



FONDAZIONE GUIDO BERNARDINI
BETTER EDUCATION FOR BETTER SCIENCE

ANNUAL ACTIVITY REPORT 2024

The Fondazione Guido Bernardini is a non-profit international organization devoted since 2009 to continuing education and training of professionals involved in the care, welfare and use of laboratory animals.



Fondazione guidò bernardini - fondazione senza scopo di lucro
Reg. Persone giuridiche prefettura di milano n. 1086
- c.f. 97524690159 - p. Iva 06797270961
via manfredo camperio, 11 - 20123 milano

WWW.FONDAZIONEGUIDOBERNARDINI.ORG

In 2024, the Fondazione Guido Bernardini, beyond consolidating and updating the existing offer, offered new training opportunities, thanks to strategic collaborations with international and Italian institutions such as the Francis Crick Institute, with which a course on the management of genetically modified mouse colonies was organized, and the University of Palermo, with which the *4th Italian Zebrafish Meeting* was organized.

In the Italian context, strategic partnerships have been consolidated with the University of Milan and the Istituto Zooprofilattico Sperimentale of Teramo, with the aim of offering courses and events certified by the Italian Ministry of Health.

In the European context, the Foundation's scientific courses and events have received Continuing Professional Development (CPD) credits from prestigious organizations such as the Institute of Animal Technology (IAT), the Swiss Veterinary Association and the Belgian Council for Laboratory Animal Science (BCLAS).

During 2024 FGB maintained its AALAS affiliate status and membership in the Royal Society of Biology.

FGB sponsored and attended national and international events such as ESLAV, ECLAM and AALAC Conference in Amsterdam and the XXX Aisal Congress in Rome, getting in touch with a significant number of people potentially interested in the training activities and educational opportunities offered by the Foundation. Joining those events has contributed to expand and strengthen the network of collaborations with other scientific groups and societies active in Laboratory Animal Science.

SCIENTIFIC EVENTS AND WORKSHOPS

4th Italian Zebrafish Meeting, Palermo, 7-9 February 2024

At the start of 2024, the Fondazione Guido Bernardini organized in collaboration with the University of Palermo the ***4th Italian Zebrafish Meeting***, which took place from 7 to 9 February.

After Pisa (2019) and Naples (2022), the Foundation was also asked to organize the fourth edition of the Italian Zebrafish Meeting, the most important event for the Italian scientific community working with this animal model.

The meeting was an opportunity for the presentation and discussion of the most innovative and interesting research currently underway in Italy on the zebrafish model. By providing broad coverage of a wide range of topics, the scientific programme enabled the dissemination of cutting-edge research and shed light on its future directions, strengthening existing partnerships and forging new collaborations.

Oral presentations and posters were selected from the submitted abstracts and two keynote speakers from the United States and Israel were invited to the conference. The event has received the patronage of the *European Zebrafish Society*.

The meeting was held entirely in English and was also attended by researchers from abroad.



Altogether, 200 people attended the meeting. Given the success of the event, the Foundation has been asked to collaborate in the organization of the next edition in Trento in 2026.

Australian Symposium LAB ANIMAL SCIENCE LEADERS' MASTERCLASS, Buguggiate, 19 – 20 June 2024

The course, addressed to Senior figures working in the facility, was organized specifically for a group of managers and technicians from various Australian institutions of excellence.

Different topics such as operating procedures within the facility, lean management, personnel management, health monitoring and budget management were deepened and discussed.

There were 15 participants, including the president of ANZLAA (Australian and New Zealand Laboratory Animal Association).

Hands on course Practical workshop on minimally invasive procedures in rodents and zebrafish,

Two workshops were organized with the aim of fostering practical skills of manipulation and the implementation of minimally invasive procedures in rodents and zebrafish. These topics are fully

consistent with the training modules of the Italian Ministerial Decree of 5 August 2021, which regulates compulsory training for individuals working in LAS field.

The workshops were organized in collaboration with the Department of Veterinary Medicine and Animal Sciences (DIVAS) of the University of Milan. There were 18 participants in the rodent workshop while 12 in the zebrafish workshop.



2024 TRAINING COURSES

The 2024 training offer also included online courses, webinars aimed at a wider audience and face-to-face courses. The objective was to meet the different needs of both the national and international scientific community. Below is a brief description of 2024 FGB Training Courses, all delivered in English and addressed to an international audience.

