



# FONDAZIONE GUIDO BERNARDINI

BETTER EDUCATION FOR BETTER SCIENCE

## Annual Activity Report for year 2019

By the end of the year 2019 the Fondazione Guido Bernardini (FGB) has completed its tenth year of activities. Since November 2009 it has gained a lot of experience and achieved respectable goals in the field of education and training of personnel involved in the care and use of laboratory animals.

In ten years many things have changed and the animal facilities have become increasingly complex microcosms in which many aspects are deeply correlated: the legal and ethical requirements, the compliance with best practices in the maintenance of animals, the request of be in sync with the scientific research needs and, last but not least, the economic components. All these aspects represent a challenge for the operational efficiency and the high quality standards of the structure and require increasingly complex and specialized skills.

The FGB's efforts have been in the direction of accompanying these developments by evolving and updating its educational offer and expanding its collaborations with renowned scientific institutions and organizations around the world.

The Scientific Committee (SC), composed of distinguished members of the international laboratory animal community, is the heart and engine of the Fondazione and has constantly dedicated its knowledge, passion and time to improving the quality and breadth of FGB training portfolio.

Special attention has always been paid to the selection of the faculty of our events made up of speakers who stand out for their competence and ability to arouse interest and discussion among the participants. In fact, a particularly appreciated feature of our training initiatives is the high interactivity facilitated by the limited maximum number of participants established for each course. Also, the applicability of the information received to daily working practice is another aspect that meets the favour of the participants in our courses and scientific events.

FGB course and scientific events award continuing professional development (CPD) credits by prestigious organizations such as: the Institute of Animal Technology (IAT) and the Swiss Veterinary Association.

FGB is an AALAS affiliate member and member of the Royal Society of Biology.

### TRAINING COURSES

During 2019 FGB has organized eight training courses listed below:

- **Organizing and operating activities in a rodent animal facility; part I;**  
(3 days): 6-8 March, IFOM, Milan. The course awarded: 18 CPD points by IAT and 2.5 days continuing education for person carrying out procedures on animals and person designing procedures and projects by the Swiss Veterinarian Associations.



10 participants attended the course that focused on the most relevant aspects of the functioning of laboratory animal facilities; particular attention was paid to new technological developments, needs of scientific research and management concepts. The feedback from the participants was generally very positive.

- **Intensive course on biostatistics;**

(2 days): 28-29 March, IFOM, Milan. 9 participants attended the course. Statistics and experimental design play a central role in improving translatability and reproducibility of research results and contribute greatly to the Reduction component of the Three Rs. The distinguished lecturer of the course, Dr Frédéric Schütz, from the Swiss Institute of Bioinformatics, addressed the central questions of how to design an experiment and which test to perform given some specific research questions. Here are some participants' comments to Dr Schütz lectures: "Dr Schütz made complicate topics comprehensible"; "I would like to have more time for statistic, he was excellent"; "the topics have been very relevant to my work".

- **The management of genetically altered rodent colonies;**

(2 days) 9-10 May, IFOM, Milan. The course awarded: 11 CPD points by IAT, and 1.5 day continuing education for person carrying out procedures on animals and person designing procedures and projects by Swiss Veterinarian Associations. 7 participants attended the course that was addressed to: facility managers and supervisors, persons responsible for overseeing the welfare and care of animals, veterinarians, lab. biologists, senior technicians, coordinators and managers of GM breeding colonies. A session of the scientific program offered the participants the opportunity to present one or more cases from their practice.



- **Refinement in husbandry of ferrets and pigs;**



(2 days): 22-23 August, Hamburg, Germany.

9 participants attended the course. This new course was the result of a FGB collaboration with the University Medical Centre Hamburg-Eppendorf (UKE), Germany. Besides a vast number of mice, the research animal facility at UKE maintains smaller numbers of other species, including ferrets and pigs. Over the years methods have been developed to train these animals by positive reinforcement. This course introduced the participants to peculiar aspects of these species, including their needs and the specific “language” they use to communicate, signs of wellbeing, pain and distress. In addition to the theoretical background, the course included hands-on experience and examples of positive reinforcement training.



