

12th International Course

Care & Use of Laboratory Animals

Mice, Rats, Zebrafish

Coordinated by the University of Crete - Department of Biology

in collaboration with the

Institute of Molecular Biology & Biotechnology- FORTH



April – May 2026

Theoretical part of the Course – Online Lectures – 6 of April to 15 of May 2026

Practical part of the Course – On Campus Laboratory Hands - On Training 25 to 29 of May 2026

Heraklion, Crete, Greece

<https://cula-uoc.eu/>



Scientific Committee

- Prof. M. Pavlidis, University of Crete, Dept. of Biology
- Prof. G. Garinis, University of Crete, Dept. of Biology and IMBB FORTH
- Prof. K. Sidiropoulou, University of Crete, Dept. of Biology

Course Secretariat

- Mrs. Sofia Kyriakidi, University of Crete



Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 1

Monday, 6 April 2026

Time 16:00 – 16:45

Introduction - orientation session (L)

Prof. Michail Pavlidis

University of Crete & Institute of Molecular Biology and
Biotechnology of the Foundation for Research and
Technology Hellas

Teleconference

Time 17:00 – 17:45

**Discussion/
Preparation for PP presentation (O)**

Prof. Michail Pavlidis

University of Crete & Institute of Molecular Biology and
Biotechnology of the Foundation for Research and
Technology Hellas

Teleconference

Tuesday, 7 April 2026

Time 16:00 – 17:30

National and EU Legislation (L)

Dr. Katerina Marinou

General Directorate of Veterinary Services
Ministry of Rural Development and Food

Teleconference

Wednesday, 8 April 2026

Time 16:00 – 18:00

Introduction to animal ethics (L)

Prof. Stavroula Tsinorema

University of Crete

Teleconference

**9 – 15 of April 2026
Happy
Easter Holidays**

Care & Use of
Laboratory Animals
Mice, Rats, Zebrafish

Info:

L: Lecture

P: Practicals

O: Other





Week 2



9 – 15 of April 2026

Holidays



Thursday, 16 April 2026

Time 15:00 – 16:30

Project authorization, Animal Welfare Bodies (L)

Dr. Katerina Marinou
General Directorate of Veterinary Services
Ministry of Rural Development and Food

Teleconference

Friday, 17 April 2026

Time 15:00 – 16:30

Stress, anxiety and welfare of laboratory animals (L)

Dr. Athanasios Samaras
University of Crete

Teleconference

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 3

Monday, 20 April 2026

Time 15:00 – 16:00

Anesthesia and analgesia in laboratory animals (L)

Dr. Kalliopi Stratigi,
Institute of Molecular Biology and Biotechnology of the
Foundation for Research and Technology Hellas

Teleconference

Tuesday, 21 April 2026

Time 16:00 – 17:00

Current education and training requirements with laboratory animals (L)

Prof. Emeritus Ismene Dontas
University of Athens

Teleconference

Wednesday, 22 April 2026

Time 15:00 – 16:00

Manipulating the mouse embryo (L)

Prof. Eirini Athanasakis
University of Crete

Teleconference

Thursday, 23 April 2026

Time 15:00 – 16:00

Quality Management Systems and Good Laboratory Practice in Laboratory Animal Facilities and Research (L)

Dr. Georgia Chatzinikolaou
Institute of Molecular Biology and Biotechnology of the
Foundation for Research and Technology Hellas

Teleconference

Friday, 24 April 2026

Time 17:30 – 18:30

Defining alternatives; the 3Rs principles of animal use (L)

Argyro Zacharioudaki, DVM MLAS DipLECLAM
Designated Veterinarian
BIOEMTECH CRO Laboratories

Teleconference

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals:

Week 4

Monday, 27 April 2026

Time 16:00 – 17:30

Zebrafish Behavioural Indicators of stress and anxiety (L)

Dr. Kallirroï Papadaki
University of Crete

Teleconference

Tuesday, 28 April 2026

Time 17:30 – 19:30

Euthanasia (L)

Argyro Zacharioudaki, DVM MLAS DipLECLAM
Designated Veterinarian
BIOEMTECH CRO Laboratories

Teleconference

Wednesday, 29 April 2026

Time 15:30 – 17:30

Diseases of laboratory animals, Health monitoring and prevention of disease (L)

Dr. Konstantinos Kostas, DVM
University of Crete

Teleconference

Thursday, 30 April 2026

Time 15:00 – 16:00

Nutrition & Dietary Regimens in Laboratory Animals (Mice & Rats)

Dr. Georgia Chatzinikolaou
Institute of Molecular Biology and Biotechnology of the
Foundation for Research and Technology Hellas

