#1

COMPLETE

Collector: New Email Invitation (Email)
Started: Saturday, February 08, 2014 7:11:40 AM **Last Modified:** Monday, February 10, 2014 6:19:41 AM
Time Spent: Over a day
Email:
IP Address:

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Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @bcm.edu
Q2: Which phenotyping center is data is being submitted for?	BCM Baylor College of Medicine
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	BaSH
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	IMPC Pipeline (id: IMPC_001)

Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 08/01/2011

Q6: If known, please specify the end date for which this information applies.

End Date 07/31/2016

Q7: Control design - what controls are run? [ontology parent: control design]	Littermate control: WT animals that are true siblings and hence were generated from a HET*HET, or a HET*WT cross that generated the mutant of interest. , Production colony control: WT animals from a breeding colony on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Parallel control with knockout: The process of running control phenotyping concurrently (same day) with knockouts.

Q9: How many controls are run through the main pipeline per batch for a genetic background?	
Male	2
Female	2
Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NJ
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Multiple batches: For an allele, animals are processed in multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Genotype Free blinding
CSD:SHIRPA & dysmorphology	Genotype Free blinding
Grip strength	Genotype Free blinding
PPI	Genotype Free blinding
Calorimetry	Genotype Free blinding
ipGTT	Genotype Free blinding
ABR collection	Genotype Free blinding
ABR annotation	Genotype Free blinding
DEXA	Genotype Free blinding
X-ray imaging	Genotype Free blinding

X-ray annotation	Genotype Free blinding
slit lamp collection	Test not run
slit lamp annotation	Test not run
Ophthalmoscope collection	Test not run
Ophthalmoscope annotation	Test not run
Haematology	Genotype Free blinding
Clinical Blood Chemistry	Genotype Free blinding
Insulin Blood Level	Genotype Free blinding
Immunophenotyping collection	Genotype Free blinding
Immunophenotyping annotation	Genotype Free blinding
Heart weight	Genotype Free blinding
Open field	Genotype Free blinding
Histology collection	Genotype Free blinding
Histology annotation	Genotype Free blinding
ECG	Genotype Free blinding
Echo	Genotype Free blinding
Plethysmography	Genotype Free blinding
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Genotype Free blinding
Embryo Lac Z annotation	Genotype Free blinding
Pain Test	Test not run

Q17: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific

instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the ‘local’ control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Controlled instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Controlled instrumentation strategy
Calorimetry	Controlled instrumentation strategy
ipGTT	Controlled instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Test not run
Ophthalmoscope	Test not run
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Controlled instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Controlled instrumentation strategy
Plethsmography	Controlled instrumentation strategy
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects

will affect the ‘local’ control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Single operator.
Open field	Single operator.
CSD: SHIRPA & dysmorphology	Single operator.
Grip strength	Single operator.
PPI	Single operator.
Calorimetry	Single operator.
ipGTT	Single operator.
ABR collection	Single operator.
ABR annotation	Single operator.
DEXA	Single operator.
X-ray imaging	Single operator.
X-ray annotation	Single operator.
Slit lamp	Test not run
Opthalmoscope	Test not run
Hematology	Single operator.
Clinical Chemistry	Single operator.
Immunophenotyping collection	Single operator.
Immunophenotyping analysis	Single operator.
Heart weight	Single operator.
Histology collection	Single operator.
Histology annotation	Single operator.
ECG	Single operator.
Echo	Single operator.
Plethsmography	Single operator.
Insulin Blood Level	Single operator.
Embryo Lac Z collection	Single operator.
Embryo Lac Z annotation	Single operator.
Adult Lac Z collection	Single operator.
Adult Lac Z annotation	Single operator.
Pain Test	Test not run

Q19: **How do you manage potential time effects? [parent ontology: time effect strategy]**	Controlled time effect: Local control and knockout animals are consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Casual randomisation within a cage
CSD:SHIRPA & dysmorphology	Casual randomisation within a cage
Grip strength	Casual randomisation within a cage
PPI	Casual randomisation within a cage
Calorimetry	Casual randomisation within a cage
ipGTT	Casual randomisation within a cage
ABR collection	Casual randomisation within a cage
ABR annotation	Casual randomisation within a cage
DEXA	Casual randomisation within a cage
X-ray imaging	Casual randomisation within a cage
X-ray annotation	Casual randomisation within a cage
Slit Lamp	Test not run
Ophthalmoscope	Test not run
Haematology	Casual randomisation within a cage
Clinical Chemistry	Casual randomisation within a cage
Immunophenotyping	Casual randomisation within a cage
Heart Weight	Casual randomisation within a cage
Open field	Casual randomisation within a cage
Histology collection	Casual randomisation within a cage
Histology annotation	Casual randomisation within a cage
ECG	Casual randomisation within a cage
Echo	Casual randomisation within a cage
Plethsmography	Casual randomisation within a cage
Insulin Blood Level	Casual randomisation within a cage
Embryo Lac Z	Casual randomisation within a cage
Adult Lac Z	Casual randomisation within a cage
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	Passive subject selection strategy
Histology collection	Passive subject selection strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Respondent skipped this question

