



Manitoba Neuroscience Network

2014/2015 Seminar & Visiting Speaker Series

Friday, February 27th, 2015 9:00 a.m.



Sachin Katyal, PhD

Assistant Professor, Department of Pharmacology & Therapeutics, University of Manitoba; Senior Scientist, Manitoba Institute of Cell Biology, CancerCare Manitoba

Topic: Understanding DNA repair biology in the development of novel cancer chemotherapeutic strategies: neurodevelopment applied to neuro-oncology

Location: PX236/238 PsychHealth Bldg., Bannatyne Campus

Research: Modulating DNA damage repair pathways in the treatment of malignant brain tumours

My research aims to identify ways to dysregulate cellular DNA repair pathways in tumours and improve therapeutic success. In this regard, DNA damage repair pathways are an ideal target; first, to minimize tumour cell therapeutic resistance and second, to specifically kill cancer cells by lowering the radio- and chemotherapeutic threshold of tumour cell genotoxicity by inhibiting redundant DNA repair pathways. We use genetic and biochemical approaches: 1. to determine how DNA repair pathways co-ordinately affect neurodevelopment, 2. to investigate how DNA repair deficiency contributes to neurodegeneration and, 3. to selectively target DNA repair pathways in neural/brain tumour cell and animal lines to enhance cellular sensitization to radio- and chemotherapeutic drugs. My work will serve to expand our knowledge of DNA repair neurobiology and translate this data into tangible next-generation cancer treatment paradigms that augment therapeutic efficacy with improved patient quality-of-life.

Web Addresses:

https://www.umanitoba.ca/institutes/manitoba_institute_cell_biology/MICB/Scientists/Katyal.html

https://umanitoba.ca/faculties/medicine/units/pharmacology/faculty_members/8300.html

For more information, contact the MNN Office at
(T) 235.3939 or email: mnn@sbrc.ca

Partners:



Hôpital St-Boniface Hospital
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