

## 4<sup>th</sup> Annual Gerald Bronfman Centre Symposium and Awards Ceremony November 24, 2014

The 4<sup>th</sup> Annual Gerald Bronfman Centre Symposium and Awards Ceremony took place on November 24, 2014. Celebrating the Centre's 23<sup>rd</sup> year, the theme of the symposium was *Advances in Cancer Therapy*. **Dr. Marc Lippman** from the University of Miami was the keynote speaker. He was followed by Department of Oncology faculty members, **Drs. Armen Aprikian** and **Gerald Batist**, who lead the cancer care teams at the MUHC and the Jewish General Hospital respectively. Following the three seminars there was a question and answer period moderated by **Dr. Jaroslav Prchal**, Director of the cancer care team at St. Mary's Hospital Center.

### *The Role of the Host in Metastatic Progression of Human Breast Cancer*

Dr. Lippman's presentation focused on host factors which may play a role in tumour metastasis and survival. He talked about the role of Myeloid-Derived Suppressor Cells (MDSCs) in tumour growth and metastasis and showed a potential pathway whereby cytokine production induced by the primary tumour or by stress, depression or obesity, promotes the production of MDSCs in the bone which then travel through the circulatory system to the primary tumour and to the liver, lungs and brain. Experiments are currently underway to determine if inhibiting expression of MDSC/tumour secreted cytokines will prevent metastasis. Dr. Lippman also discussed his experiments which identified genes whose change in expression relative to the primary tumour was common to all metastases, and which could therefore be promising targets for the prevention of metastasis.

### *Prostate Cancer: Therapeutic advances, societal impact, and evidence-based uncertainty*

Dr. Aprikian's presentation delved into the dilemma facing many in the medical community, namely deciding on the best course of treatment in the face of conflicting recommendations from clinical research studies, while also being mindful of today's fiscal realities in the health care system. With respect to prostate cancer, two randomized controlled trials looking at screening with the PSA test had opposing results, one showing no benefit, the other showing considerable reduction in mortality. In the context of the McGill experience, active surveillance for low-risk prostate cancer patients yielded a relative cost reduction of 54%. Castration sensitive prostate cancer can be treated with hormonal therapy/castration, however, if the cancer is castration resistant, there are a number of new therapies that can be used post chemotherapy, such as Abiraterone Acetate (inhibitor of androgen synthesis) or Enzalutamide (androgen receptor inhibitor). With treatment, castration resistant prostate cancer patients live on average 1.5 years longer. Health care professionals must manage the cost of treatments perhaps by going back to older, less expensive methods for some aspects of care in order to use newer, more expensive treatments at later stages of the disease.

### *The ExACCT Program: New paradigms for research and implementation of novel cancer therapeutics*

Dr. Batist talked about the development of a multi-faceted program to research and implement new cancer therapies in the context of a personalized medicine approach to cancer treatment. Currently there is a trial and error approach to cancer treatment with the result that for some patients the tumours are responsive while for others they are not. For some types of tumours there has now been a shift to personalized medicine. For example, non-small-cell lung cancer with the ALK mutation is responsive to treatment with Crizotinib. However, there is only a 5% incidence of this mutation in the non-small-cell lung cancer population. In another example, Vemurafenib can be used for metastatic melanoma patients with the BRAF<sup>V600E</sup> mutation. Again, not many patients have this mutation and although there is a high response rate, relapse occurs due to therapeutic resistance. The challenges for a personalized medicine approach to cancer treatment are the identification of patient subgroups, obtaining data on toxicity, identification of molecular signature and

mechanisms of therapeutic resistance. The ExACCT Program (Excellence in Advanced Cancer Clinical Trials) was developed to pursue research into the use of personalized medicine for various types of cancers.



Drs. Eduardo Franco, Armen Aprikian, Marc Lippman, Jaroslav Prchal, Gerald Batist, David Eidelman (Dean of Medicine)

Following the symposium, the winners of the 2014 Gerald Bronfman Centre Awards were called up to the podium to receive their award: **Dr. Jamil Asselah** for Research & Clinical Service, **Dr. Carmen Loiselle** for Teaching & Mentorship and **Ms. Marianna Perna** for Academic, Clinical & Research Support. **Drs. Philip Branton** and **Michael Thirlwell** were each honoured with a Lifetime Achievement Award.



Drs. Eduardo Franco, Michael Thirlwell, Philip Branton, Jamil Asselah, Ms. Marianna Perna, Drs. Carmen Loiselle, David Eidelman (Dean of Medicine)