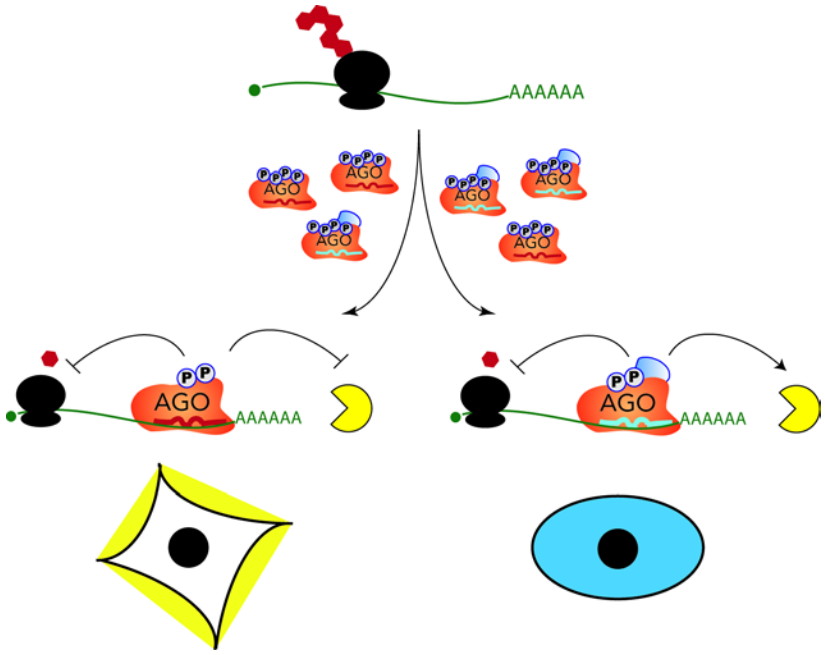
GUEST SPEAKER SEMINAR

Molecular Genetics
UNIVERSITY OF TORONTO

Function and regulation of the microRNA-mediated gene silencing pathway



From all the small RNAs recently discovered in our cells, the microRNAs represent a class of regulatory molecules that are extremely important for the maintenance of cell homeostasis. These conserved RNAs play an essential role in the control of diverse biological processes and several studies demonstrate that their misregulation can lead to the development of different pathologies such as cancer. Molecularly, each microRNA is bound by an Argonaute protein to form a microRNA-induced silencing complex known as miRISC. This silencing complex uses the base complementarity between the microRNA and messenger RNA sequences to target it and alter protein production. In the past years, our research program has mainly focused on uncovering new molecular players implicated in the microRNA pathway as well as understanding the function and regulation of Argonaute proteins, key components of this pathway. During this seminar, I will present our recent discoveries about the contribution of distinctive microRNA-induced silencing complexes in animals and discuss about new molecular processes that control the function of Argonautes.

Dr. Martin Simard
St-Patrick Research Group in Basic Oncology
CRCHU de Québec-Université Laval

Host: Dr. Julie Claycomb

Date: Tuesday April 3rd, 2018
Time: 10:00AM
Place: CCBR Red Seminar Room;
160 College St