Teleconference

Friday, 1 May 2026

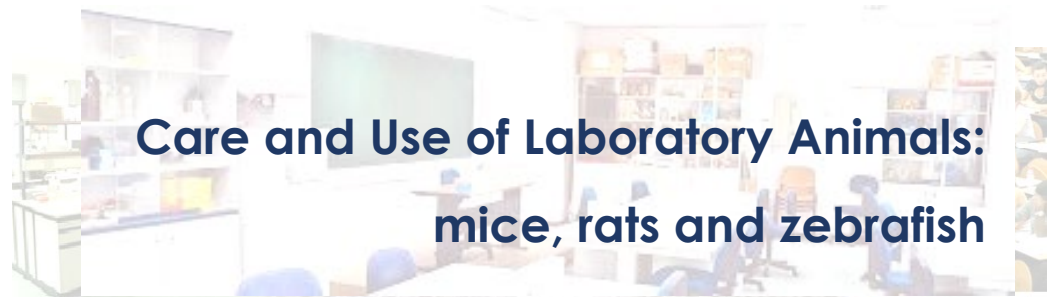
National public holiday

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 5

Monday, 4 May 2026

Time 16:00 – 18:00 **Zebrafish diseases and health management(L)** Teleconference
Dr. Pantelis Katharios
Hellenic Centre for Marine Research

Tuesday, 5 May 2026

Time 16:00 – 17:00 **Transportation and procedures (L)** Teleconference
Dr. Eleni Moltsanidou, DVM
Institute of Molecular Biology and Biotechnology of the Foundation
for Research and Technology Hellas

Wednesday, 6 May 2026

Time 16:00 – 17:30 **Generation of transgenic, knockin and knockout
animal models for human diseases (L)** Teleconference
Prof. George Garinis
University of Crete & Institute of Molecular Biology and Biotechnology
of the Foundation for Research and Technology Hellas

Thursday, 7 May 2026

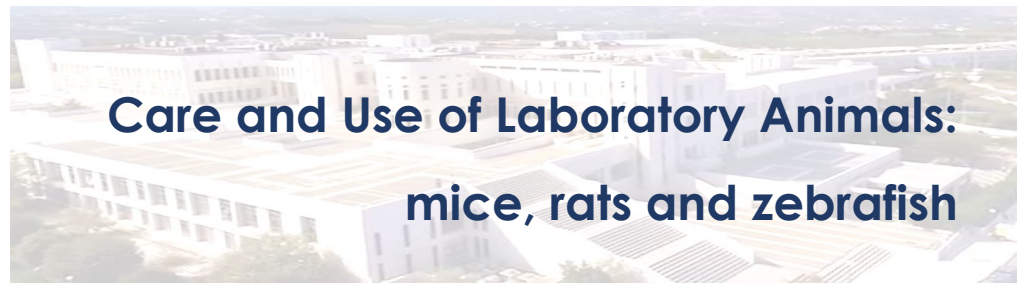
Time 17:30 – 19:30 **Severity & Humane endpoints (L)** Teleconference
Argyro Zacharioudaki, DVM MLAS DiplECLAM
Designated Veterinarian
BIOEMTECH CRO Laboratories

Friday, 8 May 2026

Time 16:00 – 17:30 **Harm/benefit analysis: cases of research studies
using laboratory animals in practice (PBL)** Teleconference
Prof. Emeritus Ismene Dontas
University of Athens

Info:
L: Lecture
P: Practicals





Week 6

Monday, 11 May 2026

Tuesday, 12 May 2026

Time 16:00 – 16:45

Husbandry and Enrichment (L)

Dr. Marianna Tsoutsou, DVM, MLAS
Director, Animal Research Facility
Athens LifeTech Park

Teleconference

Time 17:00 – 18:00

**Enhancing Transparency in Animal Research:
Public Communication and Non-Technical
Summaries (L)**

Dr. Marianna Tsoutsou, DVM, MLAS
Director, Animal Research Facility
Athens LifeTech Park

Teleconference

Wednesday, 13 May 2026

Time 15:00 – 17:00

Zebrafish biology & husbandry (L)

Dr. Eleftheria Fanouraki
University of Crete

Teleconference

Thursday, 14 May 2026

Time 15:00 – 15:45

Experimental design (L)