- **Microbiological monitoring of rodents: traditional and innovative approaches;**

(2 days) 26-27 September, IFOM, Milan. The course awarded: 10 CPD points by IAT, and 1.5 day continuing education for person carrying out procedures on animals and person designing procedures and projects by Swiss Veterinarian Associations. The 14 participants were guided by expert instructors through traditional and innovative procedures for health monitoring, including the interpretation of results and action plans in case of confirmed infection. Novelties for this course were the simulation of health monitoring schemes that were delivered through interactive sessions and a workshop presenting a hypothetical scenario, with needs and limitations. Particularly appreciated by the attendees was the opportunity to develop their own program with the competent support of the trainers.



- **Severity and humane endpoints in fish research;**  
(1 day) 4 October, Bergen University, Norway. This new course was the result of a FGB collaboration with the University of Bergen and the Norwegian Institute of Marine Research. The 51 participants were instructed on how to assess the severity of procedures in fish and how to define humane endpoints. Fish in research are covered by the same regulations as mammals, however applying the same principles for assessing welfare, endpoints and severity pose some challenges. This course focused on examples of relevant studies for defining severity levels and illustrated how endpoints can be used to reduce the procedures' severity.
- **Organizzazione ed attività in uno stabulario di roditori;**  
(3 days) 23-25 October, IFOM, Milan. This course responded to the request of Italian professionals to provide training in Italian. FGB was very pleased to satisfy such request and gratified by the positive appreciation of the course. The 11 participants, very interested and active, positively valued the competence and expertise of the speakers and the opportunity to visit the animal facility.



- **Organizing and operating activities in a rodent animal facility; part II: Critical points and bottlenecks;**  
(2 days): 21-22 November, IFOM, Milan. 11 CPD points by IAT and 2.5 days continuing education for person carrying out procedures on animals and person designing procedures and projects by the Swiss Veterinarian Associations. 10 participants attended the course. This two-day completely new course aimed to deepen the subjects covered in the course "Organizing and Operating Activities in a Rodent Animal Facility; part I". For this reason, it was preferentially addressed to those who had already attended in the years the part I and were interested to experience a more practical approach to problems that may be encountered in the managing and functioning of an animal facility.

## SCIENTIFIC EVENTS

- **2nd Italian zebrafish meeting**

(3 days): 30 January – 1 February, Pisa. This meeting was organized jointly by the University of Pisa, the Italian CNR, the Scuola Normale Superiore, the Stella Maris Foundation, ISPRO and the Fondazione Guido Bernardini. The meeting, attended by 150 participants, highlighted and discussed emerging aspects of zebrafish research. It also aimed at promoting networking among Italian researchers with the ultimate goal to disseminate the experience and philosophy of the European Society (Eufishbiomed). The meeting was also a great opportunity to share knowledges and practical experiences, to coordinate national grant opportunities and local databases for fish lines and reagents, and to promote new research issues among younger researchers.

## PROMOTION ACTIVITIES

- We were present with our booth to the FELASA meeting in Prague in June; we were very happy to meet old friends and to establish new relationships with all those interested in our training initiatives.



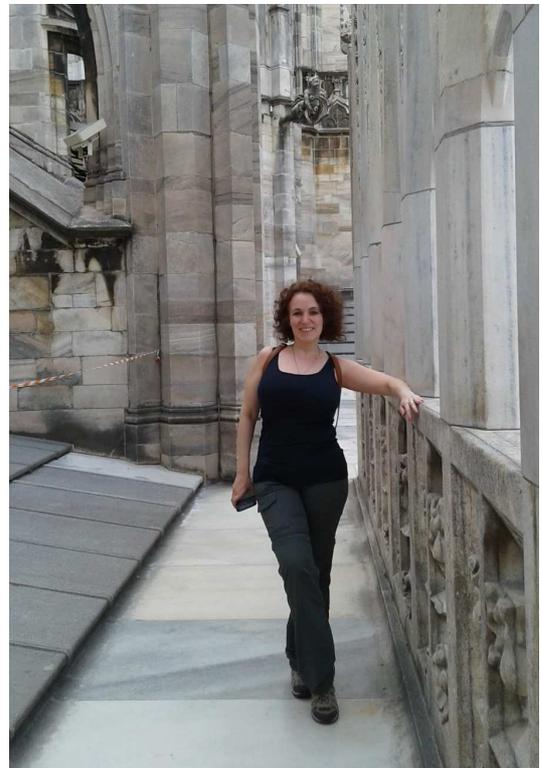
- Marcel Gyger, member of FGB SC, has represented FGB during the 9th International Conference of LASA India: “Laboratory Animals in Biomedical Research – The Way Forward”; 21-23 November, Pune, India. Marcel gave two presentations, one illustrating FGB mission and activities: “The Fondazione Guido Bernardini: values and goals in education and training of LAS”, and a second one titled: “Scientific and ethical considerations in designing and assessing a research project”. This was a good opportunity to establish a network with the Indian colleagues who showed great interest

