

**6<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



May 27, 2019 — June 6, 2019

Heraklion, Crete, Greece



### Organizing Committee

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

### Course Secretariat

- Mrs. Sofia Kyriakidi, University of Crete



# Monday, 27 May 2019

**Monday, 27 May 2019**  
**09:30 am – 17:00 pm**

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<b>09:30 am – 09:45 am</b>	<b>Registration</b>	Rotonda 3rd Floor Department of Biology
<b>09:45 am – 10:30 am</b>	<b>Introduction (L)</b> Prof. Michail Pavlidis UoC	Rotonda 3rd Floor Department of Biology
<b>10:30 am – 11:00 am</b>	<b>Subject Selection for PP presentation</b> Prof. Michail Pavlidis UoC	Rotonda 3rd Floor Department of Biology
<b>11:00 am – 11:15 am</b>	<b>Coffee break</b>	
<b>11:15 am – 13:00 pm</b>	<b>Introduction to animal ethics (L)</b> Prof. Stavroula Tsinorema UoC	Rotonda 3rd Floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:00 pm – 16:00 pm</b>	<b>Stress and welfare revisited (L)</b> Prof. Michail Pavlidis UoC	Rotonda 3rd Floor Department of Biology
<b>16:00 pm – 17:00 pm</b>	<b>Defining alternatives; the 3R principle of animal use (L)</b> Eleni Moltsanidou IMBB	Rotonda 3rd Floor Department of Biology

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**Info:**

L: Lecture

P: Practicals





# Tuesday, 28 May 2019

**Tuesday, 28 May 2019**  
**09:30 am – 17:00 pm**

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<b>09:30 am – 10:30 am</b>	<b>National and EU Legislation (L)</b> Dr. K. Marinou General Directorate of Veterinary Services Ministry of Rural Development and Food	Rotonda 2nd Floor Department of Biology
<b>10:30 am – 11:30 am</b>	<b>Project authorization, Animal Welfare Bodies (L)</b> Dr. K. Marinou General Directorate of Veterinary Services Ministry of Rural Development and Food	Rotonda 2nd Floor Department of Biology
<b>11:30 am – 11:45 am</b>	<b>Coffee break</b>	
<b>11:45 am – 12:45 pm</b>	<b>Nutrition and dietary regimes in laboratory animals (L)</b> Georgia Chatzinikolaou IMBB	Rotonda 2nd Floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:00 pm – 16:30 pm</b>	<b>Mouse and rat: biology &amp; use (L)</b> Prof. Eirini Athanasaklis UoC	Rotonda 2nd Floor Department of Biology
<b>16:00 pm – 17:00 pm</b>	<b>Health hazards and safe practices in the animal house (L)</b> Constantinos Kourouniotis, DVM IMBB	Rotonda 2nd Floor Department of Biology

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**Info:**

L: Lecture  
P: Practicals

UoC: University of Crete  
IMBB: Institute of Molecular Biology & Biotechnology





# Wednesday, 29 May 2019

**Wednesday, 29 May 2019**  
**09:30 am – 17:15 pm**

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<b>09:30 am – 12:00 pm</b>	<b>Generation of transgenic, knockin and knockout animal models for human diseases (L)</b> Theodoros Kosteas IMBB	Rotonda 3rd Floor Department of Biology
<b>12:00 pm – 12:15 pm</b>	<b>Coffee break</b>	
<b>12:15 pm – 13:00 pm</b>	<b>Quality and GLP in Lab Animal Facility (L)</b> Theodoros Kosteas IMBB	Rotonda 3rd Floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:30 pm – 16:30 pm</b>	<b>Fish biology, Stress &amp; welfare (L)</b> Prof. Gert Flik, UN	Rotonda 3rd Floor Department of Biology
<b>16:30 pm – 17:15 pm</b>	<b>Genetic standardization, Inbred strains; co-isogenic, congenic lines (L)</b> Eleni Moltsanidou IMBB	Rotonda 3rd Floor Department of Biology

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**Info:**

L: Lecture

P: Practicals

IMBB: Institute of Molecular Biology & Biotechnology  
UN: Radboud University Nijmegen, The Netherlands





# Thursday, 30 May 2019

**Thursday, 30 May 2019**  
**09:30 am – 18:00 pm**

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<b>09:30 am – 10:15 am</b>	<b>Anesthesia and analgesia in laboratory animals (L)</b> Kalliopi Stratigi, IMBB	Rotonda 3rd Floor Department of Biology
<b>10:15 am – 11:15 am</b>	<b>Preoperative surgery (L)</b> Dr. Nikolaos Kostomitsopoulos, DVM BRFAA	Rotonda 3rd Floor Department of Biology
<b>11:15 am – 11:45 am</b>	<b>Coffee break</b>	
<b>11:45 am – 13:00 pm</b>	<b>Diseases of laboratory animals, Health monitoring and prevention of disease (L)</b> Dr. Nikolaos Kostomitsopoulos, DVM BRFAA	Rotonda 3rd Floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:00 pm – 18:00 pm</b>	<b>Rats hands-on exercise I: handling &amp; stitching (P)</b> Evangelos Balafas, Pavlos Alexakos, Dr. Nikolaos Kostomitsopoulos BRFAA Niki Mastrodimou, UoC	Laboratory Γ Ground floor Department of Biology

