

**7<sup>th</sup> International Course**

# Care and Use of Laboratory Animals:

## mice, rats and zebrafish

Coordinated by the

University of Crete - Department of Biology

in collaboration with the

Institute of Molecular Biology & Biotechnology- FORTH



April - June 2021

Heraklion, Crete, Greece



### Organizing Committee

- Prof. M. Pavlidis, University of Crete, Dept. of Biology
- Prof. G. Garinis, University of Crete, Dept. of Biology and IMBB FORTH
- Dr. N. Kostomitsopoulos, Senior Research Scientist, BRFAA

### Course Secretariat

- Mrs. Sofia Kyriakidi, University of Crete



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

## Week 1

### Monday, 12 April 2021

**Time 16:00 – 16:45**      **Introduction (L)**  
Prof. Michail Pavlidis  
University of Crete  
Teleconference

**Time 17:00 – 17:30**      **Discussion/Preparation for PP presentation (O)**  
Prof. Michail Pavlidis  
University of Crete  
Teleconference

### Tuesday, 13 April 2021

**Time 17:00 – 18:00**      **Introduction to animal ethics (L)**  
Prof. Stavroula Tsinorema  
University of Crete  
Teleconference

### Wednesday, 14 April 2021

**Time 17:00 – 17:45**      **National and EU Legislation (L)**  
Dr. Katerina Marinou  
General Directorate of Veterinary Services  
Ministry of Rural Development and Food  
Teleconference

### Thursday, 15 April 2021

**Time 17:00 – 17:45**      **Defining alternatives; the 3R principle of animal use (L)**  
Argyro Zacharioudaki, DVM  
Experimental Research Center ELPEN  
Teleconference

**Time 18:00 – 18:45**      **Quality and GLP in Lab Animal Facility and Research (L)**  
Dr. Georgia Chatzinikolaou  
Institute of Molecular Biology and Biotechnology of the  
Foundation for Research and Technology Hellas  
Teleconference

### Friday, 16 April 2021

**Time 14:00 – 14:45**      **Occupational health, safety & waste management (L)**  
Brian Mphande, DVM  
Tampere University  
Teleconference

#### Info:

L: Lecture  
P: Practicals  
O: Other





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

## Week 2

### Monday, 19 April 2021

**Time 16:00 – 16:45**  
**17:00 – 17:45**

#### **Stress, anxiety and welfare of laboratory animals (L)**

Prof. Michail Pavlidis  
University of Crete

Teleconference

### Tuesday, 20 April 2021

**Time 16:00 – 17:30**

#### **Mouse and rat: biology & use (L)**

Prof. Eirini Athanasakis  
University of Crete

Teleconference

### Wednesday, 21 April 2021

**Time 14:00 – 14:45**

#### **Nutrition and dietary regimes in laboratory animals (L)**

Brian Mphande, DVM  
Tampere University

Teleconference

**Time 16:00 – 16:45**

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

Dr. Nikolaos Kostomitsopoulos, DVM  
Biomedical Research Foundation Academy of Athens

Teleconference

### Thursday, 22 April 2021

**Time 17:00 – 18:00**

#### **Zebrafish diseases and health management (L)**

Dr. Pantelis Katharios  
Hellenic Centre for Marine Research

Teleconference

### Friday, 23 April 2021

**Time 16:00 – 16:45**

#### **Experimental design (L)**

Assoc. Prof. Konstantia Lika  
University of Crete

Teleconference

**Time 17:00 – 17:45**

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

Assoc. Prof. Konstantia Lika  
University of Crete

Teleconference

### Info:

L: Lecture

P: Practicals





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

## Week 3

### Monday, 10 May 2021

**Time 17:00 – 18:00**

#### **Transportation and procedures (L)**

Dr. Nikolaos Kostomitsopoulos, DVM  
Biomedical Research Foundation Academy of Athens