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*

#2

COMPLETE

Collector: New Email Invitation (Email) **Started:** Monday, February 10, 2014 5:43:59 AM
Last Modified: Thursday, February 13, 2014 2:15:58 AM
Time Spent: Over a day
Email:
IP Address:

PAGE 1

Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @har.mrc.ac.uk
Q2: Which phenotyping center is data is being submitted for?	H MRC Harwell
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	BaSH, MRC
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	Harwell (id: HRWL_001)
Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	
Start Date 01/10/2011	
Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Line mate control: WT animals that are generated from breeding program of HET*HET, or HET*WT crosses that generated the mutant of interest. , Production colony control: WT animals from a breeding colony on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Parallel control with knockout: The process of running control phenotyping concurrently (same day) with knockouts.

Q9: How many controls are run through the main pipeline per batch for a genetic background?	
Male	5
Female	5
Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NTac
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Multiple batches: For an allele, animals are processed in multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Blinded
CSD:SHIRPA & dysmorphology	Blinded
Grip strength	Blinded
PPI	Blinded
Calorimetry	Blinded
ipGTT	Blinded
ABR collection	Blinded
ABR annotation	Blinded
DEXA	Blinded
X-ray imaging	Blinded

X-ray annotation	Blinded
slit lamp collection	Blinded
slit lamp annotation	Blinded
Ophthalmoscope collection	Blinded
Ophthalmoscope annotation	Blinded
Haematology	Blinded
Clinical Blood Chemistry	Blinded
Insulin Blood Level	Blinded
Immunophenotyping collection	Blinded
Immunophenotyping annotation	Blinded
Heart weight	Blinded
Open field	Blinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Blinded
Echo	Blinded
Plethysmography	Blinded
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Blinded
Embryo Lac Z annotation	Unblinded
Pain Test	Test not run

Q17: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific

instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the ‘local’ control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Causal randomisation and minimisation instrumentation strategy
Heart Weight	Causal randomisation and minimisation instrumentation strategy
Grip strength	Causal randomisation and minimisation instrumentation strategy
PPI	Causal randomisation and minimisation instrumentation strategy
Calorimetry	Causal randomisation and minimisation instrumentation strategy
ipGTT	Causal randomisation and minimisation instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Controlled instrumentation strategy
ECG	Causal randomisation and minimisation instrumentation strategy
Echo	Controlled instrumentation strategy
Plethsmography	Causal randomisation and minimisation instrumentation strategy
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an**

operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Balanced operator with minimisation
Open field	Balanced operator with minimisation
CSD: SHIRPA & dysmorphology	Balanced operator with minimisation
Grip strength	Balanced operator with minimisation
PPI	Balanced operator with minimisation
Calorimetry	Balanced operator with minimisation
ipGTT	Balanced operator with minimisation
ABR collection	Balanced operator with minimisation
ABR annotation	Balanced operator with minimisation
DEXA	Balanced operator with minimisation
X-ray imaging	Balanced operator with minimisation
X-ray annotation	Balanced operator with minimisation
Slit lamp	Balanced operator with minimisation
Opthalmoscope	Balanced operator with minimisation
Hematology	Balanced operator with minimisation
Clinical Chemistry	Balanced operator with minimisation
Immunophenotyping collection	Balanced operator with minimisation
Immunophenotyping analysis	Balanced operator with minimisation
Heart weight	Balanced operator with minimisation
Histology collection	Balanced operator with minimisation
Histology annotation	Balanced operator with minimisation
ECG	Balanced operator with minimisation
Echo	Balanced operator with minimisation
Plethsmography	Balanced operator with minimisation
Insulin Blood Level	Balanced operator with minimisation
Embryo Lac Z collection	Balanced operator with minimisation

