

# Combined SHIRPA and Dymorphology BCM\_CSD\_001

## Purpose

SHIRPA and dymorphology were originally always separate assessments. However they have recently been combined as assessments, so that they take place at the same time.

The purpose of the assessments is to examine mice for obvious physical characteristics, behaviors and morphological abnormalities.

Descriptions include abnormal locomotion/appearance/behavior/reflex reactions.

The BCM-specific CSD procedure differs from the IMPC procedure in that the IMPC-mandatory parameter "Locomotor activity" (and associated metadata parameters) is not included in BCM's procedure, as BCM perform Open Field as standard instead.

## Experimental Design

- **Minimum number of animals** : 4M + 4F
- **Age at test**: Week 9
- **Sex**: We would expect the results of this test to show sexual dimorphism

## Equipment

- Viewing Jar
- Click Box
- Tube for contact righting
- Photo and/or video camera

## Notes

1. If wiping down with ethanol prior to the use of equipment, make sure no ethanol residue remains as the ethanol may affect the behaviour of the animals.
2. The validity of results obtained from behavioural phenotyping is largely dependent on methods of animal husbandry. It is important that individuals following this procedure are experienced and aware of the animal's welfare, and is familiar with the animal being tested, in order to reduce the anxiety levels of the animal prior to testing.
3. The majority of mouse behavioural studies are age/sex/strain dependent. It is important to keep these parameters comparable throughout a single experiment.

4. Environmental factors may contribute to the levels of anxiety within the mouse. The temperature, humidity, ventilation, noise intensity and light intensity must be maintained at levels appropriate for mice. It is essential that the mice be kept in a uniform environment before and after testing to avoid anomalous results being obtained.
5. It is recommended that all phenotyping experimentation is conducted at approximately the same time of day because physiological and biochemical parameters change throughout the day.
6. When a number of mice are tested continuously, residual odours from the equipment used in the preceding test may affect the test results. The floor and walls of the arena, ruler, and metal net should be wiped clean before introducing the next mouse. To prevent infection, the equipment should be washed with water at the completion of the day's tests. Some specific pathogen-free facilities use ultraviolet irradiation when tests are not being performed. Care needs to be taken, however, to ensure that ultraviolet irradiation does not crack any acrylate equipment covered with residual alcohol.

## Parameters and Metadata

### Tail - presence IMPC\_CSD\_001\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** tail\_presence

**Options:** Absent, Present,

---

### Tail - length IMPC\_CSD\_002\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** tail\_length

**Options:** Long, Short, As expected, No data,

---

## Tail - thickness IMPC\_CSD\_003\_001 | v1.1

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: tail\_thickness

Options: Increased, Decreased, As expected, No data,

---

## Tail - morphology IMPC\_CSD\_004\_001 | v1.1

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: tail\_morphology

Options: As expected, Not as expected, No data,

---

## Coat - color - back IMPC\_CSD\_005\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: coat\_color\_back

Options: As expected, Not as expected, No data,

---

## Coat - color - head IMPC\_CSD\_006\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: coat\_color\_head

Options: As expected, Not as expected, No data,

---

## Coat - color - abdomen IMPC\_CSD\_007\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: coat\_color\_abdomen

Options: As expected, Not as expected, No data,

---

## Coat - color pattern - back IMPC\_CSD\_008\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: coat\_color\_pattern\_back

Options: As expected, Not as expected, No data,

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---

## Coat - color pattern - head IMPC\_CSD\_009\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_color\_pattern\_head

**Options:** As expected, Not as expected, No data,

---

## Coat - color pattern - abdomen IMPC\_CSD\_010\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_color\_pattern\_abdomen

**Options:** As expected, Not as expected, No data,

---

## Coat - hair distribution - back IMPC\_CSD\_011\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_hair\_distribution\_back

**Options:** As expected, Not as expected,

---

## Coat - hair distribution - head IMPC\_CSD\_012\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_hair\_distribution\_head

**Options:** As expected, Not as expected,

---

## Coat - hair distribution - abdomen IMPC\_CSD\_013\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_hair\_distribution\_abdomen