Teleconference

### Tuesday, 11 May 2021

**Time 16:00 – 16:45**

#### **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

**Time 17:00 – 17:45**

#### **Zebrafish biology & husbandry (L)**

Dr. Aleka Tsalafouta  
University of Crete

Teleconference

### Wednesday, 12 May 2021

**Time 17:00 – 18:30**

#### **Humane end-points (L)**

Argyro Zacharioudaki, DVM  
Experimental Research Center ELPEN

Teleconference

### Thursday, 13 May 2021

**Time 16:00 – 17:00**

#### **Methods and tests to assess anxiety-related behaviour (L)**

Assis. Prof. Kyriaki Sidiropoulou  
University of Crete

Teleconference

### Friday, 14 May 2021

**Time 16:00 – 17:00**

#### **Generation of transgenic, knockin and knockout animal models for human diseases (L)**

Prof. George Garinis  
University of Crete & Institute of Molecular Biology and  
Biotechnology of the Foundation for Research and Technology  
Hellas

Teleconference

**Time 17:15 – 18:00**

#### **Project authorization, Animal Welfare Bodies (L)**

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

Teleconference

#### **Info:**

L: Lecture

P: Practicals





## Week 4

### Monday, 17 May 2021

**Time 16:00 – 16:45**

**Current education and training requirements with laboratory animals (L)**

Prof. Ismene Dontas  
University of Athens

Teleconference

### Tuesday, 18 May 2021

**Time 14:00 – 14:45**

**Preoperative surgery (L)**

Brian Mphande, DVM  
Tampere University

Teleconference

### Wednesday, 19 May 2021

**Time 16:00 – 17:00**

**Severity classification (L)**

Prof. Ismene Dontas  
University of Athens

Teleconference

### Thursday, 20 May 2021

**Time 16:00 – 17:00**

**Harm/benefit analysis: cases of research studies using laboratory animals in practice (PBL)**

Prof. Ismene Dontas  
University of Athens

Teleconference

### Friday, 21 May 2021

**Time 16:00 – 16:45**

**Husbandry and Enrichment (L)**

Dr. Nikolaos Kostomitsopoulos, DVM  
Biomedical Research Foundation Academy of Athens

Teleconference

### Info:

L: Lecture

P: Practicals

PBL: Problem-based learning





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

Week 5

Tuesday, 01 June 2021

## PP Presentations of group work

Group work  
(10 min/group+ questions, 6 participants per group)

**Time 17:00 – 17:10**

**+ questions**

### Group 1

Kostas Theodorakis  
Gabriela Dumitrita Stanciu  
Simone Tasciotti  
Ioanna Daskalaki  
Nanci D. Monteiro Abreu  
Isidoros Axiotis

Teleconference

**Time 17:20 – 17:30**

**+ questions**

### Group 2

Sakis Siametis  
Theano Andriopoulou  
Ioannis Kaplanis  
Sofia Pasadaki  
Gianina Dodi  
Maria Felicia Fiordelisi

Teleconference

**Time 17:40 – 17:50**

**+ questions**

### Group 3

Maria Anna Papadopoulou  
Razvan Stefan Boiangiu  
Paraskevi Kalamara  
Ilias Gkikas  
Maria Tampakaki  
Ana Raluca Opris

Teleconference

**20 min. break**

**Time 18:20 – 18:30**

**+ questions**

### Group 4

Christina Papanikolaou  
Christina Efremoglou  
Alina Lenghel  
Maria Grigoriou  
Ioannis Gardikiotis  
Elissavet Charizani

Teleconference

**Time 18:40 – 18:50**

**+ questions**

### Group 5

Spiros Georgakis  
Elpida Neofotistou-Themeli  
Gheorghita Isvoranu  
Ilias Frydas  
Georgios Niotis  
Electra Stylianopoulou

Teleconference

**Time 19:00 – 19:10**

**+ questions**

### Group 6

Fotini Kokou  
Styliani Andreopoulou  
Eleftheria Fanouraki  
Laura Maria Daian  
Emmanouil Malandrakis  
Theodoros Kosteas

Teleconference





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

**PRACTICALS -1<sup>st</sup> weekend of June 2021**

**1<sup>st</sup> day – Saturday, 5 June 2021**

**Time 09:00 – 13:00**

**Rats hands-on exercise (P)**

**I: handling & stitching**

**II: Drug administration; Anaesthesia & analgesia  
GROUP A**

Dr.Niki Mastrodimou, Dr.Kostas Kostas &  
Dr.Sofia Papadogkonaki  
University of Crete