Embryo Lac Z annotation	Balanced operator with minimisation
Adult Lac Z collection	Balanced operator with minimisation
Adult Lac Z annotation	Balanced operator with minimisation
Pain Test	Test not run
Q19: How do you manage potential time effects? [parent ontology: time effect strategy]	Controlled time effect: Local control and knockout animals are consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Casual randomisation within a cage
CSD:SHIRPA & dysmorphology	Casual randomisation within a cage
Grip strength	Casual randomisation within a cage
PPI	Casual randomisation within a cage
Calorimetry	Casual randomisation within a cage
ipGTT	Casual randomisation within a cage
ABR collection	Casual randomisation within a cage
ABR annotation	Casual randomisation within a cage
DEXA	Casual randomisation within a cage
X-ray imaging	Casual randomisation within a cage
X-ray annotation	Casual randomisation within a cage
Slit Lamp	Casual randomisation within a cage
Ophthalmoscope	Casual randomisation within a cage
Haematology	Casual randomisation within a cage
Clinical Chemistry	Casual randomisation within a cage
Immunophenotyping	Casual randomisation within a cage
Heart Weight	Casual randomisation within a cage
Open field	Casual randomisation within a cage
Histology collection	Casual randomisation within a cage
Histology annotation	Casual randomisation within a cage
ECG	Casual randomisation within a cage
Echo	Casual randomisation within a cage
Plethsmography	Casual randomisation within a cage
Insulin Blood Level	Casual randomisation within a cage
Embryo Lac Z	Casual randomisation within a cage
Adult Lac Z	Casual randomisation within a cage
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	Passive subject selection strategy
Histology collection	Passive subject selection strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Respondent skipped this question

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*

#3

COMPLETE

Collector: New Email Invitation (Email) **Started:** Friday, February 14, 2014 10:19:03 AM
Last Modified: Friday, February 14, 2014 10:34:08 AM
Time Spent: 00:15:04
Email:
IP Address:

PAGE 1

Q1: What are your contact details?

Name	XXXXX
Email	XXXXX @jax.org

Q2: Which phenotyping center is data is being submitted for?	J The Jackson Laboratory
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	JAX
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	JAX Pipeline (id: JAX_001)

Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 09/01/2012

Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Production colony control: WT animals from a breeding colony on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Weekly control: A process where controls are run weekly

Q9: How many controls are run through the main pipeline per batch for a genetic background?

Male	5
Female	5

Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NJ
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Variable batch: For an allele, animals can be processed either as a single batch or multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Blinded
CSD:SHIRPA & dysmorphology	Blinded
Grip strength	Blinded
PPI	Blinded
Calorimetry	Test not run
ipGTT	Blinded
ABR collection	Blinded
ABR annotation	Blinded
DEXA	Blinded
X-ray imaging	Blinded
X-ray annotation	Blinded
slit lamp collection	Blinded
slit lamp annotation	Blinded

Ophthalmoscope collection	Blinded
Ophthalmoscope annotation	Blinded
Haematology	Blinded
Clinical Blood Chemistry	Blinded
Insulin Blood Level	Blinded
Immunophenotyping collection	Blinded
Immunophenotyping annotation	Blinded
Heart weight	Blinded
Open field	Blinded
Histology collection	Blinded
Histology annotation	Blinded
ECG	Blinded
Echo	Test not run
Plethysmography	Test not run
Adult Lac Z collection	Test not run
Adult Lac Z annotation	Test not run
Embryo Lac Z collection	Blinded
Embryo Lac Z annotation	Blinded
Pain Test	Test not run

Q17: **How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.**

Body Weight	Causal randomisation and minimisation instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Causal randomisation and minimisation instrumentation strategy
Calorimetry	Test not run
ipGTT	Controlled instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Causal randomisation and minimisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Test not run
Plethsmography	Test not run
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Test not run
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as**

equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Minimized operator
Open field	Minimized operator
CSD: SHIRPA & dysmorphology	Minimized operator
Grip strength	Minimized operator
PPI	Minimized operator
Calorimetry	Test not run
ipGTT	Minimized operator
ABR collection	Minimized operator
ABR annotation	Single operator.
DEXA	Minimized operator
X-ray imaging	Minimized operator
X-ray annotation	Single operator.
Slit lamp	Minimized operator
Opthalmoscope	Minimized operator
Hematology	Minimized operator
Clinical Chemistry	Minimized operator
Immunophenotyping collection	Minimized operator
Immunophenotyping analysis	Single operator.
Heart weight	Minimized operator
Histology collection	Minimized operator
Histology annotation	Single operator.
ECG	Minimized operator
Echo	Test not run
Plethsmography	Test not run
Insulin Blood Level	Minimized operator
Embryo Lac Z collection	Minimized operator
Embryo Lac Z annotation	Single operator.
Adult Lac Z collection	Test not run
Adult Lac Z annotation	Test not run
Pain Test	Test not run

Q19: **How do you manage potential time effects? [parent ontology: time effect strategy]**	Uncontrolled time effect: The local control and knockout animals are not consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Cage casual randomisation
CSD:SHIRPA & dysmorphology	Cage casual randomisation
Grip strength	Cage casual randomisation
PPI	Cage casual randomisation
Calorimetry	Test not run
ipGTT	Cage casual randomisation
ABR collection	Cage casual randomisation
ABR annotation	Cage casual randomisation
DEXA	Cage casual randomisation
X-ray imaging	Cage casual randomisation
X-ray annotation	Cage casual randomisation
Slit Lamp	Cage casual randomisation
Ophthalmoscope	Cage casual randomisation
Haematology	Cage casual randomisation
Clinical Chemistry	Cage casual randomisation
Immunophenotyping	Cage casual randomisation
Heart Weight	Cage casual randomisation
Open field	Cage casual randomisation
Histology collection	Cage casual randomisation
Histology annotation	Cage casual randomisation
ECG	Cage casual randomisation
Echo	Test not run
Plethsmography	Test not run
Insulin Blood Level	Cage casual randomisation
Embryo Lac Z	Cage casual randomisation
Adult Lac Z	Test not run
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	Active subject selection strategy
Histology collection	Active subject selection strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Respondent skipped this question

