



HELLENIC REPUBLIC
MINISTRY OF DEVELOPMENT AND INVESTMENTS
GENERAL SECRETARIAT FOR RESEARCH & INNOVATION (G.S.R.I.)



ΕΛΛΗΝΙΚΟ ΙΝΣΤΙΤΟΥΤΟ ΠΑΣΤΕΡ
INSTITUT PASTEUR HELLENIQUE

Report of ICLAS Visiting Grant for Professional Development in LAS in Europe

Awarding Institution: Dep. Animal Models Biomedical Research,
Hellenic Pasteur Institute, Greece

Hosting Institution: UMS28 Phénotypage du petit animal
Faculty of Medicine, Sorbonne University, France

Date of grant approval: 21st March, 2023

Date of visit: 13-28 June, 2023

The predefined aims of the awardee's (she) training visit at the UMS28 Phénotypage du Petit Animal, Faculty of Medicine, Sorbonne University, Paris focused on animal phenotyping methods and good laboratory practices on specific surgical techniques, Animal Biosafety Level 3 (ABSL3) facilities management and communication skills about animal research.

The training on *rodents phenotyping methods* included theory and practical demonstration of

- Positron Emission Tomography - Computed Tomography (PET/CT) mainly on tumor-mouse models,
- transthoracic Doppler echocardiography, electrocardiography (ECG), vascular catheterization and mini-pumps implantation mainly for pharmacology studies,
- electromyography (EMG) and behavioural tests for gait and locomotion analysis (grip-strength counter, catwalk, etc.) to assess neuromuscular function.

The responsible experts of all three platforms (PET/CT imaging, cardiovascular and neuromuscular studies) were generous to share their standard operating procedures in compliance to 3Rs, occupational health and safety but also best practices related to pain-alleviation, definition of endpoints and welfare of animal models. The platforms' experts highlighted their experience about the importance of trained animal experimenters and validated procedures as directly linked to reproducibility and translatability of preclinical models to theranostics (therapeutics and diagnostics).

The critical points for *running efficiently an ABSL3 facility* were presented to her by the Chief facility manager. Insights from architectural design to decontamination practices were discussed, with extra focus on infrastructure regular maintenance check-ups and economic sustainability.

In regard to *communicating animal research*, the Director of the Unit kindly shared his experience regarding students and lay public attitude toward animal research in France and

worldwide, and the importance of designing a user-friendly website where the objectives and missions of each animal facility are presented.

Furthermore, she was given the opportunity to visit the aquatic animal facility of Sorbonne University, where fish and *Xenopus* species are used as wild-type and genetically-modified models for toxicology, neurobiology, developmental biology, nutrition and ageing. The Chief aquatic facility manager was really kind to present her some ergonomic aspects of improved management, emphasizing the wellbeing of personnel.

And last but not least, she had the opportunity to attend the “Day of Platforms at Sorbonne University” on 27th June 2023, where scientific teams from all disciplines presented their services in an exposition-event, aiming to promote collaborations. This event was an eye-opening example on how to communicate animal research in different scientific environments.

In conclusion, the actual outcomes from the awardee’s 10-days scheduled on-site visit covered all predefined aims and offered even bonus insights on Laboratory Animal Science. Tips for better organization, improved anesthetic protocols and refined surgical techniques, but also cost-effective ideas for her institute’s ongoing ABSL3 facility are significant benefits acquired after this educational visit.

The awardee wishes to sincerely thank International Council for Laboratory Animal Science (ICLAS) for making this scientific visit economically feasible and the UMS28 team of experts for warm welcome, amazing professionalism, mentoring and openness.