

C. Translational Breast Cancer Research Catalyst Grant Program

The Translational Breast Cancer Research Catalyst Grant Program is a rigorous, peer-reviewed program that provides “seed funding” to develop the most promising new breast cancer research ideas in London. Two of these highly competitive grants are given out each year, and are intended to either kickstart new research ideas that lead to improvement in breast cancer prevention, diagnosis, and treatment; and/or provide critical bridge funding to move research towards the clinic.

Updates from the 2017-2018 Catalyst Grants:

Former Catalyst Grant recipient **Dr. Richard Kim** and TBCRU trainee **Dr. Adrienne Borrie** have published the findings of BCSC-funded clinical study, and are now working closely with oncologists in London to incorporate their findings into clinical practice. Dr. Borrie also recently started her first year of medical school and plans to pursue a career as a medical oncologist specializing in breast cancer and under-serviced/rural patient populations.

Letrozole concentration is associated with CYP2A6 variation but not with arthralgia in patients with breast cancer. Borrie, A.E., Rose, R.V., Choi, Y-H., Perera, F.E., Read, N., Sexton, T., Lock, M., Vandenberg, T.A. Hahn, K., Dinniwell, R., Younus, J., Logan, D., Potvin, K., Yaremko, B., Yu, E., Lenehan, J., Welch, S., Tyndale, R.F., Teft, W.E., Kim, R.B., *Breast Cancer Res Treat*, 2018:172 (2), 371-379.

New Catalyst Grants: 2018-2019:

For the 2018-2019 year, recipients of the Breast Cancer Catalyst Grants included **Dr. Alison Allan** for her project “*Influence of breast cancer-derived exosomes on pre-metastatic priming of lung stroma*”, and **Dr. Shawn Li** for his project “*Novel biomarkers for predicting breast cancer metastasis potential*”.

Dr. Allan’s project is aimed at understanding how specific molecular signals from a patient’s primary breast tumor can enhance or inhibit metastasis to the lung. This project is closely linked to work being carried out by current TBCRU trainee Braeden Medeiros (described above in the Trainee section).

Dr. Li’s project is using sophisticated protein analysis approaches (proteomics and bio-informatics) to establish and validate new biomarkers in breast cancer tumors that could help predict metastasis in patients earlier. This project is closely linked to work being carried out by current TBCRU trainee Owen Hovey (described above in the Trainee section).

Importantly, recipients of these Catalyst Grants have a strong track-record of leveraging the research finding facilitated by the original BCSC-supported funding of \$25,000 into much larger (often >10-fold) government or industry grants to support long-term development of this research. This speaks to the true “catalyst” nature of this critical funding program.