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*

#4

COMPLETE

Collector: New Email Invitation (Email)
Started: Thursday, February 20, 2014 12:17:07 PM
Last Modified: Thursday, February 20, 2014 12:40:33 PM
Time Spent: 00:23:26
Email:
IP Address:

PAGE 1

Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @igbmc.fr
Q2: Which phenotyping center is data is being submitted for?	ICS Mouse Clinical Institute
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	Phenomin
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	ICS (id: ICS_001)

Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 01/01/2012

Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Production colony control: WT animals from a breeding colony on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Parallel control with knockout: The process of running control phenotyping concurrently (same day) with knockouts.

Q9: How many controls are run through the main pipeline per batch for a genetic background?

Male	8
Female	8

Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NCrl, C57BL/6NTac
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Externally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Externally managed control: The process by which controls are outsourced and new animals are acquired.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Single batch: For an allele, animals are processed in one batch for both sexes. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Unblinded
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Unblinded
PPI	Unblinded
Calorimetry	Unblinded
ipGTT	Unblinded
ABR collection	Unblinded
ABR annotation	Unblinded
DEXA	Unblinded
X-ray imaging	Unblinded
X-ray annotation	Unblinded
slit lamp collection	Unblinded
slit lamp annotation	Unblinded

Ophthalmoscope collection	Unblinded
Ophthalmoscope annotation	Unblinded
Haematology	Unblinded
Clinical Blood Chemistry	Unblinded
Insulin Blood Level	Test not run
Immunophenotyping collection	Test not run
Immunophenotyping annotation	Test not run
Heart weight	Unblinded
Open field	Unblinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Unblinded
Echo	Unblinded
Plethysmography	Unblinded
Adult Lac Z collection	Test not run
Adult Lac Z annotation	Test not run
Embryo Lac Z collection	Test not run
Embryo Lac Z annotation	Test not run
Pain Test	Unblinded

Q17: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Controlled instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Active randomisation instrumentation strategy
PPI	Active randomisation instrumentation strategy
Calorimetry	Controlled instrumentation strategy
ipGTT	Controlled instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Test not run
Open field	Active randomisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Controlled instrumentation strategy
Plethsmography	Controlled instrumentation strategy
Histology	Test not run
Insulin Blood Level	Test not run
Embryo Lac Z	Test not run
Adult Lac Z	Test not run
Pain Test	Active randomisation instrumentation strategy
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects**

will affect the ‘local’ control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Balanced operator
Open field	Balanced operator
CSD: SHIRPA & dysmorphology	Balanced operator
Grip strength	Balanced operator
PPI	Balanced operator
Calorimetry	Balanced operator
ipGTT	Balanced operator
ABR collection	Balanced operator
ABR annotation	Balanced operator
DEXA	Balanced operator
X-ray imaging	Balanced operator
X-ray annotation	Balanced operator
Slit lamp	Balanced operator
Opthalmoscope	Balanced operator
Hematology	Balanced operator
Clinical Chemistry	Balanced operator
Immunophenotyping collection	Test not run
Immunophenotyping analysis	Test not run
Heart weight	Balanced operator
Histology collection	Balanced operator
Histology annotation	Balanced operator
ECG	Balanced operator
Echo	Balanced operator
Plethsmography	Balanced operator
Insulin Blood Level	Test not run
Embryo Lac Z collection	Test not run
Embryo Lac Z annotation	Test not run
Adult Lac Z collection	Test not run
Adult Lac Z annotation	Test not run
Pain Test	Balanced operator

Q19: **How do you manage potential time effects? [parent ontology: time effect strategy]**	Controlled time effect: Local control and knockout animals are consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Alternate animal order
CSD:SHIRPA & dysmorphology	Alternate animal order
Grip strength	Alternate animal order
PPI	Alternate animal order
Calorimetry	Alternate animal order
ipGTT	Alternate animal order
ABR collection	Alternate animal order
ABR annotation	Alternate animal order
DEXA	Alternate animal order
X-ray imaging	Alternate animal order
X-ray annotation	Alternate animal order
Slit Lamp	Alternate animal order
Ophthalmoscope	Alternate animal order
Haematology	Alternate animal order
Clinical Chemistry	Alternate animal order
Immunophenotyping	Test not run
Heart Weight	Alternate animal order
Open field	Alternate animal order
Histology collection	Alternate animal order
Histology annotation	Alternate animal order
ECG	Alternate animal order
Echo	Alternate animal order
Plethsmography	Alternate animal order
Insulin Blood Level	Test not run
Embryo Lac Z	Test not run
Adult Lac Z	Test not run
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	Active subject selection strategy
Histology collection	Active subject selection strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

