

# The Goodman Cancer Research Centre Seminar Series 2016-17

## Invited Seminar Speaker

Tuesday, March 14, 2017  
4:00 PM – 5:00 PM  
McIntyre Medical Building  
Meakins Amphitheatre, Room 521



## Robert G. Roeder, Ph.D.

Arnold and Mabel Beckman Professor of Biochemistry  
and Molecular Biology

The Rockefeller University, New York

### **Mechanistic studies of the cooperative functions of transcriptional co-activators**

Transcriptional regulation by gene- and cell-specific DNA-binding factors underlies key events in development, cell differentiation and transformation. However, their effects on specific genes depend upon complex arrays of cofactors (co-activators and co-repressors) whose biochemical mechanisms are not completely understood. These cofactors include both chromatin remodeling/histone modifying factors (e.g., the p300/CBP histone acetyl-transferases and the SET1/MLL H3K4 methyl-transferases) and other factors (e.g., Mediator, TAFs) that facilitate more direct communication between promoter-bound regulatory factors and the general transcription machinery. Emphasizing biochemical studies with cell-free systems reconstituted with recombinant chromatin templates and purified transcription factors, the cooperative functions and mechanism of action of selected co-activators will be discussed in relation to gene regulation by selected activators. This will include recent studies of p300-dependent activation of chromatin templates through novel acylation marks as well as mechanisms for the de-compaction and activation of higher order (linker histone H1-containing) chromatin templates.

**STUDENTS:** If you would like to attend a lunch with Dr. Roeder, please send an email to: [leah.donnely@mcgill.ca](mailto:leah.donnely@mcgill.ca)

**MANDATORY FOR GRADUATE  
STUDENTS / OBLIGATOIRE  
POUR ÉTUDIANTS DIPLÔMÉS**

**EVERYONE IS WELCOME**

**BIENVENUE A TOUS**