Online course *What you should know about your rodent facility*, 6 and 7 March 2024

The two-day online course, designed to provide the key aspects for the management of a modern laboratory rodent facility, with a particular focus on IVC systems, responds to the request of Facility and unit managers and supervisors, veterinarians, quality assurance managers, animal technologists and senior technicians.

Online course *“Introduction to microbiological monitoring”*, 29 May 2024

The one-day online course is designed to provide participants with the key concepts of microbiological monitoring of laboratory rodents and their environment. The program includes an overview on traditional and emerging pathogenic agents, the description of different screening techniques for animals and biologicals. In addition, the necessary assessments in relation to the factors that influence the approach of the screening plan, from the housing system in use to the identification of the microbiological unit will be discussed. An open session provided an opportunity to discuss the practical challenges of managing a microbiological monitoring programme.

In person course “*GA-Rodents: Colony Management, breeding strategies and genetic quality control*”, 19 and 20 September 2024

The Fondazione Guido Bernardini was pleased to collaborate in the realization of this course, designed and delivered by the Francis Crick Institute Colony Management Platform.

The training covered best practices for the execution of a rodent colony management program, from the procurement and validation of mouse models (via genotyping, genetic monitoring, phenotyping), management and optimal performance of the lines, as well as breeding cohorts, storage and rederivation strategies.

The aim of this course was to provide an overview of the aspects that should be considered to ensure that mouse lines are accurately characterised and can be managed as efficiently as possible for best scientific practices and providing value to stakeholders. The theoretical principles of colony management were covered and participants had the opportunity to analyze and discuss case studies and ask questions to a group of subject matter experts, gaining essential skills and knowledge to apply in their daily practice relevant to their institution.

Participants had the opportunity to send samples from their own facilities to Transnetyx for structure-specific genome analysis, which was in-depth during a practical session of the course.

In person course *Practical approaches and challenges for microbiological monitoring of rodents and zebrafish*, 16- 17 November 2024

This two-day course is a completely revised edition of one of the most successful courses in the FGB offer and it benefits of more than ten years of experience. The participants were guided by experts through a general overview of the traditional and the new approaches to screen animals, the interpretation of HM reports and action plans in case of confirmed infection. Innovative approaches and new challenges of incoming animals monitoring were also be discussed. Moreover, the course will focus on health monitoring programs for Zebrafish.

Three different workshops presented practical situations of everyday life providing the participants with the opportunity to develop their own strategies and HM program with the support of the trainers. The lively discussions and the informal training environment aimed to enhance the participants' knowledge and to improve their skills on everyday activities.

Online course *Intensive course on experimental design and biostatistics*, 4, 11 and 25 October 2025

Currently, the scientific literature is critical of the translatability of *in vivo* research results and of the reproducibility of research conducted with animals. There are certainly solutions on what should be done to improve the translatability and reproducibility of animal experiments. Among the solutions, statistics and experimental design play a central role to reach better translatability and reproducibility, in addition to contribute to the Reduction arm of the ThreeRs. The two-day online course addressed the central question of how to design your experiments and which test to perform given your specific research questions. This course offered lectures, exercises and discussions on these topics.



Webinar on *National legislation and Ethics*, 9 and 12 December 2025

The webinar was organized in collaboration with IZSAM (Istituto Zooprofilattico Sperimentale of Abruzzo and Molise "G. Caporale"). The training is addressed to native English speaking professionals (e.g. principal investigators, scientists, veterinarians), working in Italy, who would need specific modules on national legislation and ethics to complete their personal training (in accordance with the Ministerial Decree of 5 August 2021).

There were about one hundred participants, the webinar will be scheduled at the end of 2025.

Online course *Key aspects to design an environmental enrichment program for lab rodents*, 14 and 15 November 2024



The course is focused on the key aspects for designing a proper environmental enrichment program for lab rodents. The speakers shared practical information on how to approach, evaluate and monitor an environmental enrichment plan. An open session provided opportunities to discuss the practical challenges related to an environmental enrichment program.

