

# Education, training, and mutual recognition

## and the role of FELASA

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FELASA President

# Outline

- What is FELASA?
- What is the European (EU) legislation and policy of Education and Training (E&T)?
- What role does FELASA play in European E&T?

# What is FELASA?

- Federation of European Laboratory Animal Science Associations
- Umbrella organisation for laboratory animal science associations in Europe
  - Membership is open to laboratory animal science associations of nations in Europe
  - No individual members – people are represented via their national associations

# Background

- Established in 1978
  - A need for collaboration and communication between national associations –and professionalisation of the field
- Founding associations were GV-SOLAS, LASA and Scand-LAS
- Short FELASA history at FELASA website:  
<http://www.felasa.eu/about-us>



# What is FELASA today?

- FELASA has 21 member associations representing 28 countries
- Member associations gather about 5400 specialists in the field of laboratory animal science

# FELASA as of today



- AFSTAL** – France
- AISAL** – Italy
- ARSAL** – Romania
- BaltLASA** – Latvia and Lithuania
- BCLAS** - Belgium
- CLASA** – Czech Republic
- CroLASA** – Croatia
- DALAS** – The Netherlands
- GALAS** – Georgia
- GV-SOLAS** – Germany and Austria
- HLASA** – Hungary
- HSBLAS** - Greece
- ILAF** – Israel
- LASA** – United Kingdom
- Pol-LASA** – Poland
- Rus-LASA** – Russia
- Scand-LAS** – Denmark, Estonia, Finland, Iceland, Norway, Sweden
- SECAL** – Spain
- SGV** – Switzerland
- SLAS** – Slovenia
- SPCAL** – Portugal

# FELASA's mission

- FELASA represents common interest in the furtherance of all aspects of laboratory animal science
- FELASA advocates responsible scientific research with emphasis on animal welfare
- The 3Rs principle as the guiding star

# How does FELASA work to accomplish this?

- Member Delegate Meetings and General Assemblies
- Executive Committee
  
- Working groups
- International liaisons and networks
- Scientific congresses and workshops
- Education and training accreditation board



# Member Delegate Meeting (MDM)

- Decisions-taking body
- Each member association as well as affiliated or observer association has 1-2 delegates appointed by the associations
- One vote per member association (only members can vote)
- Meets physically once a year, and another 2-3 times online
- Physical meetings organised by member associations

# General Assemblies

- Election of Executive Committee Members
- Accounts and reports
- Only member associations can participate (through their delegates)
- One vote per association

# Executive Committee

- Elected by the General Assembly
- Prepares matters for the MDM
- Execute decisions by the MDM
- EC officers do not vote at MDMs

## **Executive Committee 2023:**

- President: Klas Abelson
- Past President: Bélen Pintado
- Secretary: J-P Mocho
- Treasurer: Martina Përse
- Vice President for Education and training: Chris van Ginneken
- Vice President for International Affairs: Samuel Vidal
- Vice President for Working groups: Livia D'Angelo
  
- *FELASA secretariat: Antonio Casal*

# Working groups

- Experts appointed after nominations by the member associations
- Based on scientific knowledge
- Work results in recommendations and guidelines, most of them published in *Laboratory Animals*, but also *Biology or Animals*

# Ongoing working groups

- FELASA WG on capture and transport of cephalopods
  - *Accepted for publication in Lab Anim*
- FELASA WG on Pain Management in Zebrafish
  - *Report submitted to Lab Anim*
- FELASA WG on Methods of Humane Killing of Laboratory Fish
  - *Draft report reviewed by FELASA members, second draft being written*
- FELASA WG on Pain Management in Mice
- FELASA WG on Severity Classification in zebra fish and their larvae
- FELASA WG on Anaesthesia and Analgesia in calves, goats, sheep and pigs for biomedical research
- FELASA WG on Welfare and health management of laboratory dogs, cats and ferrets

