Dr. Alan Spatz, MD, PhD

Dr. Alan Spatz is Director of the Pathology Department at the Jewish General Hospital, and Professor of Pathology and Oncology at McGill University and holds a Canada Research Chair in Molecular Pathology. Dr. Spatz presently directs the X chromosome and Cancer research lab at the Lady Davis Institute and leads an international research group on cutaneous melanoma. He has authored more than 180 original scientific papers, reports, review articles, and books.

Dr. Spatz is also the Director of the McGill-JGH Dubrovsky Molecular Pathology Centre located at the Jewish General Hospital, which opened at the end of 2013. This new cutting-edge facility is leading the way to personalized medicine by using molecular analysis to identify tumour biomarkers to advance the diagnosis and treatment of cancer.

Research Interests

Dr. Spatz's research is focused on the X chromosome and its role in cancer. His lab is focused on three programs: the regulation and role of FoxP3 gene and its variants, the function of PPP2R3B gene as a metastasis suppressor gene, and the X chromosome-mediated allele specific expression. FoxP3 has a dual role and is both a key player to regulate the immune micro-environment, and a strong transcription regulator. Dr. Spatz and his team investigate whether its variants have different roles and may have a negative dominant effect. PPP2R3B is one of these fascinating genes that escapes X chromosome inactivation, and is located on the X in females and in the Y in males. In 2004, Dr. Spatz proposed a non-Knudsonian model of X chromosome-based tumor suppressor gene inactivation that then became validated with several genes, including WTX, UPX, and now PPP2R3B.

For a list of selected publications please visit the Faculty webpage at: https://www.mcgill.ca/pathology/faculty