UNIVERSITAT DE BARCELONA

Facultat de Medicina
Plan Docent de la Asignatura 1: "Thalassaemias"
Màster en Competencies Mèdiques Avançades - Anemias Raras i síndromes relacionados

GENERAL DATA

Subject: 1. THALASSAEMIAS

Code:

Type: Optional

Schedule: To be defined

Departments involved: Medicine

Coordinator:
Joan-LLuis Vives Corrons (Departament de Medicina, Universitat de Barcelona, Unidad de Patología Eritrocitaria)

Academia:

1. C.L. Harteveld
2. Maria del Mar Mañú
3. Mariane de Montalembert
4. Vip Viprakasit
5. Fréderic Galactéros
6. Irene Roberts
7. Antonio Piga
8. Celeste Bento
9. Antonis Kattamis
10. Nicholas Anagnou

Subject Coordinator: Fréderic Galactéros

Credits ECTS: 3

Subject total teaching time (in hours):75

- **Presential (teacher): 50**
- **Autonomous (student): 25**

Requirements for subject learning

Skills to be developed

TRANSVERSAL SKILLS

- Being able to interact with other medical specialists to advise them
- Ability to work in interdisciplinary teams and collaborate with other researchers together, act independently and use initiative
- Ability to teach and disseminate knowledge in the social environment in both expert and non-expert audiences, clearly and in different languages
- Ability to integrate knowledge and ways to deal with the complexity and formulate judgments based on limited information, but so thoughtful, considering social and ethical repercussions of the trials
- To keep up to date knowledge exposed in the field of the international scientific community, that is, to seek, obtain and interpret information obtained in biomedical databases and other sources
- Being able to know the principles of bioethics and medico-legal research and professional activities in the field of biomedicine

SPECIFIC SKILLS

- Knowing the epidemiological, pathogenic, clinical and therapeutic advances of thalassemia, major and intermedia.
- Know the most advanced and complementary clinical diagnostic examinations of thalassemias
- Be able to recognize, interpret and diagnose properly laboratory abnormalities of thalassemias
- To develop, implement and evaluate clinical practice guidelines for patients with thalassemia

Subject Learning Objectives

A. General Objectives

The main objective of the course is to help train clinicians and researchers in the field of thalassaemic haemoglobinopathies as a unit of care is an area of excellence for translational research. Thalassemias represent a public health problem with increasing incidence and high associated morbidity due to migration impact.

B. Specific Objectives

To know in depth the mechanisms of thalassemia, their etiological mechanism/s and main clinical manifestation , as well as the eventual relationship between molecular mechanism and clinical expression of the disease. Furthemore, the exploration of their research possibilities and the assessment of the results of clinical trials for the international development of new biological or genetical treatments by cost-effectiveness studies.

Teaching programme

Subject 1: “Thalassaemias ”

Date	Topic	Chapter	Professor	Language
	1.1 Alpha thalassemia (21h)	1.1.1 Alpha 1 and alpha thalassemia thalassemia 2 (2h)	C.L. Harteveld	English
		1.1.2 Clinical and laboratory diagnosis	C.L. Harteveld	English
		1.1.3 Molecular diagnosis (2h)	Mar Mañú	English
		1.1.4 Clinical follow (2h)	Mariane de Montalembert	English
		1.1.5 Hemoglobin H (2h)	Vip Viprakasit	English
		1.1.6 Clinical and laboratory diagnosis (3h)	Vip Viprakasit	English
		1.1.7 Molecular diagnosis (3h)	Vip Viprakasit	English
		1.1.8 Clinical follow (2h)	Federic Galacteros	English
		1.1.9 Hydrops fetalis (2h)	Irene Roberts	English
	1.2 Beta thalassemia (23h)	1.2.1 Beta thalassemia intermedia (2h)	Antonio Piga	English
		1.2.2 Clinical and laboratory diagnosis (3h)	Antonio Piga,	
		1.2.3 Molecular diagnosis (3h)	Celeste Bento	English
		1.2.4 Treatment and clinical follow (3h)	Antonis Kattamis	English
		1.2.5 Beta thalassemia major (Cooley's anemia) (3h)	Frédéric Galactéros	English
		1.2.6 Clinical and laboratory diagnosis (3h)	Frédéric Galactéros	English
		1.2.7 Molecular diagnosis (3h)	Mar Mañú	English
		1.2.8 Treatment and clinical follow (3h)	Antonis Kattamis	
	1.3 Hereditary persistence of	1.3.1 Clinical and laboratory diagnosis (2h)	Irene Roberts	English

		1.3.2 Molecular diagnosis (2h)	Nicholas Anagnou	English
		1.3.3Treatment and clinical follow (2h)	Nicholas Anagnou	English

Methodology and General Organisation

A. **Main Lectures**: They will have a duration of 60 minutes; The first 40 minutes will be devoted to the exhibition of the teaching topic by the teacher and the remaining 20 minutes will be devoted to the interaction between students and teacher on the key issues of teaching topic theme (18 lectures= 18 hours).

B. **Interactive Seminars**: Will last 60 minutes and they will present case studies that the approach to analyze diagnostic and therapeutic evolution of patients with major erythropoietic defects (5 seminars = 5 hours).

C. **Student supervised task**: Students will prepare for approximately 1 hour each of the teaching classes / seminars and, for this, the teacher will provide a minimum of 2 articles in PDF format on the topic of the corresponding subject (class or seminar) (25 x 1 hour classes / seminars = 25 hours).

D. **Self Assessment** : At the end of the course (maximum two weeks after the last lecture), students must submit a portfolio summarizing skills acquired in this course (Independent task = 25 hours).

Attendance and degree of participation in lectures and interactive seminars (40%)
Realization of autonomous work, presentation and discussion with the teacher (60%)

Essential information resources

RELEVANT BIBLIOGRAPHY