# Ongoing working groups

- FELASA WG on Experimental design in education and training
  - *Two Workshops have been delivered to develop the right profile and a new one is scheduled on June 28<sup>th</sup>-29<sup>th</sup> in Italy <https://felasa.eu/Events/id/107> - Still some available seats*
- FELASA WG on Blood sampling of rodents
- FELASA WG on Health & welfare management of laboratory chickens
- FELASA WG on Health & welfare management of the Equine Species in research and education
- FELASA WG on Methodology for Health Monitoring of mice maintained in IVCs
- FELASA-ECLAM-ESLAV WG on Role of the designated veterinarian
- FELASA WG on Benchmarking the Ratio of Technical Staff for the Care of laboratory mice, according to the personnel's role and housing and husbandry conditions

# Publications

- 2023 FELASA-EFAT WG on Harmonisation of Education, Training and CPD for laboratory animal caretakers and technicians (Lab Anim)
- 2023 FELASA recommendations for the rehoming of animals used for scientific and educational purposes (Lab Anim)
- 2023 Survey among FELASA members about rehoming of animals used for scientific and educational purposes (Lab Anim)
- 2022 FELASA-AALAS Recommendations for Monitoring and Reporting of Laboratory Fish Diseases and Health Status, with an Emphasis on Zebrafish (*Danio Rerio*) (Comp Med)
- 2022 FELASA-AALAS Recommendations for Biosecurity in an Aquatic Facility, Including Prevention of Zoonosis, Introduction of New Fish Colonies, and Quarantine (Comp Med)
- 2022 A FELASA Working Group Survey on Fish Species Used for Research, Methods of Euthanasia, Health Monitoring, and Biosecurity in Europe, North America, and Oceania (Biology)
- 2021 FELASA recommendations of best practices for the health management of ruminants and pigs used for scientific and educational purposes (Lab Anim)
- 2020 Genetic quality assurance and genetic monitoring of laboratory mice and rats: FELASA Working Group Report (Lab Anim)
- 2020 Zebrafish: Housing and husbandry recommendations (Lab Anim)

# Publications

- 2019 Revised recommendations for health monitoring of non-human primate colonies (2018): FELASA Working Group Report (Lab Anim)
- 2019 FELASA accreditation of education and training courses in laboratory animal science according to the Directive 2010/63/EU (Lab Anim)
- 2018 Classification and reporting of severity experienced by animals used in scientific procedures (Lab Anim)
- 2016 Current concepts of Harm–Benefit Analysis of Animal Experiments – Report from the AALAS–FELASA Working Group on Harm–Benefit Analysis – Part 1 (Lab Anim)
- 2016 Recommendations for Addressing Harm–Benefit Analysis and Implementation in Ethical Evaluation – Report from the AALAS–FELASA Working Group on Harm–Benefit Analysis – Part 2 (Lab Anim)
- 2015 The reporting of clinical signs in laboratory animals (Lab Anim)
- 2015 Guidelines for the Care and Welfare of Cephalopods in Research – A consensus based on an initiative by CephRes, FELASA and the Boyd Group (Lab Anim)
- 2015 FELASA 2015 Recommendations for the Accreditation of Education and Training Courses in Laboratory Animal Science (FELASA web)
- 2014 AALAS/FELASA Working Group on Health Monitoring of Rodents for Animal Transfer (JAALAS)
- 2014 FELASA recommendations for the health monitoring of mouse, rat, hamster, guinea pig and rabbit colonies in breeding and experimental units (Lab Anim)



# Publications, cont.

- 2013 Report of the Federation of European Laboratory Animal Science Associations Working Group on animal identification (Lab Anim)
- 2013 FELASA guidelines for the refinement of methods for genotyping genetically-modified rodents (Lab Anim)
- 2012 FELASA Guidelines and Recommendations (JAALAS)
- 2010 Guidelines for Continuing Education for Persons Involved in Animal Experiments – Recommendations of a FELASA Working Group (FELASA web)
- 2010 FELASA recommendations for the education and training of laboratory animal technicians: Category A (Lab Anim)
- 2010 FELASA Guidelines for the Accreditation of Health Monitoring Programmes and for Testing Laboratories involved in Health Monitoring (Lab Anim)
- 2008 Guidelines for the veterinary care of laboratory animals: report of the FELASA/ECLAM/ESLAV Joint Working Group on Veterinary Care (Lab Anim)
- 2007 Principles and practice in ethical review of animal experiments across Europe: summary of the report of a FELASA working group on ethical evaluation of animal experiments (Lab Anim)
- 2007 FELASA guidelines for the production and nomenclature of transgenic rodents (Lab Anim)
- 2006 FELASA Working Group Standardization of Enrichment (FELASA web)

