3 rd Course Mouse and Rat Bone Phenotyping



Objective of the Course:

The aim of this course is capacitating participants to localize and to interpret the most common skeletal alterations found in mice and rats. This will occur in the context of dedicated learning sessions devoted to the study of bone anatomy, histology, immunohistochemistry, ultrastructure and imaging. Each lecture will be followed by a practical session in which

participants will work with real bone specimens, radiographs, histological preparations, and images from TEM and micro-CT.

In addition, the course will include seminars where specific skeletal abnormalities found in mutant mice will be discussed.

Duration: 4 days. 10-13 July 2017

Number of participants: 15 max

Tuition fee: € 950

The course will be held at the Center for Animal Biotechnology and Gene Therapy (CBATEG) and the School of Veterinary Medicine at the Universitat Autònoma de Barcelona (www. uab.cat)



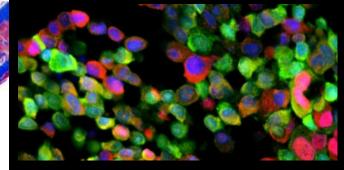
Course Program:

- **1.** Bone nomenclature. Skeletal design, bone architecture and types of bone.
- 2. Bone ontogeny. Osteogenesis
- **3.** Bone structure and immunohistochemistry



- **4.** Bone visualization: X-ray, microCT, and enzymatic cleaning.
- 5. Skeleton of the head
- **6.** Vertebral column. Ribs and sternum

- 7. Skeleton of the thoracic limb: scapula, clavicle, humerus, radius, ulna, carpal, metacarpal, and digital bones
- 8. Skeleton of the pelvic limb. coxal, femur, patella, tibia, fibula, tarsal, metatarsal and digital bones



Speakers:

Jesús Ruberte (Course coordinator)

Professor of Animal Anatomy

Head of the Mouse Imaging Platform, CBATEG, UAB

Ilaria Bellantuono

Professor of Musculoskeletal Ageing, University of Sheffield

Marc Navarro

Professor of Animal Anatomy, UAB

Ana Carretero

Professor of Animal Anatomy, UAB

Víctor Nacher

Professor of Animal Anatomy, UAB

Luisa Mendes-Jorge

Professor of Animal Anatomy, University of Lisbon

David Ramos

Interdisciplinary Center of Research in Animal Health, Lisbon

DEADLINE FOR APPLICATIONS: 25th May 2017

Applications should be sent to: victor.nacher@uab.cat

