

# BIOTECNOLOGIE MEDICHE E NANOBIOTECNOLOGIE (LM49)

(Lecce - Università degli Studi)

## Insegnamento BIOPRODUCTION

GenCod A004554

**Insegnamento** BIOPRODUCTION

**Anno di corso** 2

**Insegnamento in inglese**  
BIOPRODUCTION

**Lingua** INGLESE

**Settore disciplinare** BIO/01

**Percorso** BIOMEDICO

**Corso di studi di riferimento**  
BIOTECNOLOGIE MEDICHE E

**Docente** Gian Pietro DI SANSEBASTIANO

**Tipo corso di studi** Laurea Magistrale

**Sede** Lecce

**Crediti** 5.0

**Periodo** Primo Semestre

**Ripartizione oraria** Ore Attività frontale:

**Tipo esame** Orale

**Per immatricolati nel** 2017/2018

**Valutazione** Voto Finale

**Erogato nel** 2018/2019

**Orario dell'insegnamento**

<https://easyroom.unisalento.it/Orario>

### BREVE DESCRIZIONE DEL CORSO

The goal of the course is the acquisition of skills in the study of organisms suitable for the production of molecules of biotechnological interest, particularly biomedical as well as a thorough understanding of the potential of biotechnology in cellular processes, with particular attention to plants. Scientific and technical aspects referring to the bioproduction of macromolecules using the

### PREREQUISITI

knowledge of cell biology (as acquired in most first level courses)

### OBIETTIVI FORMATIVI

acquisition of awareness on the biotechnological potential inherent in cellular processes and on the use of organisms for the production of biologically relevant molecules.

### METODI DIDATTICI

Learning methods consist of formal Lectures making use of slides. The students are also expected to read assigned papers from the scientific literature.

### MODALITA' D'ESAME

**Oral. It is aimed at ascertaining, in proportion:**

- The level of theoretical knowledge through the presentation of the program topics (50%)
- The level of practical abilities through description of methods and methodologies (25%)
- The ability to apply theoretical knowledge and practical skills to solve simple problems (25%)

### APPELLI D'ESAME

### ALTRE INFORMAZIONI UTILI

reception hours will be updated after courses organization. An appointment can be requested at any time by email and arranged accordingly to prof schedule.

### PROGRAMMA ESTESO

Concept of Bioproduction - Bioreactors and mass transport - Natural products (secondary metabolites) - Plants genetic engineering. - Molecular tools (vectors, markers, genes etc) - Cases of study. - Model plants -therapeutic recombinant proteins potentials. - otehr macromolecules for health. - vaccins - Insect cells. - Purification of bio-products.

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## TESTI DI RIFERIMENTO

attendance is strongly recommended because the course has no textbook. PDF will be made available on this website. About 20% of the content is described in *Biologia cellulare e biotecnologie vegetali*. G. Pasqua ; PICCIN ed. 2011. ISBN: 978-88-299-2124-9