# Department of Pathology Grand Rounds

## "Enhancer Malfunction in Cancer"


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**Feinberg School of Medicine**


*Thursday, September 10th, 2015 – 12:30 p.m.*
*Fitkin Amphitheatre – LMP 1094*

## Host: Qin Yan, Ph.D.


*This program is not supported by any grants*


*This course will fulfill the licensure requirement set forth by the State of Connecticut*

*ACCREDITATION*

The Yale School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

*NEEDS ASSESSMENT:*

- Understanding the molecular mechanism of leukemic pathogenesis involving MLL translocations.
- Translational control of gene expression as related to target specific treatment of human cancer.
- Epigenetic basis of cancer pathogenesis and the role of enhancer malfunction in this process.

*LEARNING OBJECTIVES:*

At the conclusion of this activity, participants will be able to:

- Understand some of the basics of the molecular mechanisms of the regulation of gene expression and epigenetic control
- Understand the functions and identification of some of MLL's translocation partners and their role in leukemic pathogenesis
- ELL as an RNA Polymerase II (Pol II) elongation factor and component of the Super Elongation Complex
- Describe the Set1 protein function within its macromolecular complex COMPASS, capable of methylating histone H3K4
- Describe the MLL partners in leukemia found with ELL within the Super Elongation Complex (SEC) regulating the transcription of the MLL-chimera target genes
- Understand the Pol II elongation factors and pause release and the diverse role they play in regulating gene expression including the marking of both poised and inactive enhancers in the embryonic state and in the priming of future developmental gene expression patterns
- Understand the role epigenetics play in the development of cancer and how we could use this information for targeted therapeutics.

*DESIGNATION STATEMENT*

**The Yale School of Medicine designates this live activity for 1 *AMA PRA Category 1 Credit(s)*™. Physicians should only claim credit commensurate with the extent of their participation in the activity.**

*FACULTY DISCLOSURES*

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