Prof. Konstantia Lika
University of Crete

Teleconference

Time 16:00 – 17:00

**Statistical analysis and interpretation of
results (L)**

Prof. Konstantia Lika
University of Crete

Teleconference

Friday, 15 May 2026

Time 16:00 – 17:00

**Methods to assess emotional and cognitive
behavior (L)**

Assoc. Prof. Kyriaki Sidiropoulou
University of Crete

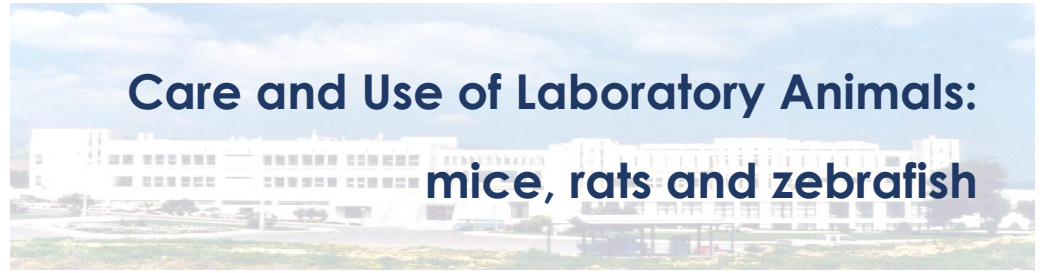
Teleconference

Info:

L: Lecture

P: Practicals





Week 7 – 25 to 29 of May 2026

On Campus -University of Crete, Department of Biology, Heraklion, Crete

Practical part of the Course –Laboratory Hands-On Training

1st day – Monday, 25 May 2026

Time 09:00 – 11:30

Rats hands-on exercise (P)

I: handling & stitching

Dr. Evangelos Balafas, MSc Pavlos Alexakos,
BRFAA

Dr. Niki Mastrodimou, Dr. Konstantinos Kostas
Andromahi Tsimvragou, DVM
University of Crete

Laboratory Γ
Department of Biology

Time 11:30 – 11:45

Coffee break

Time 11:45 – 14:00

Rats hands-on exercise (P)

I: handling & stitching

Dr. Evangelos Balafas, MSc Pavlos Alexakos,
BRFAA

Dr. Niki Mastrodimou, Dr. Konstantinos Kostas
Andromahi Tsimvragou, DVM
University of Crete

Laboratory Γ
Department of Biology

Time 14:00 – 15:00

Lunch

Time 15:00 – 19:00

**Zebrafish hands-on exercise: Water quality
monitoring, handling, anaesthesia, welfare
indicators (P)**

GROUP A

Prof. Michail Pavlidis,
Dr. Eleftheria Fanouraki, Dr.Thanasis Samaras
Joey Arboleda
University of Crete

Laboratory A
Department of Biology

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 7 – 25 to 29 of May 2026

On Campus -University of Crete, Department of Biology, Heraklion, Crete

Practical part of the Course –Laboratory Hands-On Training

2nd day – Tuesday, 26 May 2026

Time 09:00 – 11:30

Rats hands-on exercise (P)

II: Drug administration; Anaesthesia & analgesia

Dr. Evangelos Balafas, MSc Pavlos Alexakos,
BRFAA

Dr. Niki Mastrodimou, Dr. Konstantinos Kostas
Andromahi Tsimvragou, DVM
University of Crete

Laboratory Γ
Department of Biology

Time 11:30 – 11:45

Coffee break

Time 11:45 – 14:00

Rats hands-on exercise (P)

II: Drug administration; Anaesthesia & analgesia

Dr. Evangelos Balafas, MSc Pavlos Alexakos,
BRFAA

Dr. Niki Mastrodimou, Dr. Konstantinos Kostas
Andromahi Tsimvragou, DVM
University of Crete

Laboratory Γ
Department of Biology

Time 14:00 – 15:00

Lunch

Time 15:00 – 19:00

**Zebrafish hands-on exercise: Water quality
monitoring, handling, anaesthesia, welfare
indicators (P)**

GROUP B

Prof. Michail Pavlidis,
Dr. Eleftheria Fanouraki, Dr. Thanasis Samaras
Patricia Pereira
University of Crete

Laboratory A
Department of Biology

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 7 – 25 to 29 of May 2026

On Campus -University of Crete, Department of Biology, Heraklion, Crete

Practical part of the Course –Laboratory Hands-On Training

3rd day – Wednesday, 27 May 2026

Time 09:00 – 10:50

Mice hands-on exercise (P)

I: stitching and handling

Prof. Kyriaki Sidiropoulou,
Andromahi Tsimvragou, DVM

Dr. Konstantinos Kostas

Dr. Konstantinos Diskos, Dr. Angeliki Velli

University of Crete

Dr. Theodoros Kosteas, Eleni Moltsanidou-DVM

Institute of Molecular Biology and Biotechnology of the
Foundation for Research and Technology Hellas

Laboratory B
Department of Biology

Time 10:50 – 11:05

Coffee break

Time 11:05 – 13:00

Mice hands-on exercise (P)

