## 15th GABBA COURSE (2012) Module: IRON BIOLOGY

One objective of this course module is to introduce students to the most recent developments in the field of iron biology, its regulatory mechanisms, genes and proteins involved, and the clinical implications of its deregulation. The students will be stimulated to discuss the main and most controversial research topics in the field. They are also expected to learn the importance of knowledge transfer from basic science to clinical research. The iron biology field comprises many good examples of such translational research. To attain these objectives, the students will have a close contact, during interactive tutorial classes (IAT), with Portuguese researchers leading projects of basic and clinical research in iron biology and also with other well recognized top quality international experts in the field in sessions designated as "Meet the Experts" (MEX). These sessions will be chaired by the students themselves.

A preliminary (temptative) Program is schedule as follows:

## Monday, May 7

10:30 Introduction to the course and week planning Graça Porto & Jorge Pinto (co-ordinators)

11:00 **IAT1: "Iron Biochemistry and Toxicity"**Conceição Rangel, ICBAS, Porto

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- 14:30 IAT2: "The importance of clinical models to explore iron homeostasis: the example of Hemochromatosis"

  Graça Porto, HAS/ICBAS/IBMC
- 16:00 VISIT TO THE CGPP: "Introduction to a Centre of Genetic Diagnosis, Counseling and Clinical Research" (guided by Graça Porto)

### Tuesday, May 8

10:30 MEX1: "Cellular Iron Trafficking"

With Caroline Enns, Portland, USA *Chaired by students* 

12:00 MEX2: "Systemic Iron Metabolism"

With Martina Muckenthaler, Heidelberg, Germany *Chaired by students* 

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## 14:30 MEX3: "Hepcidin Regulation & Hypoxia"

With Sophie Vaulont and Carole Peyssonnaux, Paris, France *Chaired by students* 

#### 16:30 MEX4: "Erythropoiesis and erythroid iron intake"

With Stefano Rivella, NY, USA *Chaired by students* 

## Wednesday, May 9

#### 10:30 MEX3:"Iron and infection"

With Hal Drakesmith, Oxford, UK *Chaired by students* 

# 12:00 IAT3:"Iron and Lymphocytes"

Jorge Pinto, IBMC

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## 15:00 Round Table: "Evolution of the Iron Biology Field"

Chair: Maria de Sousa, ICBAS, Porto

With:

Hal Drakesmith: a European Perspective Caroline Enns: an American Perspective Martina Muckenthaler: in a Research Institute

Stefano Rivella: in Hematology

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