Laboratory Γ  
Department of Biology

**Mice hands-on exercise (P)**

**I: stitching and handling**

**II: Drug administration; Anaesthesia & analgesia  
GROUP B**

Dr.Constantinos Kourouniotis, Dr.Hara Roumpaki,  
Dr.Eleni Moltsanidou, Dr.Theodora Velona &  
Dr.Christina Cheimonidi

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

Laboratory A  
Department of Biology

**Time 13:00 – 14:00**

**Light Lunch**

**Time 14:00 – 16:00**

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

**GROUP A**

Prof. Michail Pavlidis, Dr. Athanasios Samaras  
Ms.Tonia Theodoridi  
University of Crete

Laboratory B  
Department of Biology





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

**PRACTICALS -1<sup>st</sup> weekend of June 2021**

**2<sup>nd</sup> day – Sunday, 6 June 2021**

**Time 09:00 – 13:00**

**Rats hands-on exercise (P)**

**I: handling & stitching**

**II: Drug administration; Anaesthesia & analgesia  
GROUP B**

Dr.Niki Mastrodimou, Dr.Kostas Kostas &  
Dr.Sofia Papadogkonaki  
University of Crete

Laboratory Γ  
Department of Biology

**Mice hands-on exercise (P)**

**I: stitching and handling**

**II: Drug administration; Anaesthesia & analgesia  
GROUP A**

Dr.Constantinos Kourouniotis, Dr.Hara Roumpaki,  
Dr.Eleni Moltsanidou, Dr.Theodora Velona &  
Dr.Christina Cheimonidi

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

Laboratory A  
Department of Biology

**Time 13:00 – 14:00**

**Light Lunch**

**Time 14:00 – 16:00**

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

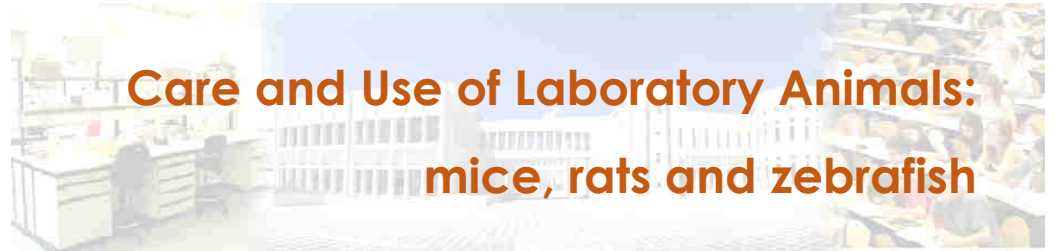
**GROUP B**

Prof. Michail Pavlidis, Dr. Athanasios Samaras  
Ms.Tonia Theodoridi  
University of Crete

Laboratory B  
Department of Biology







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

**PRACTICALS -2<sup>nd</sup> weekend of June 2021**

**3<sup>rd</sup> day – Saturday, 12 June 2021**

**Time 09:00 – 13:00**

**Rats hands-on exercise (P)**

**I: handling & stitching**

**II: Drug administration; Anaesthesia & analgesia  
GROUP C**

Dr.Niki Mastrodimou, Dr.Kostas Kostas &  
Dr.Sofia Papadogkonaki  
University of Crete

Laboratory Γ  
Department of Biology

**Mice hands-on exercise (P)**

**I: stitching and handling**

**II: Drug administration; Anaesthesia & analgesia  
GROUP D**

Dr.Constantinos Kourouniotis, Dr.Hara Roumpaki,  
Dr.Eleni Moltsanidou, Dr.Theodora Velona &  
Dr.Christina Cheimonidi  
Institute of Molecular Biology and Biotechnology of the  
Foundation for Research and Technology Hellas

Laboratory A  
Department of Biology

**Time 13:00 – 14:00**

**Light Lunch**

**Time 14:00 – 16:00**

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

**GROUP C**

Prof. Michail Pavlidis, Dr. Athanasios Samaras  
Ms.Tonia Theodoridi  
University of Crete

