GUEST SPEAKER SEMINAR

Molecular Genetics
UNIVERSITY OF TORONTO

Establishment and maintenance of early embryonic chromatin structure

Chromatin structure influences the interpretation of biological stimuli, defining the spectrum of active and inactive genomic features. During embryogenesis, chromatin changes dynamically, initially reflecting cellular totipotency but becoming increasingly restricted as cell fate specification proceeds. How such changes in the chromatin landscape relate to the developmental gene expression program is not well understood. I will discuss how the patterns of chromatin structure in the Drosophila embryo are initially established and maintained over multiple cell cycles, and how such patterns are elaborated upon by spatially-restricted patterning systems. Key to these observations are the development of sensitive methodologies for making near real-time measurements of chromatin accessibility by both high throughput sequencing and quantitative imaging.

Dr. Shelby Blythe

Princeton University
(Candidate for Faculty Appointment)

Host: Dr. Leah Cowen

Date: Monday February 6, 2017
Time: 10:00 a.m.
Place: Red Seminar Room
Donnelly CCBR