

Global rating scales to assess the competence of researchers in handling and performing substance administrations in laboratory rodents

**Andreia Costa^{1,2,3}, Sofia Lamas^{1,2}, Manuel João Costa⁴,
I. Anna S. Olsson^{1,2}**

1 i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Portugal

2 IBMC - Institute for Molecular and Cell Biology, University of Porto, Portugal

3 ICBAS - Abel Salazar Institute of Biomedical Sciences, University of Porto, Portugal

4 ICVS - Life and Health Sciences Research Institute, School of Medicine, University of Minho, Portugal

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Instructions to the assessor

1. Ensure that the candidate's identification (name and course/assessment reference) and the date of task performance are correct.
2. Provide clear indications to the candidate regarding the task required at each assessment (see the instructions to the candidate indicated in the different global rating scales).
3. Ensure that the candidate is wearing appropriate protective equipment before starting the demonstration.
4. Observe the candidate without interfering or communicating, except if the candidate expresses attitudes or behaviors that might compromise animal well-being, in which case the demonstration should be immediately halted, and the candidate's performance should be considered "not approved".
5. Use the scale to assess the candidate's performance by selecting for each descriptor the categories representing the candidate's actions.
6. Feedback may be given to candidate with focus on both the positive and negative aspects of the demonstration, to promote skills development.
7. Please note that information that is considered relevant, such as any special condition of the station that constrains the candidate's performance, the animal strains used, disturbances occurring during the assessment, etc., should be registered under the "Observations" column.

Suggested approval criteria for summative examinations

- We recommend adjusting the approval criteria to the context of the assessment, considering institutional standards and policies, the objectives of the assessment, and the intended proficiency of the candidates. Such criteria should be defined prior to examinations and be transparent to candidates.
- The pass criteria recommended for candidates who concluded formal training in laboratory animal science is a final score of [pass] for “global impression”, with at least one [clear pass] record for all the remaining items.
- We propose that these pass criteria correspond to level 2/3 of supervision, as defined in the EU working document¹. This score indicates that, although the candidate developed the skill, training with supervision is required to achieve mastery (level 0 of supervision, defined in the EU working document ¹)

¹ "The level of supervision can be divided in five stages:

4 – Supervisor present when the procedure takes place providing direct supervision and advice

3 – Supervisor aware when procedures are taking place and available for rapid intervention if required (i.e. in the vicinity of the procedure)

2 – Supervisor aware when procedures are taking place and available to attend to provide advice if required (i.e. in the vicinity of the establishment)

1 – Supervisor aware when procedures are taking place and available for discussion to provide advice if necessary (e.g. by telephone)

0 – No supervision required"

European Commission guidance document. National Competent Authorities for the implementation of Directive 2010/63/EU on the protection of animals used for scientific purposes. A working document on the development of a common education and training framework to fulfil the requirements under the Directive. Brussels, http://ec.europa.eu/environment/chemicals/lab_animals/pdf/guidance/education_training/en.pdf (2014, accessed 9 April 2021). page 14

Mouse restraint

Candidate Name:





Assessor Name:

ID/ Course reference:

Assessment Station ID:

Instructions to the candidate:

1. Please remove one animal from the cage.
2. Perform the complete restraint.
3. Return the animal safely to the cage.

MOUSE Rt 		FAIL	PASS	CLEAR PASS
Removal from the cage	Tail grasp attempts	Failed or >8	3-7	<3 or tunnel
	Suspension	>10 s	5-10 s	<5 or tunnel
	Tail hold	Failed	tip or middle	Base
Restraint & scruffing	Neck scruff attempts	Failed or >10	3-10	<3
	Scruffing	No hold or too loose/too tight	Loose/tight	Adequate
	Tail holding/restraint	Failed or posterior part of the animal released	Tail hold via other way than with the ring finger and/or without the thumb supporting the body	Adequate animal body support using the thumb
After restraint	Procedure repetition	>3	1-3	No repetition
GLOBAL IMPRESSION				

OBSERVATIONS:

Final score: fail pass clear pass

Assessor signature:

Date:

Rat restraint

Candidate Name:





Assessor Name:

ID/ Course reference:

Assessment Station ID:

Instructions to the candidate:

