

Testi del Syllabus

Resp. Did. **MANFIOLETTI GUIDALBERTO** **Matricola: 004082**

Docente **MANFIOLETTI GUIDALBERTO, 6 CFU**

Anno offerta: **2022/2023**

Insegnamento: **855SM - ESPRESSIONE GENICA**

Corso di studio: **SM53 - GENOMICA FUNZIONALE**

Anno regolamento: **2021**

CFU: **6**

Settore: **BIO/11**

Tipo Attività: **C - Affine/Integrativa**

Anno corso: **2**

Periodo: **Primo Semestre**

Sede: **TRIESTE**



Testi in italiano

Lingua insegnamento	INGLESE
Contenuti (Dipl.Sup.)	<p>The course is organized in two parts:</p> <p>I PART. One week intensive course on regulation of gene expression . The course is part of the Double Diploma programme with the University of Paris Cité (France).</p> <p>II PART. 1. How a Scientific paper is organized. Several papers will be discussed in this section. 2. RNA analyses. Extraction, purification and analysis of RNA from eukaryotic cells. 3. Protein-DNA interactions.</p> <p>III PART 1. Eukaryotic RNA polymerases and promoters. 2. Eukaryotic general transcription factors. 3. Eukaryotic transcriptional activators. 4. Chromatin structure and its effects on transcription. 5. Post-transcriptional processes.</p>
Testi di riferimento	R. Weaver - Molecular biology - McGraw-Hill. Selected scientific papers and other didactical material will be provided through the Moodle platform.
Obiettivi formativi	Knowledge and understanding. Understand mechanisms responsible for the regulation of gene expression in Eukaryotic organisms at the transcriptional and post-transcriptional level. Acquire the theoretical methodology used in gene expression studies.
Prerequisiti	Basic concepts in Biochemistry, Molecular and cellular Biology.
Metodi didattici	Frontal lessons, seminars, poster presentations from students, seminars from students, teamwork, visits to scientific institutions.
Altre informazioni	Attendance of Part I and III is compulsory that one of Part II highly recommended. Students not able to attend the course should contact the teacher in advance.

Slides of the course, papers and protocols discussed during the course can be found at the Moodle website (password needed).

Modalità di verifica dell'apprendimento

A written test is at the end of the "Erasmus week" (part I) and is the discussion of a scientific paper or questions with short answers or multiple choice. Student presentations organized in groups of papers selected from topics present in part III. The last test is based on three open questions related to part II and III (look at the calendar of exams).

Programma esteso

The course is organized in 3 parts:
I PART. One week intensive course on regulation of gene expression. The course is organized in seminars given by experts, professors of the University of Trieste, Udine, SISSA, ICGEB and visiting professors. The course (Erasmus week) is part of the Double Diploma programme with the University of Paris Cité (France). French students will be also present. The attendance is compulsory.
II PART. 1. How a Scientific paper is organized. Several papers will be discussed in this section. 2. RNA analyses. Extraction, purification and analysis of RNA from eukaryotic cells. 3. Protein-DNA interactions.
III PART 1. Eukaryotic RNA polymerases and promoters. 2. Eukaryotic general transcription factors. 3. Eukaryotic transcriptional activators. 4. Chromatin structure and its effects on transcription. 5. Post-transcriptional processes.

Obiettivi Agenda 2030 per lo sviluppo sostenibile

Obiettivi per lo sviluppo sostenibile

Codice	Descrizione
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Testi in inglese

	English
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	Knowledge and understanding. Understand mechanisms responsible for the regulation of gene expression in Eukaryotic organisms at the transcriptional and post-transcriptional level. Acquire the theoretical methodology used in gene expression studies.
	Basic concepts in Biochemistry, Molecular and cellular Biology.

	Frontal lessons, seminars, poster presentations from students, seminars from students, teamwork, visits to scientific institutions.
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Obiettivi per lo sviluppo sostenibile

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