**Options:** As expected, Not as expected,

---

## Coat - hair texture / appearance - back IMPC\_CSD\_014\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_hair\_texture\_appearance\_back

**Options:** As expected, Not as expected, No data,

---

## Coat - hair texture / appearance - head IMPC\_CSD\_015\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_hair\_texture\_appearance\_head

**Options:** As expected, Not as expected, No data,

---

## Coat - hair texture / appearance - abdomen IMPC\_CSD\_016\_001

| v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** coat\_hair\_texture\_appearance\_abdomen

**Options:** As expected, Not as expected, No data,

---

## Forelimbs - position IMPC\_CSD\_017\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimbs\_position

**Options:** As expected, One forelimb only - not as expected, Both forelimbs - not as expected,

---

## **Forelimbs - shape** IMPC\_CSD\_018\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimbs\_shape

**Options:** As expected, One forelimb only - not as expected, Both forelimbs - not as expected,

---

## **Forelimbs - size** IMPC\_CSD\_019\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimbs\_size

**Options:** As expected, One forelimb only - increased, One forelimb only - decreased,  
Both forelimbs - increased, Both forelimbs - decreased,

---

## **Hindlimbs - position** IMPC\_CSD\_020\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true



**Description:** hindlimbs\_position

**Options:** As expected, One hindlimb only - not as expected,  
Both hindlimbs - not as expected,

---

## **Hindlimbs - shape** IMPC\_CSD\_021\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimbs\_shape

**Options:** As expected, One hindlimb only - not as expected,  
Both hindlimbs - not as expected,

---

## **Hindlimbs - size** IMPC\_CSD\_022\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimbs\_size

**Options:** As expected, One hindlimb only - increased, One hindlimb only - decreased,  
Both hindlimbs - increased, Both hindlimbs - decreased,

---

## **Vibrissae - presence** IMPC\_CSD\_023\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** vibrissae\_presence

**Options:** As expected, Not as expected,

---

## **Vibrissae - appearance** IMPC\_CSD\_024\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** vibrissae\_appearance

**Options:** As expected, Not as expected, No data,

---

## **Head size** IMPC\_CSD\_025\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** head\_size

**Options:** As expected, Increased, Decreased,

---

## **Head morphology** IMPC\_CSD\_026\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** head\_morphology

**Options:** As expected, Not as expected,

---

## **Ears** IMPC\_CSD\_027\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** ears

**Options:** As expected, Not as expected,

---

## **Snout size** IMPC\_CSD\_028\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** snout\_size

**Options:** As expected, Increased, Decreased,

---

## Activity (body position) IMPC\_CSD\_029\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: activity\_body\_position\_

Options: As expected, Increased activity, Inactive,

---

## Tremor IMPC\_CSD\_030\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: tremor

Options: Absent, Present,

---

## Transfer arousal IMPC\_CSD\_031\_001 | v1.2

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: transfer\_arousal

Options: As expected, Immediate movement, Extended freeze,

---

## **Gait** IMPC\_CSD\_033\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** gait

**Options:** Fluid movement, Lack of fluidity in movement,

---

## **Tail elevation** IMPC\_CSD\_034\_001 | v1.2

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** false

**Description:** tail\_elevation

**Options:** As expected, Straub / elevated tail, Dragging, No data,

---

## **Startle response** IMPC\_CSD\_036\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** false

**Is Annotated:** true

**Description:** startle\_response

**Options:** None, Present, No data,

---

## Unexpected behaviors IMPC\_CSD\_037\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** unexpected\_behaviors

**Options:** None, Circling, Jumping, Retropulsion, Other,

---

## Trunk curl IMPC\_CSD\_038\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** trunk\_curl

**Options:** Absent, Present, No data,

---

## Limb grasp IMPC\_CSD\_039\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** limb\_grasp

**Options:** Absent, Present, No data,

---

## Forelimb digit - size IMPC\_CSD\_046\_001 | v1.1

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: forelimb\_digit\_size

Options: As expected, One forelimb - increased size, One forelimb - decreased size, One forelimb - fused, Both forelimbs - increased size, Both forelimbs - decreased size, Both forelimbs - fused,

