

A training at Idibell in Barcelona

I work at the Institute of Preclinical Sciences at the Veterinary Faculty, University of Ljubljana, Slovenia. During my career as a lecturer and researcher in veterinary medicine, I have often come into contact with or used laboratory animals. However, not a single researcher at our Faculty specialises exclusively in LAS, and the animal rooms are distributed among different departments. Since 2021, the new national regulations put more emphasis on the education, training, and roles of staff; on the other hand, our country lacks specific training for the roles of designated veterinarian and animal welfare officer. In 2-3 years, we will move to the newly constructed Faculty of Veterinary Medicine building, which will include a modern and centralised animal facility for small animals, including aquatic animals. I decided to gain more insight into the organisational perspective of LAS facilities, and the ICLAS Visiting Grant for Professional Development was just what I needed. I was awarded in 2021, but due to pandemics and host availability, my visit was postponed until October 2022.

Since we recently started using Syrian hamsters for Covid research, I was specifically seeking an institution with experience in keeping hamsters as model animals. I was very happy when I received the response from Idibell/Charles River in Barcelona that they were willing to host me. I spent a lovely 10 days in Barcelona, taking the metro or bus daily to the L'Hospitalet de Llobregat region, where Idibell's research facilities are located in conjunction with the Catalan Institute of Oncology. I expressed a desire to gain more insight into the duties of the animal research facility, the animal welfare officer, and the responsible veterinarian.

The head of the Animal facility and the rest of the staff were friendly and helpful and showed me all the tasks of the animal facility, both related to the animals and to the equipment, the facility building, barrier regulations and tools, researcher support, supplies management and waste disposal, standard operating procedures, occupational health and safety, and veterinary supervision. The facility primarily houses mice, including transgenic animals, hamsters and zebrafish.

I spent some time with the animal facility staff in their daily routine work - organisation and service management with technicians, scheduling, follow-up, and adherence to SOPs. I also spent some time with the animal caretakers changing animal cages, checking equipment and health of the mice, and looked at the designated notes for information exchange between caretakers, veterinarian and researchers. I also spent some time in the washing area. Of particular interest to me was the autoclaving of cages, bedding, and enrichment all together to be stored for further use - I plan to introduce this equipment into our new facility. I accompanied some researchers during minor procedures such as blood sampling, tumour measurement (observing endpoint criteria in oncology studies), weaning and marking of animals, and euthanasia. Together with the assigned veterinarian, we checked the health status of the marked animals, took samples (skin and faces) for regular health monitoring, and introduced new sentinel animals. Before, I knew sentinels only in theory, but now I see that it is a very simple but effective addition. I had a tour of rooms and equipment in barrier zone A, where immunodeficient mice are housed, but did not observe any procedures there so as not to disrupt the strict regulations in that zone.

I spent a few mornings in the zebrafish unit, as my colleagues are likely to include this emerging species in their further research, especially in toxicity studies. It was my first glimpse into the aquatic equipment needed and I was able to learn first-hand how to manage the system in case of troubles. I experienced breeding, selecting embryos, caring for the different age groups, preparing feed for the different groups, I diagnosed two of the five most common diseases, performed anaesthesia, euthanasia, and necropsy.

I am especially grateful that the department head and attending veterinarian, Dr. Rosa Bonavia, shared with me all the internally generated paperwork, protocols, SOPs, guidelines and important equipment manuals and gave me insight into what it takes to pass AAALAC accreditation. The amount of paperwork can be overwhelming, but I saw the real benefit of having daily and weekly checklists taped to the wall next to caretakers desks - it works! We also talked about the general welfare health care, optimization, genetic monitoring, health hazards, the work of the Animal Welfare Advisor and the IACUC, and training support - both for newcomers into their facility and for seminars for continuing education of researchers. She and her colleagues promised to be in touch by e-mail or phone for explanation of any paperwork or other organisational issues I might have in the future, and I cannot stress enough how important it is to have such experienced colleagues available.

My visit to Idibell coincided with the finalisation of plans for the new facilities at home - it will be the first new (part of) the building in Slovenia for the purpose and not repurposed old corridors, so the construction work could be done in the best possible way given the planned space. I had the opportunity to check the materials, cleaning, storage and barrier solutions, as well as all the equipment - pros and cons of different IVC racks, laminars, water and waste treatment systems, aquatic solutions, lighting, CO2 detectors, anaesthetic gases, to name a few. By mail and phone I answered the architects' questions almost simultaneously. In 2 weeks after returning we already had a meeting with sales representatives to optimally equip the rooms with animal racks according to my recommendations, based on experience in Barcelona.

Last but not least, I am grateful to ICLAS for this opportunity to connect with Charles River professionals and visit the beautiful city of Barcelona, which I vaguely remember from a brief high school trip 30 years ago. Now I had the time to fully enjoy lively evenings and weekend with tapas and famous Gaudi masterpieces or the port in the background.