

COURSE DETAIL

ADVANCED MOLECULAR GENETICS

Country

United Kingdom - England

Host Institution

King's College London

Program(s)

King's College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

170

UCEAP Course Suffix**UCEAP Official Title**

ADVANCED MOLECULAR GENETICS

UCEAP Transcript Title

ADV MOL GENETICS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course covers advanced molecular genetic concepts, together with their associated analytical or research-driven techniques, presented, where possible, by scientists or clinicians actively employing these concepts and techniques in their own research or clinical practice. The course covers: Genome Wide Association Studies (GWAS) - finding genes associated with complex disease; Pharmacogenetics (PGx) - using genetics to "individualize" drug treatment; Next Generation Sequencing - methods and application to translational medicine; networks of transcriptional control and regulation; chromatin regulation; recombineering and transgenic tools; genome editing techniques and uses; genetically modified (GM) foods and other plant technologies; RNA interference - future therapeutic or useful laboratory tool?; microbiome; and stem cell genetics.

Language(s) of Instruction

English

Host Institution Course Number

6BBB0346

Host Institution Course Title

ADVANCED MOLECULAR GENETICS

Host Institution Course Details

<https://keats.kcl.ac.uk/mod/url/view.php?id=7801923>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Bioscience

Course Last Reviewed

2024-2025

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