# Publications, cont.

- 2004 Report of the FELASA Working Group on evaluation of quality systems for animal units (Lab Anim)
- 2002 FELASA recommendations for the accreditation of laboratory animal science education and training (Lab Anim)
- 2000 FELASA recommendations for the education and training of persons carrying out animal experiments (Category B) (Lab Anim)
- 2000 FELASA recommendations for the health monitoring of experimental units of calves, sheep and goats (Lab Anim)
- 1999 FELASA guidance paper for the accreditation of laboratory animal diagnostic laboratories (Lab Anim)
- 1999 FELASA guidelines for education of specialists in laboratory animal science (Category D) (Lab Anim)
- 1998 FELASA recommendations for the health monitoring of breeding colonies and experimental units of cats, dogs and pigs (Lab Anim)
- 1997 Sanitary aspects of handling non-human primates during transport (Lab Anim)
- 1995 FELASA recommendations on the education and training of persons working with laboratory animals: Categories A and C (Lab Anim)
- 1994 Pain and distress in laboratory rodents and lagomorphs (Lab Anim)

# International liaisons and networks

## **Observers at the MDM**

- European Society for Laboratory Animal Veterinarians (ESLAV)
- International Society for Transgenic Technologies (ISTT)
- LASA Turkey

## **Liaison bodies**

- American Association for Laboratory Animal Science (AALAS)
- European Animal Research Association (EARA)
- International Council for Laboratory Animal Science (ICLAS)

**FELASA observer in several European bodies, such as the NCP and EC**

# Scientific congresses and workshops

## FELASA triennial congress

- Every third year since 1981
- Biggest LAS conference in Europe
- Over 2000 participants
- Next congress in Athens 2025



SAVE THE DATE!

June 2–5, 2025

Athens, Greece

## Workshops on severity classification and reporting



# Workshops on severity classification and reporting

## More than 80 workshops delivered (so far)!

- **2023:** 1 WS in Prague (29<sup>th</sup> May - CELASC Congress) and other 2 scheduled in spring/early Summer
- **2022:** 12 WS in 5 countries
- **2021:** 4 WS in 4 countries (remote for Russia, Tunisia)
- **2019:** >10 WS in 6 countries
- **2018:** 22 WS in 9 countries
- **2017:** 26 WS in 14 countries
- **2016:** 2 WS in 2 countries

## Estimated number of people trained > 2000

- **2021 – 2022:** over 330
- **2018 – 2019:** over 1200
- **2016 - 2017:** over 700

*Models proposed cover different species (non-humane primates; small ruminants; dogs; rabbits; rodents; fish)*

# Education and training accreditation board

This brings us to the matter of the European (EU) legislation and policy of Education and Training (E&T)

# What is the European (EU) legislation and policy of Education and Training (E&T)?

- All outlined in the Directive 2010/63/EU

*Article 23*

**Competence of personnel**

1. Member States shall ensure that each breeder, supplier and user has sufficient staff on site.
2. The staff shall be adequately educated and trained before they perform any of the following functions:
  - (a) carrying out procedures on animals;
  - (b) designing procedures and projects;
  - (c) taking care of animals; or
  - (d) killing animals.

Persons carrying out the functions referred to in point (b) shall have received instruction in a scientific discipline relevant to the work being undertaken and shall have species-specific knowledge.

