



### **Post-Doctoral Position in Metastatic Breast Cancer Research**

Applications are invited for a post-doctoral fellow within the Pediatric Oncology/Hematology/Palliative Care/Epidemiology division within the Department of Pediatrics. Our research projects include a molecular understanding of both cancer initiation and progression and the molecular link between chronic inflammation and cancer. For this job posting, we are interested in recruiting an individual interested in understanding what promotes the migration of cancer cells, especially in the case of metastatic breast cancer. Breast cancer is the second leading cause of cancer-related deaths in women worldwide after lung cancer. Evidence suggests that, like most cancers, breast cancer is a heterogeneous disease especially in the metastatic state. About 90% of the genes the drive cancer encode for tumor suppressor genes that inhibit accelerated growth and promote cell death (apoptosis). Breast cancer has been classified into four major subtypes depending on the presence of human epidermal growth factor receptor 2 (Her2), estrogen and progesterone receptors (ER and PR, respectively). The most devastating form is the “triple negative form” that is Her2-ER-PR-and with very poor prognosis and high metastasis. The focus of this research project is to characterize the role of an emerging element, modulator of apoptosis (MOAP-1), as a tumor suppressor protein important in the appearance of the triple negative form of breast cancer. We have evidence that MOAP-1 is a pro-apoptotic protein absent in numerous cancers including breast cancer and is significantly lower in triple negative breast cancer cells. Our hypothesis is that MOAP-1 is an important “apoptotic checkpoint” that regulates the appearance of metastasis. Experience in handling cell cultures and/or cell signaling analysis is an asset as well as the use of animal models (nude mice and transgenic mice). However, experience in animal handling is not required.

Our research is situated within the University of Alberta (<http://www.ualberta.ca/>) in Edmonton, AB, Canada (<http://en.wikipedia.org/wiki/Edmonton>) within the Women and Children’s Health Research Institute. We have access to state-of-the art imaging, array platforms, tissue culture and molecular biology methodologies and a well organized tumor bank. Edmonton has a population of > 1 million, offers a cosmopolitan environment with world class performing arts, sports, culinary and recreational opportunities. The city’s proximity to the Rocky Mountains including the towns of Jasper and Banff are wonderful escapes during the summer and winter months.

Salary is commensurate with training and experience at the CIHR and or Alberta Innovates-Health solutions standard rates. A medical and dental benefit package is included with salary. The University of Alberta hires on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons. The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPP).

Please direct inquiries to Dr. Shairaz Baksh at the following email address: [sbaksh@ualberta.ca](mailto:sbaksh@ualberta.ca).

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For more information about my research or groups I am affiliated with please go to:  
<http://www.signaltransduction.ualberta.ca/> (and click on Faculty Members)  
<http://albertaibdconsortium.ca/>  
<http://innovationanthology.com/programs.php?id=406&mode=full>

Information about our gene family, please go to:  
RASSF Symposia Information at <http://rassfsymposia.com/> and research articles at  
<http://www.ncbi.nlm.nih.gov/pubmed/21776416>; <http://www.ncbi.nlm.nih.gov/pubmed/19344752>  
<http://www.ncbi.nlm.nih.gov/pubmed/20697344>; <http://www.ncbi.nlm.nih.gov/pubmed/18474619>