Focus on Faculty #16 Alan Spatz



<u>Dr. Alan Spatz</u> is a Professor in the Departments of Pathology and Oncology, and Associate Member of the Department of Human Genetics. He holds a Canada Research Chair (Tier 1) in molecular pathology. He is the Director of the Pathology Department at the Jewish General Hospital (JGH) and Director of the McGill/JGH Molecular Pathology Center. He is the Co-Director, with Dr. Leon van Kempen, of the "X chromosome and cancer" basic research lab at the Lady Davis Institute for Medical Research, as well as Director of Research at the McGill University Pathology Department.

Dr. Spatz received his medical education in Lyon, France, and did his residency in Pathology in Paris at Université Pierre et Marie Curie. He worked from 1994 to 2008 at the Gustave Roussy Cancer Institute in Villejuif, France. He was strongly involved in translational and clinical research, for instance as a Board member of the European Organization for Research and Treatment of Cancer (EORTC) and as the Chair of the EORTC Melanoma group (he was the only pathologist ever chairing an EORTC clinical group), and of the EORTC PathoBiology group. He was also President of the French division of the International Academy of Pathology. He is currently co-Chair of the Melanoma committee of the Canadian Cancer Trials Group and serves as a board member of several international professional organizations, on editorial boards and strategic committees.

He joined McGill as a full professor in 2008 and received tenure in 2011, attracted by the excellence and dynamism of McGill University, and by the atmosphere of innovation as a driving force of the JGH and the Segal Cancer Centre.

Besides his managerial activities in multiple functions, Dr. Spatz's activities in education have been remarkable. He has created a very successful molecular pathology program integrating seamlessly clinical activities and research, and has helped consolidate the role of research in pathology training. This was a strong unmet need in the province, as elsewhere in Canada. He has made mandatory the involvement of the pathology residents in research and has supervised more than 35 residents in molecular pathology and biomarkers-oriented research. This was extremely important in the personalized medicine era but also in order to create a young generation of clinician-researchers. In close collaboration with Dr Zu-hua Gao, Chair of the Pathology Department, he has reinforced the central role of research in the Department strategy and has recruited several foreign scientists from the US and Europe.

Dr. Spatz has been very active in connecting research teams in different research centers and universities to create synergistic collaborations, especially in melanoma which is his main expertise. He also acts in different research consortiums, such as EXACTIS, which is a pan-Canadian research group on personalized medicine led by Dr. Gerald Batist. One of his recent initiatives, COSMET, is a consortium involving Quebec teams at McGill and Université de Montréal and partners from China that has received funding from FRQS. His research lab is focused on the specific mechanisms of X chromosome inactivation and their relation with cancer. His lab has deciphered the role of the PPP2R3B protein in melanoma progression and its main partners, and has demonstrated the functional role of the gender-related haploinsufficiency. His research is also oriented towards the role of the interaction between CTCF and BORIS using X chromosome inactivation as a model of chromatin remodeling.

We asked Dr. Spatz to list a few of his articles whose work he is particularly proud or enjoyed the most. This is what he provided:

- 1. Deciphering the role of the X chromosome in cancer
 - **Spatz A,** Borg C, Feunteun J. X chromosome genetics and human cancer. Nature Reviews Cancer. 2004; 4(8): 617-629.
- 2. Deciphering the biology hidden behind phenotypic variables
 - Eggermont AM, Spatz A, Robert C. Cutaneous melanoma. Lancet. 2014; 383(9919):816-827.
 - Eggermont AM, et al., **Spatz A.** Adjuvant ganglioside GM2-KLH/QS-21 vaccination versus observation after resection of primary tumor > 1.5 mm in patients with stage II melanoma: results of the EORTC 18961 randomized phase III trial. J Clin Oncol. 2013; 31(30):3831-3837.
- 3. Reinforcing discovery and validation biomarkers pipelines to foster personalized therapy
 - Van Kempen L, **Spatz A** (2014). From biomarker development towards implementation of multidimensional biomarker panels in a clinical setting. Mol Oncol. 2014; 8(4):781-782.