in the educational proposals of the Fondazione.

- FGB leaflets or advertisement pages were included in some laboratory animal science international journals.
- Lab Animal Europe (LAE). Half page advertisement was published in the May and November issues, and on Buyers' Guide.
- Information were regularly distributed by internet to FGB mailing list and published on relevant associations' web sites.
- FGB website ([www.fondazioneguidobernardini.org](http://www.fondazioneguidobernardini.org)) was completely renewed and improved to better respond to the need of an efficient and timely spread of information.

## **FGB TECHNICIAN TRAINING SCHOLARSHIP**

Silvana Baletta (Centro Uruguayo de Imagenología Molecular) and Joshua Hawakey (University of Sydney) were the winner of the FGB Technician Training Scholarship 2019. They both have chosen to attend the course: “Microbiological monitoring of rodents: traditional and innovative approaches” at IFOM, Milan.



## **NEWSLETTERS**

Three issues were produced during 2019; they were posted into FGB website and distributed electronically to FGB's mailing list.

## **FUTURE INITIATIVES**

Six training courses have been scheduled for 2020, three of which are completely new.

We are very pleased and honoured to announce the renewed collaboration with the Karolinska Institutet, in Stockholm, that has offered FGB to be involved in the organization of the course “Assessing and alleviating pain and distress in laboratory animals” and the “Nordic zebrafish meeting and workshop 2020”. The collaboration with such a prestigious

institution is certainly a matter of pride for FGB.

We are also very grateful to the University of Bergen which is increasingly active in proposing interesting new collaborative initiatives to FGB. Two important workshops are scheduled in 2020: “Establishing score sheets and defining endpoints in fish experiments” and “Communicating Animal Research”; both events will involve the most renowned experts in the respective sectors.

The new collaboration with the Veterinary Faculty of Utrecht University is also a reason of pride for FGB. We are particularly grateful to Daniela Salvatori, formerly of LUMC (Leiden University Medical Center) and recently appointed as head of the Dept. Veterinary Faculty, Utrecht University, for her efforts in the realization of a series of workshops on the pathology of laboratory animals; in 2020 module three will deal with pigs and ferrets.

Another important news FGB is pleased to announce is the definition of the Learning Outcomes for many of its training activities; in the future these will be extended to all FGB initiatives.

The recently established collaboration with the Indian Laboratory Animal community will continue and, hopefully, FGB will be able to develop its activities in this region of the world.

We are pleased to report that two training scholarships have been offered for 2020, giving the opportunity to technicians to attend one of the FGB courses or events.

## **A FEW LINES OF FAREWELL**

Dear friends, colleagues, it is now time for a few lines of farewell.

Since 1 January 2020 I am no longer President of FGB Scientific Committee; I decided to resign from this position because I started a new life project, a trip around the world on a sailing boat.

Since FGB establishment, I have been truly honoured and proud to lead the Scientific Committee and to contribute to the growth and recognition of FGB in the field of LAS education and training. It has been an exciting and rewarding adventure that gave me the opportunity to work closely with renowned experts in this sector and to establish fruitful relationships with new colleagues and important institutions. Above all, I am particularly proud and happy to have contributed, in my own little way, to the growth of many professionals in our field.

Thanks to the Boards of Directors of the Fondazione for the support and trust I have never lacked. I will continue to serve the Fondazione as member of the SC for the next two years with the same enthusiasm and commitment that I have always dedicated to it.

My very best wishes to Francesco Carù who will replace me in this sometimes difficult, but always stimulating and enriching task.

Gemma Perretta  
FGB Scientific Committee President