I: stitching and handling

Prof. Kyriaki Sidiropoulou,
Andromahi Tsimvragou, DVM

Dr. Konstantinos Kostas

Dr. Konstantinos Diskos, Dr. Angeliki Velli

University of Crete

Dr. Theodoros Kosteas, Eleni Moltsanidou-DVM

Institute of Molecular Biology and Biotechnology of the
Foundation for Research and Technology Hellas

Laboratory B
Department of Biology

Time 13:00 – 14:00

Lunch

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 7 – 25 to 29 of May 2026

On Campus -University of Crete, Department of Biology, Heraklion, Crete

Practical part of the Course –Laboratory Hands-On Training

4th day – Thursday, 28 May 2026

Time 09:00 – 10:50

Mice hands-on exercise (P)

II: Drug administration; Anaesthesia & analgesia

Prof. Kyriaki Sidiropoulou,

Andromahi Tsimvragou, DVM

Dr. Konstantinos Kostas

Dr. Konstantinos Diskos, Dr. Angeliki Velli

University of Crete

Dr. Theodoros Kosteas, Eleni Moltsanidou-DVM

Institute of Molecular Biology and Biotechnology of the

Foundation for Research and Technology Hellas

Laboratory B
Department of Biology

Time 10:50 – 11:05

Coffee break

Time 11:05 – 13:00

Mice hands-on exercise (P)

II: Drug administration; Anaesthesia & analgesia

Prof. Kyriaki Sidiropoulou,

Andromahi Tsimvragou, DVM

Dr. Konstantinos Kostas

Dr. Konstantinos Diskos, Dr. Angeliki Velli

University of Crete

Dr. Theodoros Kosteas, Eleni Moltsanidou-DVM

Institute of Molecular Biology and Biotechnology of the

Foundation for Research and Technology Hellas

Laboratory B
Department of Biology

Time 13:00 – 14:00

Lunch

Info:

L: Lecture

P: Practicals





Care and Use of Laboratory Animals: mice, rats and zebrafish

Week 7 – 25 to 29 of May 2026, On Campus -UoC, Department of Biology, Heraklion, Crete
EXAMS & PP Presentations of group work

5th day – Friday, 29 May 2026

Time 09:30 – 10:30	Final exams <i>Multiple choice options, covering all topics addressed during the course</i>	Amphitheatre A
Time 10:30 – 11:00	Coffee break	
PP Presentations of group work Group work (≈15 min/group+ questions, ≈ 5-6 participants per group)		
Time 11:00 – 11:15 + questions	Group 1 – Modulating the Gut Microbiome to enhance immunotherapeutic efficacy in murine models of Glioblastoma	Amphitheatre A
Time 11:30 – 11:45 + questions	Group 2 – Investigation of Early Functional Recovery After Reconstruction of Sciatic Nerve Defect by Tunneling Autograft Through Muscle in a Rat Model	Amphitheatre A
20 min. break		
Time 12:00 – 12:15 + questions	Group 3 – Smart nanoparticles as potential therapy for type-1 diabetes-associated atherosclerosis	Amphitheatre A
Time 12:45 – 13:00 + questions	Group 4 – Micropollutant interactions in aquatic systems. Microplastic - heavy metal co - exposure in zebrafish	Amphitheatre A
Time 14:00	Farewell Lunch	We will let you know ASAP for the place



12th INTERNATIONAL COURSE

"CARE AND USE OF LABORATORY ANIMALS:



Hosted by the
University of Crete,
Department of Biology
In Collaboration with
IMBB, FORTH
Heraklion, Crete, Greece

APRIL - MAY, 2026

SCIENTIFIC COMMITTEE

PROF. MICHALIS PAVLIDIS, COORDINATOR
UNIVERSITY OF CRETE

PROF. KIRIAKI SIDIROPOULOU,
UNIVERSITY OF CRETE

PROF. GEORGE GARINIS,
UNIVERSITY OF CRETE AND
INSTITUTE OF MOLECULAR BIOLOGY
& BIOTECHNOLOGY, FORTH

ORGANIZING COMMITTEE

PROF. MICHALIS PAVLIDIS, COORDINATOR
UNIVERSITY OF CRETE (UoC)

PROF. GEORGE GARINIS,
DEPARTMENT OF BIOLOGY, UoC AND
INSTITUTE OF MOLECULAR BIOLOGY
& BIOTECHNOLOGY, FORTH

DR. ELEFThERIA FANOURAKI,
DEPARTMENT OF BIOLOGY, UoC

DR. THEODOROS KOSTEAS,
CO-HEAD OF CORE FACILITIES
INSTITUTE OF MOLECULAR BIOLOGY
& BIOTECHNOLOGY, FORTH

DR. NIKI MASTRODIMOU,
SCHOOL OF MEDICINE, UoC



FELASA ACCREDITATION
FELASA ID: 051/15

For more information about the course please visit:
<https://cula-uoc.eu/>