



Campus "A. Buzzati-Traverso"
Consiglio Nazionale delle Ricerche
Istituto di Biologia Cellulare



Laboratory Course on CRYOPRESERVATION OF MOUSE GERMLASM

October 25-29, 2010

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

The Istituto di Biologia Cellulare of Consiglio Nazionale delle Ricerche-"A. Buzzati-Traverso" Campus and The Jackson Laboratory offer a comprehensive course on cryopreservation of mouse embryos, sperm and ovaries. This Course is financially supported by the EU FP7 Capacities Specific Program, through the European Mouse Mutant Archive (EMMA; www.emmanet.org).

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:

Stanley P. Leibo (Course leader)

Dept. of Biological Sciences, University of New Orleans
Audubon Center for Research of Endangered Species, New Orleans

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

Marcello Raspa, Ferdinando Scavizzi and Raffaele Matteoni
Istituto di Biologia Cellulare CNR, European Mouse Mutant Archive (EMMA)
"A. Buzzati-Traverso" Campus, Monterotondo Scalo (Roma, Italy)

Susan Marschall, Helmholtz Zentrum München
Institute of Experimental Genetics
European Mouse Mutant Archive (EMMA), Neuherberg-Munich (Germany)

Martin Fray, MRC Mammalian Genetics Unit
European Mouse Mutant Archive (EMMA), Harwell (United Kingdom)

Johannes Wilbertz, Karolinska Institutet
Karolinska Center for Transgene Technologies
European Mouse Mutant Archive (EMMA), Stockholm (Sweden)

Lluís Montoliu
Centro Nacional de Biotecnología (CNB-CSIC)
European Mouse Mutant Archive (EMMA), Madrid (Spain)

K. C. Kent Lloyd, Center for Comp. 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 European Mouse Mutant Archive (EMMA; www.emmanet.org).

Course Fees*:

European Union's and Associated Countries' nationals:

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

Other Institutions: **Euro 900.00**

Other Countries' nationals:

Academic or Non-Profit Institutions: **Euro 1,900.00**

Other Institutions: **Euro 2,400.00**

****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 25, 2010

Download the Course application form at:

<http://www.emma.cnr.it/Courses/Course10/Applic-form10.doc>

Course information:

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Application form requests:

Giuliana Boera, Teresa Cuccurullo
Course Secretariat

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Course administrative services:

Silvana Iannone, Anna Colibazzi - Administration
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Monterotondo Cryopreservation Course 1999-2010