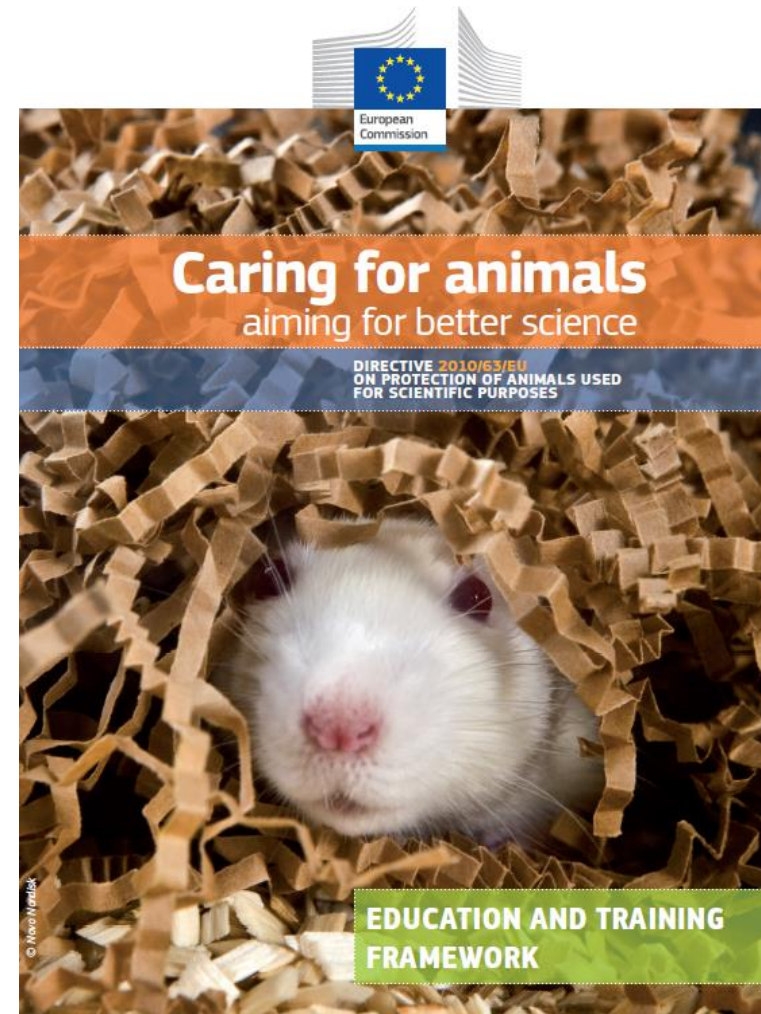
Staff carrying out functions referred to in points (a), (c) or (d) shall be supervised in the performance of their tasks until they have demonstrated the requisite competence.



However, the Directive does not specify how this should be accomplished

# EU legislation and policy of Education and Training (E&T)?

- The European commission established an expert working group
- The Education and Training Framework
- To meet the requirements for competences
- Enhance quality and promote mutual recognition





# EU legislation and policy of Education and Training (E&T)?

## Core Modules - Functions A, B, C & D

1	National legislation
2	Ethics, animal welfare and the Three Rs (level 1)
3.1	Basic and appropriate biology – species specific (theory)
4	Animal care, health and management – species specific (theory)
5	Recognition of pain, suffering and distress - species specific
6.1	Humane methods of killing (theory)

## Function Specific (Prerequisite) Modules - Function A

3.2	Basic and appropriate biology – species specific (practical)
7	Minimally invasive procedures without anaesthesia – species specific (theory)
8	Minimally invasive procedures without anaesthesia – species specific (skills)

## Function Specific (Prerequisite) Modules - Function B

7	Minimally invasive procedures without anaesthesia – species specific (theory)
9	Ethics, animal welfare and the Three Rs (level 2)
10	Design of procedures and projects (level 1)
11	Design of procedures and projects (level 2)

## Function Specific (Prerequisite) Modules - Function C

3.2	Basic and appropriate biology – species specific (practical)
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## Function Specific (Prerequisite) Modules - Function D

3.2	Basic and appropriate biology – species specific (practical)
6.2	Humane methods of killing (skills)
<b>Alternatively</b>	
6.3	Stand-alone Module for Function D (only)

