

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 Course Details

Host Institution Campus

University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department

Molecular Biosciences

Course Last Reviewed

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