



In situ imaging of germline stem cell division and architecture during *C. elegans* development



Stem cells offer great therapeutic promises for a number of degenerative diseases, yet their use requires that we obtain a comprehensive knowledge of their biology. While ground-breaking work has led to understanding genetic networks that control a variety of stem cell types, few studies have elucidated the cell biological properties controlling stem cells *in vivo*. This is due to the fact that, in general, stem cell niche environments are inaccessible for direct, live observation. We have begun a characterization of stem cell properties by live-imaging of dividing *C. elegans* germline stem cells *in situ*. I will present our findings on the regulation of their mitotic properties and on their tissue organization during gonad development.

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Host: Dr. Peter Roy

Date: Monday March 16th, 2015 **Time:** 10AM **Place:** 1 King's College Circle, Medical Sciences Building, Room 4171