

COURSE DETAIL

RNA BIOLOGY AND TECHNOLOGY

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

133

UCEAP Course Suffix**UCEAP Official Title**

RNA BIOLOGY AND TECHNOLOGY

UCEAP Transcript Title

RNA BIOLOGY & TECH

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course examines the roles of RNA, coding and in particular non-coding (ncRNA), in regulation of gene expression, host-pathogen interaction, and catalysis as well as their applications in research, diagnosis, and therapy of human diseases. The topics cover the 'RNA world hypothesis', the relation between structure and function of RNA, the mechanisms of regulation and dysregulation of gene expression by ncRNAs, selection and design of functional RNAs, features and usage of ncRNAs, the role of RNA in early stage pharmaceutical developments, and RNA-based drug development.

Language(s) of Instruction

English

Host Institution Course Number

LSM3245

Host Institution Course Title

RNA BIOLOGY AND TECHNOLOGY

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biological Sciences

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