## Additional Task Specific Modules

20	Anaesthesia for minor procedures
21	Advanced anaesthesia for surgical or prolonged procedures
22	Principles of surgery
23	Advanced animal husbandry, care and enrichment practices
24	Designated Veterinarian
25	Project Evaluator

## Other Additional Modules

50	Introduction to the local environment (establishment) for persons taking specific roles under the Directive
51	Information provision and retrieval

# EU legislation and policy of Education and Training (E&T)?

## Proposal for an EU Platform and Information Portal on Education & Training

An EU Platform should be established for a modular training framework to enable information sharing and communication between:

- Approval / Accrediting Bodies
- Course Providers
- Member State authorities



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Education and Training  
Platform for Laboratory  
Animal Science

E-learning modules on EU-functions



What role does FELASA play in European E&T?



# Education and training accreditation board

- FELASA course accreditation introduced on 1st of January 2003
- Recognised as the premier accreditation scheme for LAS courses in Europe
- Encourages and assists the development of high-quality educational programmes in laboratory animal science (LAS) throughout Europe and internationally
- FELASA accredits courses – *not people* – for Functions A, B, C and D as well as veterinarians, project evaluators and specialists
- At present, more than 40 accredited courses



Course	type	
002/03 Barcelona	ABCD, 20, 21, 22	Multispecies
004/03 Barcelona	LAS specialist	
011/05 Toulouse	ABCD, 20, 21, 23	Mouse, rat
020/08 Porto	ABD, 20, 21,	Mouse, rat, fish
023/09 Rome	ACD, 10, 20, 21, 22	Mouse, rat
025/08 Helsinki	ABD, 20, 21 22	Mouse, rat
027/08 Zurich	ACD, 10, 20, 21	Mouse, rat
029/10 Kuopio	ABD, 20, 21, 22	Mouse, rat, (rabbit, pig on request)
030/10 Oxford	ACD, 20, 21, 22	Mouse, zebrafish
031/10 Mainz	A, 20, 21	Mouse, rat, fish
032/10 Copenhagen	ABD, 20, 22	Mouse, rat
035/14 Szeged	AB, 20, 21, 22	Mouse, rat, rabbit, guinea pig, zebrafish
037/13 Antwerp	ABC, 20, 21, 22	Mouse, rat
038/12 Lausanne	ACD, 20, 21, 22	Mouse, rat
042/13 Leiden	ABD, 20, 21, 22	Mouse, rat
044/13 Aachen	AD, 20, 21	Mouse, rat, rabbit, pig
048/16 Düsseldorf	AD, 20, 22	Mouse, rat, rabbit, dog, cat
050/18 Aachen	ABD, category D	
051/15 Crete	ABCD, 20, 21, 22, 23	Mouse, rat, zebrafish
052/15 Tanuvas	ABCD, 20, 21, 22	Mouse, rat, zebrafish
054/14 Copenhagen	Designated vet	
055/17 Karolinska	7, 9, 10, 11	Mouse, rat, rabbit

Course	type	
056/16 Athens	ABCD, 20, 21, 22, 23	Mouse, rat
057/17 Göttingen	AB	NHP
058/17 Nijmegen	B, 20, 22	Mouse, rat
059/17 Karlsruhe	ACD	Zebrafish, medaka
060/17 Frame	10	
061/19 Teramo	ACD, 20, 22	Mouse, rat
062/18 Naples	ACD, 20, 21, 22, 23	Cephalopods
063/18 Montpellier	ABCD, 20	Mouse, rat, rabbit
064/17 Barcelona	Designated vet	
066/17 Utrecht	ABCD, 20, 21, 22	Multispecies
067/19 Maastricht	ABCD, 20, 22	Mouse, rat, small ruminants
068/19 Groningen	AB, 20, 21, 22	Mouse, rat
069/19 Capetown	AC	Mouse, rat
070/20 Cambridge	ACD, 20, 21, 22	Mouse, rat
071/22 Amsterdam	AB, 20, 21, 22	Mouse, rat
072/22 Berlin	AD, 20, 22	Mouse, rat
074/23 Minho		
075/22 Rotterdam		
075/23 Cairo		
076/23 Rome		
077/23 Rome		

