

Dr. Norman Boyd



Major Awards

O. Harold Warwick Prize

Key Contributions:

- Identified importance of breast density on susceptibility to cancer

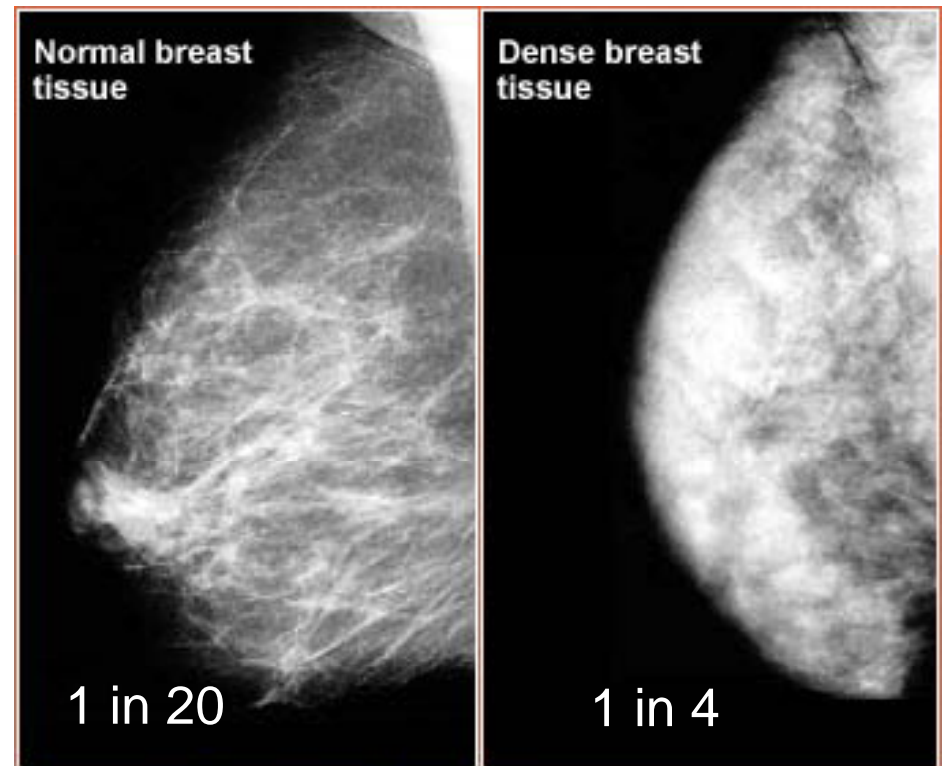


Figure provided courtesy of Dr. K. Bukhanov.

Campbell Family Institute Research Team

Dr. Mona Gauthier



Key Contributions:

- identified key regulators of stress signaling in premalignant mammary epithelial cells
- increase in Cox2
- increase in proliferation/p16
- increased risk for DCIS to progress

Future directions:

explore the regulation of stress activation and impact on tumor progression

Drug Discovery and Development Campbell Family Institute

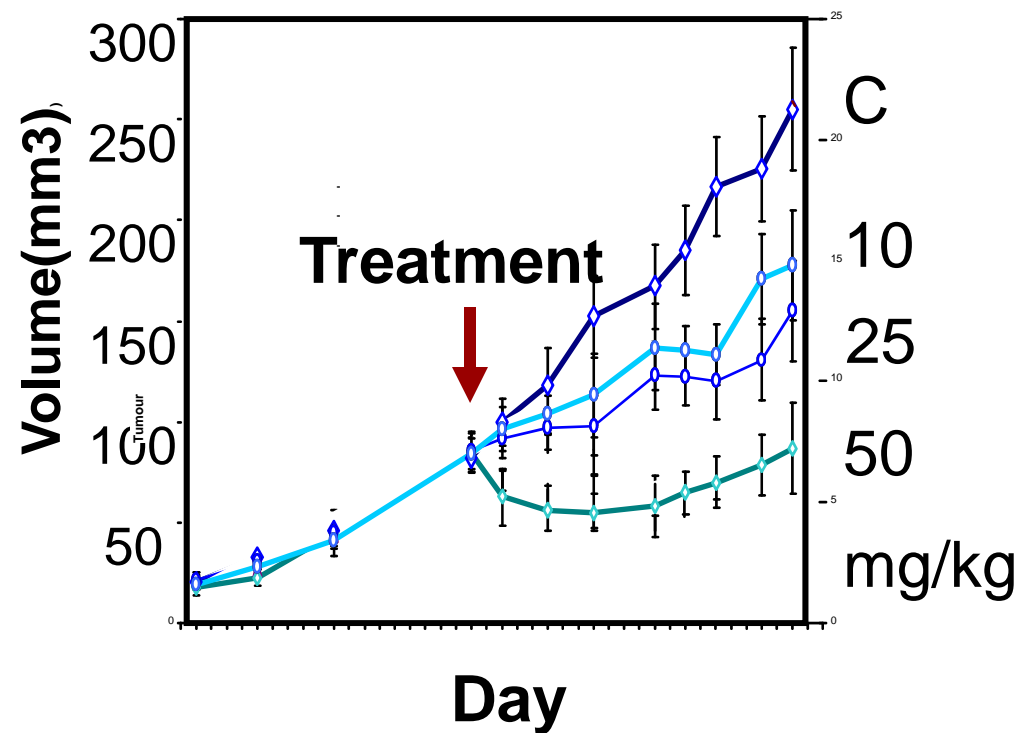
Dr. James Pan



- Aim: to discover novel drug targets and develop targeted therapies for treating breast cancer.
- The Team: experts in the areas of cancer biology, assay development and screening, chemistry and structure-guided drug design.
- discovered several novel cancer drug targets that show potent anti-cancer activity both in cell cultures and cancer xenograft model

Anti-tumor Activity of CF020 Inhibitors

- * CFO20, a novel drug target, induced by stress conditions
- * Over-expressed in multiple cancers and correlated with poor patient outcomes
- * RNAi silencing leads to cell cycle disruption, cell death and suppression of tumor growth



Campbell Family Institute Research Team

Dr. Pam Ohashi



Key Contributions:

- Basic principles of determining T cell fate in the immune system
- Establish Immune therapy program
- Design novel clinical trials

Major Awards

William E Rawls

Pharmingen Investigator Award

Canada Research Chair

*Campbell Family
Weekend to End
Breast Cancer*

*CIHR
NCIC
CBCRA*