---

## Hindlimb digit - size IMPC\_CSD\_047\_001 | v1.2

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: hindlimb\_digit\_size

Options: As expected, One hindlimb - increased size, One hindlimb - decreased size, One hindlimb - fused, Both hindlimbs - increased size, Both hindlimbs - decreased size, Both hindlimbs - fused,

---

## Skin color - whole body IMPC\_CSD\_056\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: skin\_color\_whole\_body

**Options:** As expected, Not as expected,

---

## **Skin color - snout** IMPC\_CSD\_057\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_color\_snout

**Options:** As expected, Not as expected,

---

## **Skin color - ear** IMPC\_CSD\_058\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_color\_ear

**Options:** As expected, Not as expected,

---

## **Skin color - front paws** IMPC\_CSD\_059\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true



**Description:** skin\_color\_front\_paws

**Options:** As expected, Not as expected,

---

## **Skin color - back paws** IMPC\_CSD\_060\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_color\_back\_paws

**Options:** As expected, Not as expected,

---

## **Skin color - tail** IMPC\_CSD\_061\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_color\_tail

**Options:** As expected, Not as expected, No data,

---

## **Skin texture - whole body** IMPC\_CSD\_062\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_texture\_whole\_body

**Options:** As expected, Not as expected,

---

## **Skin texture - snout** IMPC\_CSD\_063\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_texture\_snout

**Options:** As expected, Not as expected,

---

## **Skin texture - ear** IMPC\_CSD\_064\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_texture\_ear

**Options:** As expected, Not as expected,

---

## **Skin texture - front paws** IMPC\_CSD\_065\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_texture\_front\_paws

**Options:** As expected, Not as expected,

---

## **Skin texture - back paws** IMPC\_CSD\_066\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_texture\_back\_paws

**Options:** As expected, Not as expected,

---

## **Skin texture - tail** IMPC\_CSD\_067\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** skin\_texture\_tail

**Options:** As expected, Not as expected, No data,

---

## **Teeth presence** IMPC\_CSD\_068\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** teeth\_presence

**Options:** As expected, Not as expected,

---

## **Upper teeth appearance** IMPC\_CSD\_069\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** upper\_teeth\_appearance

**Options:** As expected, Not as expected, No data,

---

## **Lower teeth appearance** IMPC\_CSD\_070\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** lower\_teeth\_appearance