PAGE 3

Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Respondent skipped this question

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*

#5

COMPLETE

Collector: New Email Invitation (Email)
Started: Wednesday, February 19, 2014 7:29:06 AM
Last Modified: Monday, February 24, 2014 8:50:49 AM
Time Spent: Over a day
Email:
IP Address:

PAGE 1

Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @lunenfeld.ca
Q2: Which phenotyping center is data is being submitted for?	TCP The Toronto Centre for Phenogenomics
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	DTCC
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	TCP (id: TCP_001)
Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	
Start Date 12/01/2012	
Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Line mate control: WT animals that are generated from breeding program of HET*HET, or HET*WT crosses that generated the mutant of interest.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Regular control with phenotyping run (same week):Controls are run at regular intervals determined by the availability of knockout animals for a phenotyping experiment and will be phenotyped within the same week as the knockout animals.

Q9: How many controls are run through the main pipeline per batch for a genetic background?	
Male	2
Female	2
Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NCrl
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Externally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Externally managed control: The process by which controls are outsourced and new animals are acquired.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Variable batch: For an allele, animals can be processed either as a single batch or multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Unblinded
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Unblinded
PPI	Unblinded
Calorimetry	Unblinded
ipGTT	Unblinded
ABR collection	Unblinded
ABR annotation	Blinded
DEXA	Unblinded
X-ray imaging	Unblinded

X-ray annotation	Genotype Free blinding
slit lamp collection	Unblinded
slit lamp annotation	Blinded
Ophthalmoscope collection	Unblinded
Ophthalmoscope annotation	Blinded
Haematology	Unblinded
Clinical Blood Chemistry	Unblinded
Insulin Blood Level	Unblinded
Immunophenotyping collection	Unblinded
Immunophenotyping annotation	Genotype Free blinding
Heart weight	Unblinded
Open field	Unblinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Unblinded
Echo	Test not run
Plethysmography	Unblinded
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Unblinded
Embryo Lac Z annotation	Unblinded
Pain Test	Unblinded

Q17: **How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific**

instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the ‘local’ control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Controlled instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Causal randomisation and minimisation instrumentation strategy
Calorimetry	Causal randomisation and minimisation instrumentation strategy
ipGTT	Controlled instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Active randomisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Test not run
Plethsmography	Causal randomisation and minimisation instrumentation strategy
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Controlled instrumentation strategy
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also**

taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Single operator.
Open field	Single operator.
CSD: SHIRPA & dysmorphology	Single operator.
Grip strength	Single operator.
PPI	Single operator.
Calorimetry	Single operator.
ipGTT	Single operator.
ABR collection	Single operator.
ABR annotation	Single operator.
DEXA	Single operator.
X-ray imaging	Single operator.
X-ray annotation	Single operator.
Slit lamp	Single operator.
Opthalmoscope	Single operator.
Hematology	Single operator.
Clinical Chemistry	Single operator.
Immunophenotyping collection	Single operator.
Immunophenotyping analysis	Single operator.
Heart weight	Active operator randomisation with minimisation
Histology collection	Active operator randomisation with minimisation
Histology annotation	Single operator.
ECG	Single operator.
Echo	Test not run
Plethsmography	Single operator.
Insulin Blood Level	Single operator.
Embryo Lac Z collection	Active operator randomisation with minimisation

Embryo Lac Z annotation	Active operator randomisation with minimisation
Adult Lac Z collection	Active operator randomisation with minimisation
Adult Lac Z annotation	Active operator randomisation with minimisation
Pain Test	Single operator.
Q19: How do you manage potential time effects? [parent ontology: time effect strategy]	Uncontrolled time effect: The local control and knockout animals are not consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Casual randomisation within a cage
CSD:SHIRPA & dysmorphology	Casual randomisation within a cage
Grip strength	Casual randomisation within a cage
PPI	Casual randomisation within a cage
Calorimetry	Casual randomisation within a cage
ipGTT	Casual randomisation within a cage
ABR collection	Casual randomisation within a cage
ABR annotation	Casual randomisation within a cage
DEXA	Casual randomisation within a cage
X-ray imaging	Casual randomisation within a cage
X-ray annotation	Casual randomisation within a cage
Slit Lamp	Casual randomisation within a cage
Ophthalmoscope	Casual randomisation within a cage
Haematology	Casual randomisation within a cage
Clinical Chemistry	Casual randomisation within a cage
Immunophenotyping	Casual randomisation within a cage
Heart Weight	Casual randomisation within a cage
Open field	Casual randomisation within a cage
Histology collection	Casual randomisation within a cage
Histology annotation	Casual randomisation within a cage
ECG	Casual randomisation within a cage
Echo	Test not run
Plethsmography	Casual randomisation within a cage
Insulin Blood Level	Casual randomisation within a cage
Embryo Lac Z	Casual randomisation within a cage
Adult Lac Z	Casual randomisation within a cage
Pain Test	Casual randomisation within a cage