# What we do

- **Accreditation of courses**
  - Function
  - Las specialist (category D)
  - Designated Vet
- **Course organizers meeting**
- **Guidelines on course set-ups**

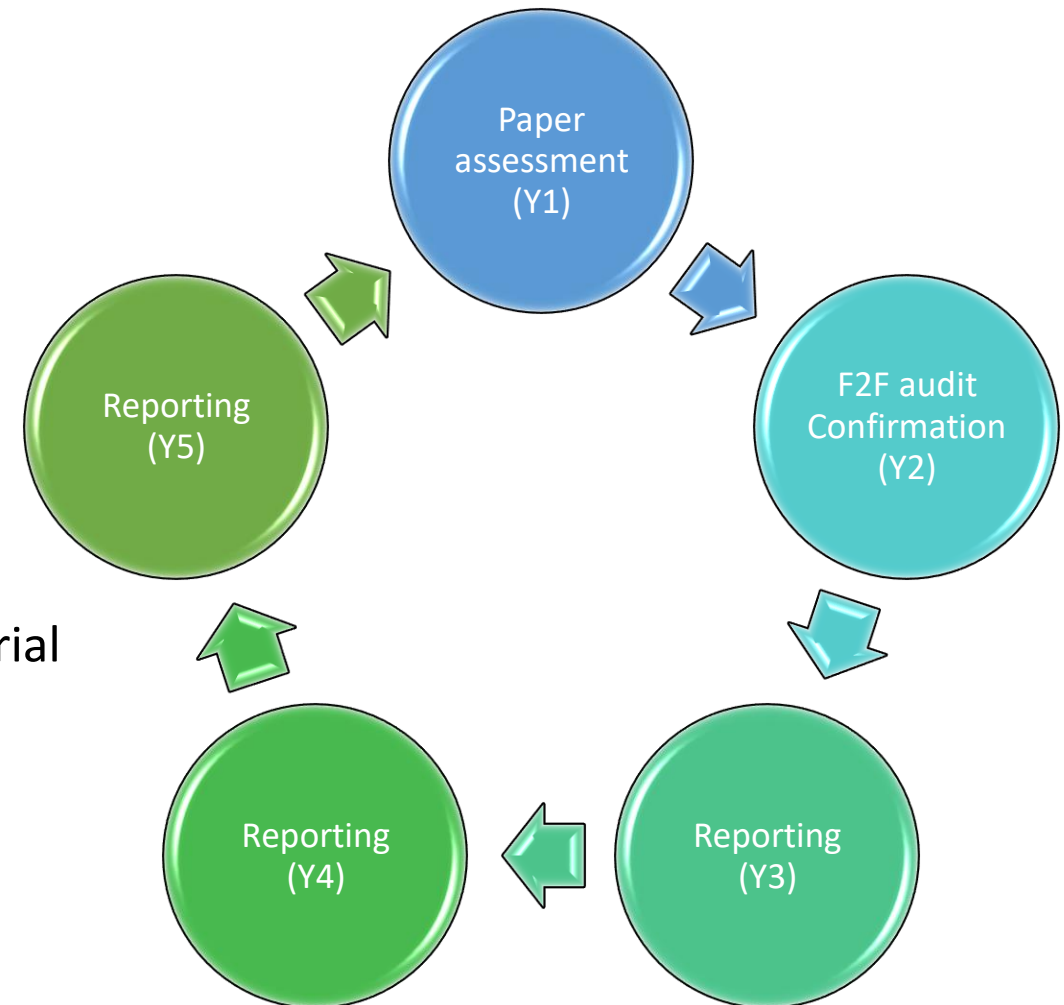
# Accreditation

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- < 2021
    - Transition from category to functions
  - > 2022
    - Combinations of functions – tailored offer
    - Species
    - New set of changes to fit better in the modular system
    - More new courses
- **more complexity**