Laboratory B  
Department of Biology





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

**PRACTICALS -2<sup>nd</sup> weekend of June 2021**

**4<sup>th</sup> day – Sunday, 13 June 2021**

**Time 09:00 – 13:00**

**Rats hands-on exercise (P)**

**I: handling & stitching**

**II: Drug administration; Anaesthesia & analgesia  
GROUP D**

Dr.Niki Mastrodimou, Dr.Kostas Kostas &  
Dr.Sofia Papadogkonaki  
University of Crete

Laboratory Γ  
Department of Biology

**Mice hands-on exercise (P)**

**I: stitching and handling**

**II: Drug administration; Anaesthesia & analgesia  
GROUP C**

Dr.Constantinos Kourouniotis, Dr.Hara Roumpaki,  
Dr.Eleni Moltsanidou, Dr.Theodora Velona &  
Dr.Christina Cheimonidi

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

Laboratory A  
Department of Biology

**Time 13:00 – 14:00**

**Light Lunch**

**Time 14:00 – 16:00**

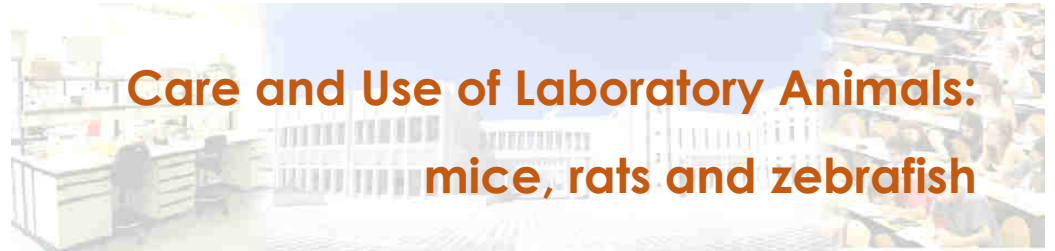
**Zebrafish hands-on exercise: Water quality  
monitoring, handling & anaesthesia (P)**

**GROUP D**

Prof. Michail Pavlidis, Dr. Athanasios Samaras  
Ms.Tonia Theodoridi  
University of Crete

Laboratory B  
Department of Biology





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**Wednesday, 16 June 2021**

**Time 17:00 – 17:45**

**Final exams**

ZOOM Link

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7th International Course

# "Care and use of laboratory animals"



Hosted by the  
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Department of Biology  
Heraklion, Crete, Greece

In Collaboration with  
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Heraklion, Crete, Greece

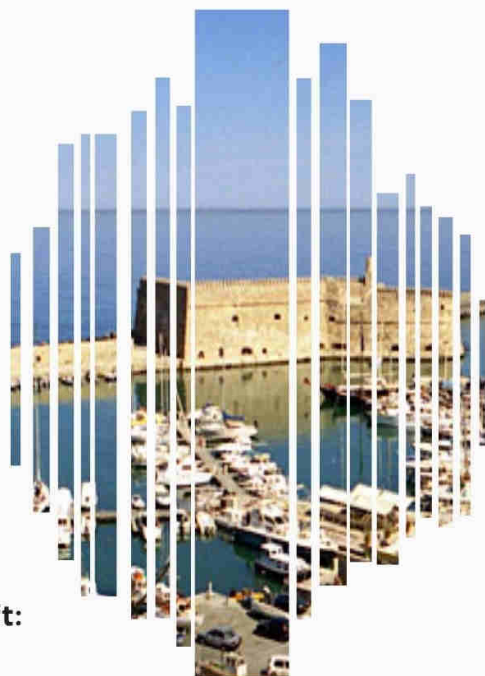
## APRIL - JUNE, 2021

### ORGANIZING COMMITTEE

PROF. MICHALIS PAVLIDIS, COORDINATOR  
UNIVERSITY OF CRETE

DR. NIKOLAOS KOSTOMITSOPOULOS,  
BIOMEDICAL RESEARCH FOUNDATION OF  
THE ACADEMY OF ATHENS

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



**For more information about the course please visit:**

<http://labanimalcourse-crete.weebly.com/>

**FELASA ACCREDITATION**

FELASA ID: 051/15

**felasa**

Federation of European Laboratory Animal Science Associations