

# BC225/NB230 Epigenetics in health and disease, Fall 2017

Monday 1:00-2:30 (~2:15)

Thursday 1:00-2:30 (~2:15)

Location: BC Conference room (Med Sci I D240)/Hitachi Plumwood Auditorium

This is an exciting cutting-edge course on current topics in epigenetics, focusing on the impact of epigenetic regulation of the genomic functions (gene regulation, DNA replication and repair) on development, metabolism, learning and memory, and human disorders. The course will be led by instructors with expertise in different areas in the epigenetics field and ends with a one-day symposium "Epigenetics Day" with prominent speakers.

Course organizers: Paolo Sassone-Corsi, Marcelo Wood, and Kyoko Yokomori

Other instructors: Xing Dai, Haoping Liu, Joan Steffan

Contact: Kyoko Yokomori (X48215, [kyokomor@uci.edu](mailto:kyokomor@uci.edu))

Course web site and syllabus: <https://eee.uci.edu/17f/90849>

## I. Basic concept of epigenetics (lecture only)

M 10/2/17 (1) Introduction: Nuclear organization (Yokomori-1)

W 10/4/17 (-) BC Seminar Ali Mortazavi (Hitachi Plumwood Auditorium)

Th 10/5/17 (2) ATP-dependent chromatin remodeling (Steffan-1)

M 10/9/17 (3) Histone modifying enzymes (Sassone-Corsi-1)

Th 10/12/17 (4) Cutting edge techniques and reagents to study epigenetics (Zymo)

M 10/16/17 (5) Special Lecture by Rob Spitale

## II. Chromatin regulation in development

Th 10/19/17 (6) Chromatin changes in germ lines (Sassone-Corsi-2):

M 10/23/17 (7) Discussion (Sassone-Corsi-2)

Th 10/26/17 (8): Chromatin regulation in filament development (Liu-1)

M 10/30/17 (9) Discussion (Liu-1)

## III. Chromatin regulation in human health and disease

Th 11/2/17 (10) Histone modifying enzymes in learning and memory (Wood-1)

M 11/6/17 (11) Discussion (Wood-1)

Th 11/9/17 (12) The role of histone modifying enzymes in addiction (Wood-2):

M 11/13/17 (13) Discussion (Wood-2)

W 11/15/17 (-) BC Seminar Wei Wang UCSD (Hitachi Plumwood Auditorium)

## (II. Chromatin regulation in development)

Th 11/16/17 (14) Chromatin Regulation in Development and Stem Cells (Dai-1)

M 11/20/17 (15) Epigenetic abnormality in human disorders I (Steffan-2)

Th 11/23/17 (--) No class

M 11/27/17 (--) No class

Th 11/30/17 (16) Discussion (Dai-1)

M 12/4/17 (17) Epigenetic abnormality in human disorders II (Yokomori-2)

Th 12/7/17 (18) Discussion (Yokomori-2)

Fr 12/8/17 (19) Epigenetics Day

M 12/11/17 (20) Discussion (Steffan-2)