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints

ABR	First subject availability strategy
Histology collection	First subject availability strategy

Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	Yes

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	NorCOMM2
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	TCP (id: TCP_001)

Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 12/01/2012

Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	Production colony control: WT animals from a breeding colony on the same genetic background.
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Regular control with phenotyping run (same week):Controls are run at regular intervals determined by the availability of knockout animals for a phenotyping experiment and will be phenotyped within the same week as the knockout animals.

Q29: How many controls are run through the main pipeline per batch for a genetic background?

Male	5
Female	5

Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NCrl
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Multiple batches: For an allele, animals are processed in multiple batches. Where a batch means they are processed on one day.

Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Unblinded
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Unblinded
PPI	Unblinded
Calorimetry	Unblinded
ipGTT	Unblinded
ABR collection	Unblinded
ABR annotation	Blinded
DEXA	Unblinded
X-ray imaging	Unblinded
X-ray annotation	Genotype Free blinding
slit lamp collection	Blinded
slit lamp annotation	Blinded

Ophthalmoscope collection	Unblinded
Ophthalmoscope annotation	Blinded
Haematology	Unblinded
Clinical Blood Chemistry	Unblinded
Insulin Blood Level	Unblinded
Immunophenotyping collection	Unblinded
Immunophenotyping annotation	Genotype Free blinding
Heart weight	Unblinded
Open field	Unblinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Unblinded
Echo	Test not run
Plethysmography	Unblinded
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Unblinded
Embryo Lac Z annotation	Unblinded
Pain Test	Unblinded

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Controlled instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Causal randomisation and minimisation instrumentation strategy
Calorimetry	Causal randomisation and minimisation instrumentation strategy
ipGTT	Controlled instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Active randomisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Test not run
Plethsmography	Causal randomisation and minimisation instrumentation strategy
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Controlled instrumentation strategy
X-ray	Controlled instrumentation strategy

Q38: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects**

will affect the ‘local’ control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Single operator.
Open field	Single operator.
CSD: SHIRPA & dysmorphology	Single operator.
Grip strength	Single operator.
PPI	Single operator.
Calorimetry	Single operator.
ipGTT	Single operator.
ABR collection	Single operator.
ABR annotation	Single operator.
DEXA	Single operator.
X-ray imaging	Single operator.
X-ray annotation	Single operator.
Slit lamp	Single operator.
Opthalmoscope	Single operator.
Hematology	Single operator.
Clinical Chemistry	Single operator.
Immunophenotyping collection	Single operator.
Immunophenotyping analysis	Single operator.
Heart weight	Active operator randomisation with minimisation
Histology collection	Active operator randomisation with minimisation
Histology annotation	Single operator.
ECG	Single operator.
Echo	Test not run
Plethsmography	Single operator.
Insulin Blood Level	Single operator.
Embryo Lac Z collection	Active operator randomisation with minimisation
Embryo Lac Z annotation	Active operator randomisation with minimisation

Adult Lac Z collection	Active operator randomisation with minimisation
Adult Lac Z annotation	Active operator randomisation with minimisation
Pain Test	Single operator.
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	Uncontrolled time effect: The local control and knockout animals are not consistently processed on the same day for a procedure.

Q40: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Casual randomisation within a cage
CSD:SHIRPA & dysmorphology	Casual randomisation within a cage
Grip strength	Casual randomisation within a cage
PPI	Casual randomisation within a cage
Calorimetry	Casual randomisation within a cage
ipGTT	Casual randomisation within a cage
ABR collection	Casual randomisation within a cage
ABR annotation	Casual randomisation within a cage
DEXA	Casual randomisation within a cage
X-ray imaging	Casual randomisation within a cage
X-ray annotation	Casual randomisation within a cage
Slit Lamp	Casual randomisation within a cage
Ophthalmoscope	Casual randomisation within a cage
Haematology	Casual randomisation within a cage
Clinical Chemistry	Casual randomisation within a cage
Immunophenotyping	Casual randomisation within a cage
Heart weight	Casual randomisation within a cage
Open field	Casual randomisation within a cage
Histology collection	Casual randomisation within a cage
Histology annotation	Casual randomisation within a cage
ECG	Casual randomisation within a cage
Echo	Test not run
Plethsmography	Casual randomisation within a cage
Insulin Blood Level	Casual randomisation within a cage
Embryo Lac Z	Casual randomisation within a cage
Adult Lac Z	Casual randomisation within a cage
Pain Test	Casual randomisation within a cage

