

☐ FACULTY OF SCIENCE, TECHNOLOGY AND COMMUNICATION

University of Luxembourg & Integrated Biobank of Luxembourg (IBBL)

Course endorsed by the International Society of Biological and Environmental Repositories (ISBER)

# A unique integrated biobanking academic course

## Covering all technical, scientific and legal/ethical aspects of human and environmental biobanking

Biospecimens have become a strategic tool for healthcare and medical research, research and conservation in biodiversity, animal, plant and microbial biology as well as in translational research and systems biology through all types of –omics applications. Optimal management of biospecimens and bioresources through biobanking for future research and conservation has now become a new discipline.

### The Concept

This course will take the students on a journey through the biospecimens' lifecycle, from their natural, (either human or non-human) environment, to the scientist's bench. The course is addressed to students from both clinical and environmental/biodiversity backgrounds, associated with scientific and bioresources collections, as collectors, managers, technicians, auditors and end users. The course will focus on the most effective ways of providing quality products/biospecimens and conserved bioresources to different communities of practice, the technical, scientific and legal/ethical aspects of collecting, processing, storing and sharing samples and evaluating sample attributes. The course teaching will be shared and delivered by an experienced team of enthusiastic instructors representing different clinical, environmental and biodiversity conservation disciplines.

It is expected that commonalities will be highlighted and new ideas will be generated through interdisciplinarity and crosscutting teaching materials in this novel course, organized by the University of Luxembourg and IBBL and endorsed by ISBER.

#### **The Course**

- 3 consecutive weeks of intensive seminars
- An overall 90 hours of teaching
- Starting in May/June 2011 (to be confirmed)
- Entirely taught in English

# Why should you attend? You will learn how to:

- 1. Understand in depth and produce an oral synthesis of the common principles of practical biobanking.
- 2. Put different types of biobanks in context and draw conclusions regarding the theoretical basis of their operations.
- 3. Apply the scientific basis of biobanking/biospecimen research in Standard Operating Procedure (SOP) development and their implementation in the exploitation of samples for research and conservation.
- 4. Question the logistical, practical and technical steps of biobanking, and evaluate their coherence and adequation.
- 5. Compare different reports and processes on biobank risk management and mitigation.
- 6. Develop Best Practices/Standard Operating Procedures (SOPs).
- 7. Validate biobank protocols, training and technology transfers.
- 8. Analyze adequation to biobank Quality Management Systems (QMS) and the principles of certification, quality assurance and 3rd party ISO accreditation.
- 9. Master the regulatory, legal and ethical aspects of biobanking.
- 10. Produce biobank cost analysis and recovery reports.

#### **Entry requirements**

- Bachelor's Degree or equivalent
- Good knowledge of English.
- Having a vested interest in biobanking