2025 INITIATIVES

Below the list of training courses and events already scheduled:

2025 FGB Calendar	
6 February 2025	On demand course “Clinical scores: applicazioni e significato”, Siena
19 - 20 March 2025	Online course “What you should know about your rodent facility”
20 March 2025	On demand course “La valutazione retrospettiva degli Studi”, Siena
22 May 2025	Online course “Introduction to microbiological monitoring in rodent facilities”
28 May 2025	On demand course “Enrichment, programmi e impatto o meno su determinati tipi di studio”, Siena
2 – 5 June 2025	FELASA 2025, Athens
23 June 2025	Practical Workshop on Xenopus, San Raffaele, Milano – in collaboration with UNIMI
30 June 2025	Practical Workshop on Zebrafish, San Raffaele, Milano – in collaboration with UNIMI
25 September 2025	Practical Workshop on Rodents and Rabbits, Brescia – in collaboration with UNIMI
22 e 23 October 2025	In person course “Practical approaches and challenges for microbiological monitoring of rodents and zebrafish”, Milano
5-6 November 2025	Online course “Key aspects to design an environmental enrichment program for lab rodents”
27 November and 11 December	Webinars in collaboration with Eslav and Eclam
10 December	Webinar on National Legislation and Ethics, in collaboration with Istituto Zooprofilattico di Teramo
15 December	Continuing education course “Etologia digitale: tecnologie innovative per la ricerca e per il benessere animale” in collaboration with Fondazione Santa Lucia, Roma

2024 PROMOTION & NETWORKING ACTIVITIES

XXX Associazione Italiana per le Scienze degli Animali da Laboratorio (AISAL) Congress, Roma, 2-4 October 2024

FGB attended as an exhibitor at the XXX AISAL Congress, which took place in Rome from 2 to 4 October 2024. It was an important opportunity to strengthen the Italian network and learn about the needs and interests of the Italian scientific community, in particular in light of the recent legislation that requires certified training for all figures involved in animal enclosure activities.

ESLAV – ECLAM – AALAC Conference, Amsterdam 19-20 June 2024

FGB joined as an exhibitor at the Conference organized by ESLAV (*European Society of Laboratory Animal Veterinarians*), ECLAM (*European College of Laboratory Animal Medicine*) and AALAC (*American Association for Accreditation of Laboratory Animal Care*). Participation in this conference, whose theme "*Quality in Animal Care and Facility Management*" is also central to the Foundation's activity, proved to be strategic for its international positioning.



NEWSLETTER and FGB WEBSITE

Updates were regularly distributed by internet to FGB mailing list and published on relevant associations' web sites. FGB Mailing list was further expanded and FGB website (www.fondazioneguidobernardini.org) was constantly updated to better fulfil the need of an efficient and timely spread of information.

In 2025 a new version of the website will be published.

SCIENTIFIC COMMITTEE

All members of [Scientific Committee](#), composed of distinguished representatives of the international laboratory animal and academic community. The Scientific Committee plays a fundamental role in ensuring the scientific excellence of educational and scientific programs.

- President: Carù Francesco - DVM, PhD LAMS Diplomate, Italy
- Brønstad Aurora - DVM, Reseracher and Chief veterinarian at the University of Bergen, Norway
- Frias Rafael - Head of Education, DVM, MSc, Phd, CEO at R3FINED International Ltd, Finland
- Gobbi Alberto - DVM, Head of Laboratory Animal Facility, Italy
- Prins Jan-Bas - Professor of Laboratory Animal Science, Leiden University Medical Centre/ Leiden University, The Netherlands
- Maria Kamper, DVM, PhD, MBA. AAALAC International Council Member. Director, BSF - The University of Manchester, United Kingdom
- Patrick Hardy, DVM, Dipl. ECLAM, Executive MBA

DONORS SUPPORT

In 2024 Donors contributions were essential to carry on daily activities and to improve the quality of the training offer. FGB is grateful to its donors: their continuous support makes possible to accomplish FGB mission and goals:



And **Woojungbio**.

GENERAL CONSIDERATIONS

In 2024, the Guido Bernardini Foundation has strengthened its face-to-face activities and updated the online training offer. The Foundation has also organized the **4th Italian Zebrafish Meeting**, the most important Italian event on this animal model and the **Lab animal science leaders masterclass**, addressed to the Australian network.

Through these activities, the Foundation has successfully carried out its mission of continuing education for laboratory animal research practitioners and raising awareness of animal welfare and the 3Rs (*replace, reduce and refine*) principle.

In 2025, FGB, beyond the consolidation of the training offer, is planning new national and international institutional collaborations, the development of on-demand training addressed to companies and participation to FELASA Congress in Athens.