

**Case Studies in Cytogenetics and Reproduction  
Biology**

Code: 42947  
ECTS Credits: 6

Degree	Type	Year	Semester
4313782 Cytogenetics and Reproductive Biology	OB	0	2

### Contact

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### Teachers

Joan Francesc Barquineró Estruch  
Vicenç Català Cahís  
Alberto Plaja Rustein

### Use of languages

Principal working language: catalan (cat)

### External teachers

Diversos professionals de l'àmbit de la Citogenètica  
Diversos professionals de l'àmbit de la Reproducció Assistida.

### Prerequisites

There are no specific prerequisites.

However, in order to ensure the correct follow-up of the sessions, it is recommended to have a good knowledge

It is recommended to have a good knowledge of English.

## **Objectives and Contextualisation**

To provide to the students a close interaction with experts of the field and insights for their professional career in t to the students.

## **Content**

Topics will be presented as case reports by professionals from research centers, assisted reproduction centers and genetic centers. The syllabus will be developed in the form of clinical cases selected by the lecturers. The coordinator of the subject will evaluate the appropriateness of the cases.

### **Topic 1: Cytogenetic cases**

Practical cases of prenatal, postnatal genetic diagnosis, constitutional cytogenetics and cancer will be studied. The most appropriate diagnostic methodologies for each case will be addressed together with the interpretation of the results and decisions taking.

Cases will include: prenatal diagnosis of aneuploidies, prenatal diagnosis of monogenic diseases, structural chromosomal abnormalities, chromosomal variants, disorders caused by deletions and cancer. Hypothesis will be established based on the results and the most appropriate interventions will be discussed for each situation.

### **Topic 2: Biology of reproduction**

Clinical of genetic diagnosis of female and male infertility, assisted reproductive treatments, donation of gametes and pre-embryos, cryopreservation of gametes and embryos and preimplantation genetic diagnosis cases will be analyzed. Hypothesis will be established based on the results and the most appropriate interventions will be discussed for each situation

Cases will include: application of assisted reproduction techniques in female factors, application of reproductive techniques assisted in male factors, ovarian hyperstimulation syndrome (OHS), recurrent pregnancy loss, in vitro embryo culture, embryo morphokinetics, preimplantation genetic diagnosis.