COURSE DETAIL

MOLECULAR MECHANISMS OF GENE EXPRESSION AND REGULATION
Country United Kingdom - England
Host Institution University College London
Program(s) English Universities,University College London
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biochemistry
UCEAP Course Number 122
UCEAP Course Suffix
UCEAP Official Title MOLECULAR MECHANISMS OF GENE EXPRESSION AND REGULATION
UCEAP Transcript Title MOLEC MECHNSM/GENES
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
This course shows how molecular biology is steadily revealing the mechanisms of previously intractable problems, for example, control of gene expression. Topics include gene expression in bacteria (integrated control networks, two component signal transduction systems); transcriptional regulation in higher organisms and molecular techniques for studying gene function (the pre-initiation complex, signals that activate transcription factors, DNA cloning, and complementation techniques for identifying DNA-protein and protein-protein interactions); chromatin structure and gene expression; gene regulation and function in vivo; post transcriptional and translational control of gene expression (RNA splicing, RNA editing and mRNA stability); examples of alternative splicing; and protein synthesis (mechanisms and regulation of translation).

Language(s) of Instruction
English

Host Institution Course Number
BIOC0020

Host Institution Course Title
MOLECULAR MECHANISMS OF GENE EXPRESSION AND REGULATION

Host Institution Campus
University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department
Molecular Biosciences

Print