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**Info:**

L: Lecture

P: Practicals

UoC: University of Crete

IMBB: Institute of Molecular Biology & Biotechnolog

BRFAA: Biomedical Research Foundation of the Academy of Athens





**Friday, 31 May 2019**  
**09:30 am – 18:00 pm**

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<b>09:30 am – 13:00 pm</b>	<b>Rats hands-on exercise II: Drug administration; Anaesthesia &amp; analgesia (P)</b> Evangelos Balafas, Pavlos Alexakos & Dr. Nikolaos Kostomitsopoulos BRFAA Niki Mastrodimou, UoC	Laboratory Γ Ground floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:00 pm – 15:00 pm</b>	<b>Transportation and procedures (L)</b> Dr. Nikolaos Kostomitsopoulos, DVM BRFAA	Rotonda 3rd Floor Department of Biology
<b>15:15 pm – 16:00 pm</b>	<b>Methods and tests to assess anxiety-related behaviour (L)</b> Assis. Prof. Kyriaki Sidiropoulou UoC	Rotonda 3rd Floor Department of Biology
<b>16:15 pm – 18:00 pm</b>	<b>Legislation &amp; regulations in laboratory animals (L)</b> Dr. iur. Jorgos Sbokos UoC external collaborator	Rotonda 3rd Floor Department of Biology

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**Info:**

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# Saturday, 1 June 2019



**Saturday, 1 June 2019**  
**09:30 am – 15:00 pm**

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<b>09:30 am – 10:30 am</b>	<b>Zebrafish as laboratory animal (L)</b> Prof. Michail Pavlidis UoC	Rotonda 3rd Floor Department of Biology
<b>10:30 am – 14:00 pm</b>	<b>Zebrafish hands-on exercise: handling, anaesthesia, behavioural monitoring (P)</b> Prof. Michail Pavlidis, Antonia Theodoridi , Dr. Athanasios Samaras, Dr. Aleka Tsalafouta UoC	Laboratory B Ground floor Department of Biology
<b>14:00 pm – 15:00 pm</b>	<b>Lunch</b>	

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**Info:**

L: Lecture

P: Practicals





**Monday, 3 June 2019**  
**09:30 am – 17:00 pm**

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<b>09:30 am – 13:00 pm</b>	<b>Mice hands-on exercise I: stitching and handling (P)</b> Theodoros Kosteas, Constantinos Kourouniotis & Hara Roumpaki, Eleni Moltsanidou IMBB	Laboratory A Ground floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:15 pm – 15:00 pm</b>	<b>Experimental design (L)</b> Assoc. Prof. Konstantia Lika UoC	Rotonda 3rd Floor Department of Biology
<b>15:00 pm – 16:00 pm</b>	<b>Statistical analysis and interpretation of results (L)</b> Assoc. Prof. Konstantia Lika UoC	Computer Room, Ground floor Department of Biology
<b>16:00 pm – 17:00 pm</b>	<b>Zebrafish diseases, prophylaxis and treatment (L)</b> Dr. Pantelis Katharios HCMR	Rotonda 3rd Floor Department of Biology

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**Info:**

L: Lecture  
P: Practicals

UoC: University of Crete  
IMBB: Institute of Molecular Biology & Biotechnology  
HCMR: Hellenic Centre Marine Research







# Tuesday, 4 June 2019

**Tuesday, 4 June 2019**  
**09:30 am – 17:00 pm**

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<b>09:30 am – 13:00 pm</b>	<b>Mice hands-on exercise II: Drug administration; Anaesthesia &amp; analgesia (P)</b> Theodoros Kosteas & Constantinos Kourouniotis, Hara Roumpaki, Eleni Moltsanidou IMBB	Laboratory A Ground floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:00 pm – 15:00 pm</b>	<b>Current education and training requirements with laboratory animals (L)</b> Prof. Ismene Dontas UoA	Rotonda 3rd Floor Department of Biology
<b>15:00 pm – 16:00 pm</b>	<b>Harm/benefit analysis: cases of research studies using laboratory animals in practice (L)</b> Prof. Ismene Dontas UoA	Rotonda 3rd Floor Department of Biology
<b>16:00 pm – 17:00 pm</b>	<b>Course Evaluation</b>	Rotonda 3rd Floor Department of Biology

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**Info:**

L: Lecture

P: Practicals

UoA: University of Athens  
IMBB: Institute of Molecular Biology & Biotechnology





# Wednesday, 5 June 2019



**Wednesday, 5 June 2018**  
**Free day**

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**Preparation of PP presentation**

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**Preparation for the final exams**

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**Info:**

L: Lecture

P: Practicals





# Thursday, 6 June 2019

**Thursday, 6 June 2019**  
**09:30 am – 16:00 pm**

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<b>10:00 am – 11:30 am</b>	<b>Exams</b> Prof. Michail Pavlidis UoC	Laboratory B Department of Biology
<b>12:00 pm – 13:00 pm</b>	<b>Presentations of group works</b> Open session	Rotonda 3rd Floor Department of Biology
<b>13:00 pm – 14:00 pm</b>	<b>Lunch</b>	
<b>14:00 pm – 16:00 pm</b>	<b>Presentations of group works</b> Open session	Rotonda 3rd Floor Department of Biology
<b>20:30 pm</b>	<b>Fairwell Dinner</b>	

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**Info:**

L: Lecture  
P: Practicals





*We would like to thank our sponsor*

