

RECENT ADVANCES IN TRANSCRIPTIONAL REGULATION

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OPIS

This course covers recent advances in transcriptional and post-transcriptional mechanisms of gene regulation, including the role of regulatory RNAs and RNA processing. Most recent exciting papers covering these topics published in reputed journals like Cell, Nature, Science etc will be discussed.

TEMATYKA / ZAGADNIENIA

The course will discuss the following topics:

1. The transcriptional regulation covers mechanisms of gene activation and repression, chromatin remodeling machines, regulation of transcription activation by signal transduction cascades and regulation with alternative sigma factors.
2. The course will also cover the post-transcriptional mechanisms regulating RNA processing and translation, mRNA stability, non-coding regulatory RNAs and regulation by RNA-binding proteins.

SPOSÓB ZALICZENIA PRZEDMIOTU (EGZAMIN I W JAKIEJ FORMIE)

The examination will be written with detailed answers.

LITERATURA

Selected Literature:

“Lewin’s Genes XI” by Krebs J.E., Goldstein E.S. and Kilpatrick S.T., Oxford University Press 2014

Zuo Y. and Steitz T.A. (2015) Mol Cell, 58: 534-540

Zhang Y. *et al.*, (2012) Science, 338:1076-1080

Feklistov A. and Darst S.A. (2011) Cell, 147:1257-1269

Hein P.P. *et al.*, (2014) Nat Struct Mol Biol, 21:794-802

Papenfort K. and Vanderpool C.K. (2015) FEMS Microbiol Rev, 39:362-378

Termin	Dzień tygodnia	Godzina	Miejsce
12.04.2016 19.04.2016 26.04.2016	Wtorek	15.15 – 17.00	Sala 112/113 Chemia A
10.05.2016 17.05.2016 24.05.2016 31.05.2016	Wtorek	15.15 – 17.00	Sala 112/113 Chemia A
07.06.2016	Wtorek	15.15 – 16.00	Sala 27 Chemia A zmiana sali!!!