**Options:** As expected, Not as expected, No data,

---

## **Genitalia - presence** IMPC\_CSD\_071\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** genitalia\_presence

**Options:** As expected, Absent,

---

## **Genitalia - size** IMPC\_CSD\_072\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** genitalia\_size

**Options:** As expected, Not as expected, No data,

---

## **Genitalia - morphology** IMPC\_CSD\_073\_001 | v1.1

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** genitalia\_morphology

**Options:** As expected, Not as expected, No data,

---

## **Mouth morphology** IMPC\_CSD\_074\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** mouth\_morphology

**Options:** As expected, Not as expected,

---

## Upper lip morphology IMPC\_CSD\_075\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** upper\_lip\_morphology

**Options:** As expected, Not as expected,

---

## Lower lip morphology IMPC\_CSD\_076\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** lower\_lip\_morphology

**Options:** As expected, Not as expected,

---

## Contact righting IMPC\_CSD\_077\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** contact\_righting

**Options:** Present, Absent, No data,

---

## Vocalization IMPC\_CSD\_078\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** vocalization

**Options:** As expected, Not as expected,

---

## Aggression IMPC\_CSD\_079\_001 | v1.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** aggression

**Options:** As expected, Excessive aggression,

---

## Head bobbing IMPC\_CSD\_080\_001 | v1.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: head\_bobbing

Options: Present, Absent,

---

## Experimenter ID IMPC\_CSD\_081\_001 | v1.0

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

---

## Location of test IMPC\_CSD\_082\_001 | v1.1

procedureMetadata

Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: location\_of\_test

Options: Open bench, LAF cabinet,

---

## Number of animals in cage IMPC\_CSD\_083\_001 | v1.2

procedureMetadata



Req. Analysis: false

Req. Upload: true

Is Annotated: false

Description: number\_of\_animals

---

## Number of days since cage changed IMPC\_CSD\_084\_001 | v1.1

procedureMetadata

Req. Analysis: false

Req. Upload: false

Is Annotated: false

---

## Images IMPC\_CSD\_085\_001 | v1.1

seriesMediaParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

---

## Comments (in English) IMPC\_CSD\_087\_001 | v1.2

simpleParameter

Req. Analysis: false

Req. Upload: false

Is Annotated: false

Description: General comments, in English

---

## Forepaw - size IMPC\_CSD\_040\_002 | v2.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: forepaw\_size

Options: As expected, One forepaw - decreased, Both forepaws - increased, Both forepaws - decreased, One forepaw - increased,

---

## Hindpaw - size IMPC\_CSD\_041\_002 | v2.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: hindpaw\_size

Options: As expected, One hindpaw - increased, One hindpaw - decreased, Both hindpaws - increased, Both hindpaws - decreased,

---

## Forepaw - shape IMPC\_CSD\_042\_002 | v2.0

simpleParameter

Req. Analysis: false

Req. Upload: true

Is Annotated: true

Description: forepaw\_shape

Options: As expected, One forepaw - not as expected, Both forepaws - not as expected,

---

## Hindpaw - shape IMPC\_CSD\_043\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindpaw\_shape

**Options:** As expected, One hindpaw - not as expected, Both hindpaws - not as expected,

---

## Forelimb digit - number IMPC\_CSD\_044\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimb\_digit\_number

**Options:** As expected, One forelimb - increased number, One forelimb - decreased number, Both forelimbs - increased number, Both forelimbs - decreased number,

---

## Hindlimb digit - number IMPC\_CSD\_045\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimb\_digit\_number

**Options:** As expected, One hindlimb - increased number, One hindlimb - decreased number, Both hindlimbs - increased number, Both hindlimbs - decreased number,

---

## **Forelimb digit - shape** IMPC\_CSD\_048\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimb\_digit\_shape

**Options:** As expected, One forelimb - not as expected, Both forelimbs - not as expected,

---

## **Hindlimb digit - shape** IMPC\_CSD\_049\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimb\_digit\_shape

**Options:** As expected, One hindlimb - not as expected, Both hindlimbs - not as expected,

---

## **Forelimb nail - number** IMPC\_CSD\_050\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimb\_nail\_number

**Options:** As expected, One forelimb - increased number, One forelimb - decreased number, Both forelimbs - increased number, Both forelimbs - decreased number, No data,

---

## Hindlimb nail - number IMPC\_CSD\_051\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimb\_nail\_number

**Options:** As expected, One hindlimb - increased number, One hindlimb - decreased number, Both hindlimbs - increased number, Both hindlimbs - decreased number, No data,

---

## Hindlimb nail - length IMPC\_CSD\_053\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimb\_nail\_length

**Options:** As expected, One hindlimb - increased length, One hindlimb - decreased length, Both hindlimbs - increased length, Both hindlimbs - decreased length, No data,

---

## Forelimb nail - length IMPC\_CSD\_052\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimb\_nail\_length

**Options:** As expected, One forelimb - increased length, One forelimb - decreased length, Both forelimbs - increased length, Both forelimbs - decreased length, No data,

---

## Forelimb nail - shape IMPC\_CSD\_054\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** forelimb\_nail\_shape

**Options:** As expected, One forelimb - not as expected, Both forelimbs - not as expected, No data,

---

## Hindlimb nail - shape IMPC\_CSD\_055\_002 | v2.0

simpleParameter

**Req. Analysis:** false

**Req. Upload:** true

**Is Annotated:** true

**Description:** hindlimb\_nail\_shape

**Options:** As expected, One hindlimb - not as expected, Both hindlimbs - not as expected, No data,

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