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints

ABR	First subject availability strategy
Histology collection	First subject availability strategy

#6

COMPLETE

Collector: UCD chase (Email)
Started: Monday, March 10, 2014 8:19:36 AM
Last Modified: Tuesday, March 11, 2014 2:44:27 AM
Time Spent: 18:24:51
Email:
IP Address:

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Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @chori.org
Q2: Which phenotyping center is data is being submitted for?	UCD University of California, Davis
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	DTCC, UCD-KOMP, DTCC-Legacy
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	UCD Pipeline (id: UCD_001)
Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	
Start Date 04/30/2011	
Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Pooled genetic control: WT animals from HET*HET or HET*WT breeding that generate mutant animals. This can be from matings that generate a variety of knockout alleles all of which will be on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Parallel control with knockout: The process of running control phenotyping concurrently (same day) with knockouts.
Q9: How many controls are run through the main pipeline per batch for a genetic background?	
Male	5
Female	5

Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NCrl
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Multiple batches: For an allele, animals are processed in multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Blinded
CSD:SHIRPA & dysmorphology	Blinded
Grip strength	Blinded
PPI	Blinded
Calorimetry	Blinded
ipGTT	Blinded
ABR collection	Blinded
ABR annotation	Blinded
DEXA	Blinded
X-ray imaging	Unblinded
X-ray annotation	Unblinded
slit lamp collection	Blinded
slit lamp annotation	Blinded

Ophthalmoscope collection	Blinded
Ophthalmoscope annotation	Blinded
Haematology	Blinded
Clinical Blood Chemistry	Blinded
Insulin Blood Level	Blinded
Immunophenotyping collection	Test not run
Immunophenotyping annotation	Test not run
Heart weight	Blinded
Open field	Blinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Blinded
Echo	Test not run
Plethysmography	Test not run
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Unblinded
Embryo Lac Z annotation	Unblinded
Pain Test	Test not run

Q17: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Controlled instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Active randomisation and minimisation instrumentation strategy
PPI	Active randomisation and minimisation instrumentation strategy
Calorimetry	Active randomisation and minimisation instrumentation strategy
ipGTT	Active randomisation and minimisation instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Test not run
Open field	Active randomisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Test not run
Plethsmography	Test not run
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are**

processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Minimized operator
Open field	Active operator randomisation with minimisation
CSD: SHIRPA & dysmorphology	Active operator randomisation with minimisation
Grip strength	Active operator randomisation with minimisation
PPI	Active operator randomisation with minimisation
Calorimetry	Active operator randomisation with minimisation
ipGTT	Active operator randomisation with minimisation
ABR collection	Active operator randomisation with minimisation
ABR annotation	Active operator randomisation with minimisation
DEXA	Active operator randomisation with minimisation
X-ray imaging	Active operator randomisation with minimisation
X-ray annotation	Single operator.
Slit lamp	Single operator.
Opthalmoscope	Single operator.
Hematology	Active operator randomisation with minimisation
Clinical Chemistry	Active operator randomisation with minimisation
Immunophenotyping collection	Test not run
Immunophenotyping analysis	Test not run
Heart weight	Active operator randomisation with minimisation
Histology collection	Active operator randomisation with minimisation
Histology annotation	Single operator.
ECG	Active operator randomisation with minimisation

Echo	Active operator randomisation with minimisation
Plethsmography	Test not run
Insulin Blood Level	Single operator.
Embryo Lac Z collection	Active operator randomisation with minimisation
Embryo Lac Z annotation	Single operator.
Adult Lac Z collection	Active operator randomisation with minimisation
Adult Lac Z annotation	Active operator randomisation with minimisation
Pain Test	Test not run
Q19: How do you manage potential time effects? [parent ontology: time effect strategy]	Controlled time effect: Local control and knockout animals are consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Cage casual randomisation
CSD:SHIRPA & dysmorphology	Cage casual randomisation
Grip strength	Cage casual randomisation
PPI	Cage casual randomisation
Calorimetry	Cage casual randomisation
ipGTT	Cage casual randomisation
ABR collection	Cage casual randomisation
ABR annotation	Cage casual randomisation
DEXA	Cage casual randomisation
X-ray imaging	Cage casual randomisation
X-ray annotation	Cage casual randomisation
Slit Lamp	Cage casual randomisation
Ophthalmoscope	Cage casual randomisation
Haematology	Cage casual randomisation
Clinical Chemistry	Cage casual randomisation
Immunophenotyping	Test not run
Heart Weight	Cage casual randomisation
Open field	Cage casual randomisation
Histology collection	Cage casual randomisation
Histology annotation	Cage casual randomisation
ECG	Cage casual randomisation
Echo	Test not run
Plethsmography	Test not run
Insulin Blood Level	Cage casual randomisation
Embryo Lac Z	Cage casual randomisation
Adult Lac Z	Cage casual randomisation
Pain Test	Cage casual randomisation

