

INFRAFRONTIER I3 - Cryopreservation training course



Laboratory Course on CRYOPRESERVATION OF MOUSE GERMLASM

October 20 - 24, 2014

**Consiglio Nazionale delle Ricerche
Campus "A. Buzzati-Traverso"
I-00015 Monterotondo Scalo, Rome, Italy**

The Consiglio Nazionale delle Ricerche, EMMA-Monterotondo Campus International Development and The Jackson Laboratory offer a comprehensive course on cryopreservation of mouse embryos, sperm and ovaries. This Course is financially supported by the European Union FP7 Capacities Specific Program, through the Infrafrontier-I3.

CRYOPRESERVATION COURSE

The course is offered to teach methods in cryopreservation for banking of various strains of mice used in research, including inbred, transgenic and knock-out strains. Several methods of cryopreservation are now available and because no single method is adequate for all the various strains of mice being developed, a variety of methods are taught. The course is designed primarily as a "hands-on" laboratory program in which participants learn techniques for the cryopreservation of cleavage-stage embryos, spermatozoa and ovaries.

Techniques include:

- *Embryo "two-step" equilibrium freezing in plastic straws.*
- *Embryo non-equilibrium "ultra-rapid" cooling or "vitrification" in straws.*
- *Sperm freezing and recovery of frozen sperm by in vitro fertilization.*

In addition, general principles of cryobiology, development of inventory databases for individual programs, and adaptation of long-term storage systems and cryogenic equipment for different situations will be presented and discussed.

Course faculty:

In memory of Stanley P. Leibo - Course leader 1999-2013
Dept. of Biological Sciences, University of New Orleans
Audubon Center for Research of Endangered Species, New Orleans

Robert Taft, Jane Farley
Reproductive Sciences
The Jackson Laboratory, Bar Harbor

Marcello Raspa, Ferdinando Scavizzi, Raffaele Matteoni
Consiglio Nazionale delle Ricerche
European Mouse Mutant Archive (EMMA)
Monterotondo Campus International Development
INFRAFRONTIER I3
"A. Buzzati-Traverso" Campus, Monterotondo Scalo (Roma, Italy)

Susan Marschall
Helmholtz Zentrum München, Institute of Experimental Genetics
INFRAFRONTIER I3
Neuherberg-Munich (Germany)

Martin Fray
Medical Research Council, Mammalian Genetics Unit
INFRAFRONTIER I3
Harwell (United Kingdom)

Lluís Montoliu
Centro Nacional de Biotecnología, Consejo Superior de Investigaciones Científicas
INFRAFRONTIER I3
Madrid (Spain)

K. C. Kent Lloyd
Center for Comparative Medicine, School of Veterinary Medicine
NIH-Mouse Mutant Regional Resource Centers (MMRRC)
University of California at Davis

Enrollment

Enrollment is limited to **10** participants and early application is advised. This Course is financially supported by the EU FP7 Capacities Specific Program, through the Infrafrontier-I3.

Course Fees*:

European Union's and Associated Countries' nationals:

Academic or Non-Profit Institutions: **Euro 400.00**

Other Institutions: **Euro 950.00**

Other Countries' nationals:

Academic or Non-Profit Institutions: **Euro 900.00**

Other Institutions: **Euro 1,200.00**

****Fees do not include participant's travel and lodging.***

An acceptance letter will be sent to the selected participants including details about payment requirements and lodging information.

Deadline for applications: September 10, 2014

Download the Course application form at:

<http://www.emma.cnr.it/Courses/Course14/Applic-form14.doc>

Course information:

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Consiglio Nazionale delle Ricerche



Monterotondo Cryopreservation Course 1999-2014

Pictures from 2013 Monterotondo Cryopreservation Course