1. Please remove one animal from the cage.
2. Perform the complete restraint.
3. Return the animal safely to the cage.

RAT Rt 		FAIL	PASS	CLEAR PASS
Removal from cage	Removal from the cage and animal suspension	Tail (if not necessary)	Quickly by the tail (>2 s)	Thorax or tunnel
	Holding the animal (in the operator's arms)	Animal free in the arm/not holding	Not always holding	Always holding (by the tail or body)
Restraint & scruffing	Cranial/anterior restraint (head and jaw)	Animal can move head/not holding or suffocating animal	Holding loosely or tight/hiding thorax	Adequate
	Caudal/posterior restraint (legs and paws)	Animal can move/not holding	Holding loosely or tight/hiding abdomen	Adequate
After restraint	Return to the cage	Tail or dropped	Quickly by the tail (>2 sec)	Thorax or tunnel, or the animal walked down into the cage
	Procedure repetition	>3	1-3	No repetition
GLOBAL IMPRESSION				

OBSERVATIONS:

Final score: fail pass clear pass

Assessor signature:

Date:

**INSTITUTO
DE INVESTIGAÇÃO
E INOVAÇÃO
EM SAÚDE
UNIVERSIDADE
DO PORTO**

Rua Alfredo Allen, 208
4200-135 Porto
Portugal
+351 220 408 800
info@i3s.up.pt
www.i3s.up.pt

Mouse intraperitoneal administration

Candidate Name:








Assessor Name:

ID/ Course reference:

Assessment Station ID:

Instructions to the candidate:

1. Please remove one animal from the cage,
2. Perform an intraperitoneal administration using the material in the station.
3. Return the animal safely to the cage.

MOUSE IP 		FAIL	PASS	CLEAR PASS
Before admin.	Restraint	Failed/no hold	Loose/tight	Adequate
	Animal position	Head up	Parallel	Head down
Administration	Body part (quadrant)	Wrong, outside margins	Quadrant margins	Correct (inside quadrant)
	Depth of puncture angle	Depth: superficial or deep Angle: 	Depth: appropriate Angle: 	Depth: appropriate Angle: 
	Reflux/syringe holding	No reflux	Yes, reflux/trembling	Yes, reflux/holding firmly
	Injection speed	Failed too slow /too fast	Slow/fast	Acceptable
After admin.	Time after restraint	> 60 s	60-30 s	< 30 s
	Procedure repetition	> 3	1-3	No repetition
GLOBAL IMPRESSION				

OBSERVATIONS:

Final score: fail pass clear pass

Assessor signature:

Date:

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www.i3s.up.pt

Rat subcutaneous administration

Candidate Name:








Assessor Name:

ID/ Course reference:

Assessment Station ID:

Instructions to the candidate:

1. Please remove one animal from the cage,
2. Perform a subcutaneous administration using the material in the station.
3. Return the animal safely to the cage.

RAT SC 		FAIL	PASS	CLEAR PASS
Before admin.	Restraint: animal body orientation & puncture site	Body: failed or perpendicular orientation Puncture site: not visible	Body: no parallel orientation Puncture site: visible	Body: parallel orientation Puncture site: visible
	Body part (quadrant)	Wrong	Acceptable but not into scapula	Scapula
Administration	Depth of puncture angle	Depth: superficial or deep Angle: 	Depth: appropriate Angle: 	Depth: appropriate Angle: 
	Reflux/syringe holding	No reflux	Yes, reflux/trembling	Yes, reflux/holding firmly
	Injection speed	Failed too slow /too fast	Slow/fast	Appropriate
	Time after restraint	> 60 s	60-30 s	< 30 s
After admin.	Procedure repetition	> 3	1-3	No repetition
GLOBAL IMPRESSION				

OBSERVATIONS:

Final score: fail pass clear pass

Assessor signature:

Date:



Stations material

Mouse restraint	cage with lid tunnel
Rat restraint	tunnel
Mouse intraperitoneal administration	Sterile syringe (1 ml) Sterile needle (25 - 27 G; 5/8" length or less) Saline for injection Sharps container
Rat subcutaneous administration	Sterile syringe (1 - 5 ml) Sterile needle (23 - 25G; 5/8" length or less) Saline for injected Sharps container