- **5 years**
- **2 step procedure**
  - Step 1:
    - Paper review
    - Application package
      - Agreement + certificate approval
  - Step 2
    - 1.5 – 2 day visit
    - Course visit - context
    - Interviews, and visit practicals, course material
      - Summary report + confirmation letter





# Reviewing process

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- **1 'FIXED' ASSESSOR**
  - Involved in the accreditation process
- **1 'ROTATING' ASSESSOR**
  - External expert (F2F)



**CHECK**

= AGREEMENT/ACCREDITATION



**REPORTING**

DATA



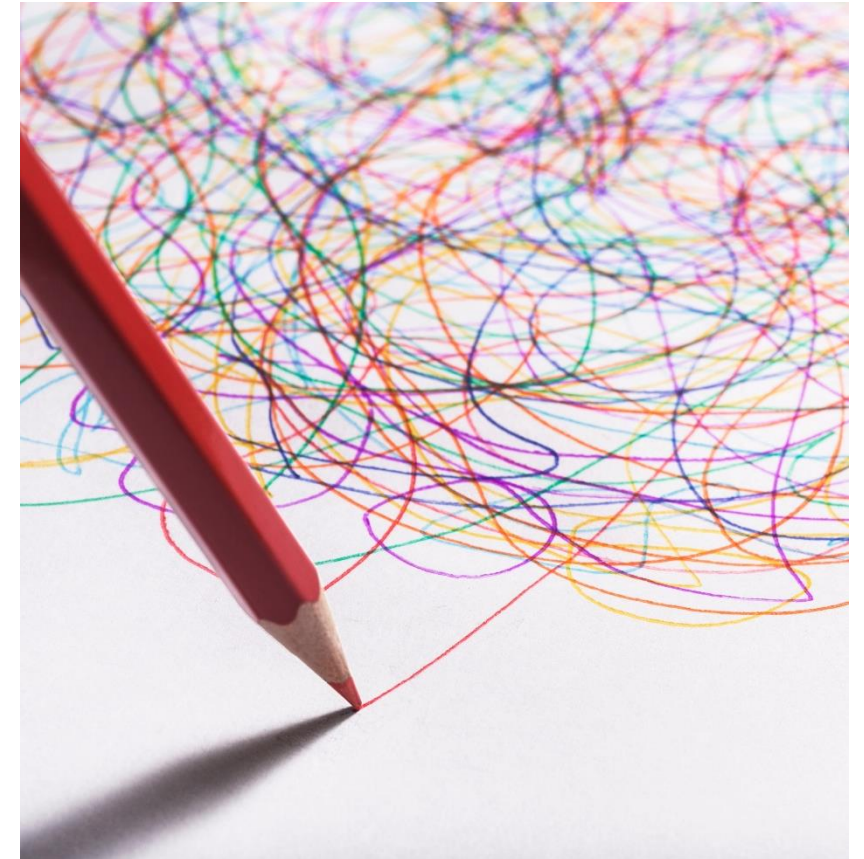
**ANALYSIS**

PDCA CYCLE

# Guidelines

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- PREVIOUS PUBLISHED RECOMMENDATION ON E&T
  - GUIDELINES ON HUMANE KILLING (SKILLS) OF MICE (REVISION)
  - GUIDELINES ON STUDENT SURVEYS/FEEDBACK
  - **GUIDELINES ON MODULE 22**
  - **GUIDELINES ON MODULE 3.2**
  - **GUIDELINES ON MODULE 8**
- 
- **BASED ON THE ACCREDITED COURSES**



# Newly published report

Check for updates

*Working Party Report*

## Harmonisation of education, training and continuing professional development for laboratory animal caretakers, technicians and technologists: Report of the FELASA-EFAT Working Group

Klas SP Abelson<sup>1\*</sup> , Charlie Chambers<sup>2</sup>, Teresa De La Cueva<sup>3</sup>, Glyn Fisher<sup>2</sup>, Penny Hawkins<sup>4</sup>, Vasileios Ntafis<sup>5</sup>, Paul F Pohlig<sup>6,7</sup>, T Pim Rooymans<sup>8</sup> and Ana I Santos<sup>9</sup> 



Laboratory Animals  
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