



2nd Annual Gerald Bronfman Centre Symposium and Awards Ceremony November 26, 2012

The 2nd Annual Gerald Bronfman Centre (GBC) Symposium and Awards Ceremony, celebrating the 21st anniversary of the GBC, took place on November 26, 2012. The theme of the symposium was Basic Cancer Research. The keynote address was delivered by **Dr. Ann Chambers**, Professor in the Departments of Oncology, Pathology and Medical Biophysics at the University of Western Ontario, with additional talks by McGill researchers, **Dr. Morag Park**, James McGill Professor in the Departments of Oncology, Biochemistry and Medicine, and **Dr. Antonis Koromilas**, Professor in the Department of Oncology.

Dr. Chambers focused her lecture on tumour metastasis and dormancy as it relates to breast cancer. Many cancer patients have been blindsided by recurrence of the tumour many years after successful treatment. This could be a result of clinical dormancy whereby the tumour cells are still present but in an inactive state. Dr. Chambers presented research studies which aimed to explain why cancer cells can still be present post-treatment yet not metastasize, at least not right away. Metastasis is dependent on whether or not the immediate environment at the molecular level is supportive of cancer cell growth thus, while cancer cells may be able to enter the circulatory system and migrate to a secondary site, the local presence of particular oncogenes, receptors, growth factors etc. will impact whether or not those cells will be able to grow. Cytotoxic chemotherapy may not necessarily get rid of dormant solitary cancer cells, thus affording the opportunity for those surviving cancer cells to one day “wake up” and grow to form a tumour. With further research on the mechanisms driving cancer cell dormancy scientists may be able to use this phenomenon in the design of targeted cancer therapies.

Dr. Park spoke about her research on breast cancer and how interactions between the tumour and its microenvironment may play a role in disease progression. Investigating individual tumour-microenvironment profiles may lead to the identification of biomarkers which can be useful in choosing the treatment that would best suit that individual’s profile.

Dr. Koromilas’ talk concentrated on the role of the Stat family of proteins in cancer, in particular, Stat1. Mouse studies have shown that impairing the function of each of the different Stat proteins via gene disruption can negatively affect the performance of the cell at the molecular level leading to drastic consequences for the animal. For example, when Stat1 is impaired control over cell proliferation is compromised and the mice have an increased susceptibility to tumour formation and virus infection. Stat1 mutations have not been found in human cancers however, its activity in human cancer is dependent on what kind of chemical modification the protein has undergone following its formation. Phosphorylation of Stat1 proteins is one such modification which has been implicated in a number of different tumour types including breast cancer. A number of studies have looked at the implications of Stat 1 phosphorylation in breast cancer patients, however, while Stat 1 is a suppressor of breast cancer, it is thus far not known what role the phosphorylated form of the protein plays. Research is ongoing to look at the possible diagnostic and therapeutic value of Stat1 for breast cancer.

Following the lectures a Question and Answer session was held which was moderated by **Dr. Peter Siegel**, Associate Professor and Associate Director of the Rosalind and Morris Goodman Cancer Research Centre. Dr. Siegel’s research focuses on mechanisms of breast cancer metastasis.



Drs. David Eidelman (Dean of Medicine), Ann Chambers, Morag Park Antonis Koromilas, Peter Siegel, Eduardo Franco

At this year's Awards Ceremony, Lifetime Achievement Awards were presented to **Drs. Phil Gold** (basic cancer research) and **Ervin Podgorsak** (medical physics). In addition, **Dr. Gerald Batist** (medical oncology, translational cancer research) received the Research & Clinical Service Award, **Dr. Robin Cohen** (palliative care research) received the Teaching & Mentorship award and **Ms. Naomi Scobie** (Administrative Coordinator, Chair's Office) received the Academic, Clinical & Research Support Award).



Drs. David Eidelman (Dean of Medicine) and Eduardo Franco with award recipients:
Drs. Phil Gold, Ervin Podgorsak, Gerald Batist, Robin Cohen, Ms. Naomi Scobie