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	Active subject selection strategy
Histology collection	First subject availability strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Respondent skipped this question

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*

#7

COMPLETE

Collector: New Link (Web Link)
Started: Tuesday, February 11, 2014 4:44:36 PM
Last Modified: Tuesday, September 23, 2014 7:22:44 AM
Time Spent: Over a month
IP Address: 134.160.64.31

PAGE 1

Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @brc.riken.jp
Q2: Which phenotyping center is data is being submitted for?	RBRC RIKEN Tsukuba Institute, BioResource Center
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	RIKEN BRC
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	IMPC Pipeline (id: IMPC_001)

Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 01/01/2012

Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Line mate control: WT animals that are generated from breeding program of HET*HET, or HET*WT crosses that generated the mutant of interest. , Production colony control: WT animals from a breeding colony on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Weekly control: A process where controls are run weekly

Q9: How many controls are run through the main pipeline per batch for a genetic background?	
Male	7
Female	7
Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NTac
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Single batch: For an allele, animals are processed in one batch for both sexes. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Blinded
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Unblinded
PPI	Blinded
Calorimetry	Blinded
ipGTT	Allele Free blinding
ABR collection	Allele Free blinding
ABR annotation	Allele Free blinding
DEXA	Blinded
X-ray imaging	Unblinded

X-ray annotation	Unblinded
slit lamp collection	Allele Free blinding
slit lamp annotation	Allele Free blinding
Ophthalmoscope collection	Allele Free blinding
Ophthalmoscope annotation	Allele Free blinding
Haematology	Blinded
Clinical Blood Chemistry	Blinded
Insulin Blood Level	Test not run
Immunophenotyping collection	Allele Free blinding
Immunophenotyping annotation	Allele Free blinding
Heart weight	Allele Free blinding
Open field	Blinded
Histology collection	Allele Free blinding
Histology annotation	Allele Free blinding
ECG	Allele Free blinding
Echo	Test not run
Plethysmography	Allele Free blinding
Adult Lac Z collection	Allele Free blinding
Adult Lac Z annotation	Allele Free blinding
Embryo Lac Z collection	Allele Free blinding
Embryo Lac Z annotation	Allele Free blinding
Pain Test	Test not run

Q17: **How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific**

instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the ‘local’ control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Causal randomisation instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Causal randomisation and minimisation instrumentation strategy
Calorimetry	Causal randomisation instrumentation strategy
ipGTT	Causal randomisation instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Causal randomisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Test not run
Plethsmography	Causal randomisation and minimisation instrumentation strategy
Histology	Controlled instrumentation strategy
Insulin Blood Level	Test not run
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the ‘local’ control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the ‘local’ control (controls collected**

at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.

Body Weight	Minimized operator
Open field	Balanced operator with minimisation
CSD: SHIRPA & dysmorphology	Balanced operator with minimisation
Grip strength	Balanced operator with minimisation
PPI	Balanced operator with minimisation
Calorimetry	Balanced operator with minimisation
ipGTT	Minimized operator
ABR collection	Single operator.
ABR annotation	Single operator.
DEXA	Single operator.
X-ray imaging	Single operator.
X-ray annotation	Balanced operator with minimisation
Slit lamp	Minimized operator
Opthalmoscope	Minimized operator
Hematology	Balanced operator with minimisation
Clinical Chemistry	Balanced operator with minimisation
Immunophenotyping collection	Single operator.
Immunophenotyping analysis	Single operator.
Heart weight	Minimized operator
Histology collection	Balanced operator with minimisation
Histology annotation	Balanced operator with minimisation
ECG	Single operator.
Echo	Test not run
Plethsmography	Single operator.
Insulin Blood Level	Test not run
Embryo Lac Z collection	Minimized operator
Embryo Lac Z annotation	Minimized operator

Adult Lac Z collection	Minimized operator
Adult Lac Z annotation	Minimized operator
Pain Test	Test not run
Q19: How do you manage potential time effects? [parent ontology: time effect strategy]	Uncontrolled time effect: The local control and knockout animals are not consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Cage casual randomisation
CSD:SHIRPA & dysmorphology	Cage casual randomisation
Grip strength	Cage casual randomisation
PPI	Cage casual randomisation
Calorimetry	Cage casual randomisation
ipGTT	Cage casual randomisation
ABR collection	Cage casual randomisation
ABR annotation	Cage casual randomisation
DEXA	Cage casual randomisation
X-ray imaging	Cage casual randomisation
X-ray annotation	Cage casual randomisation
Slit Lamp	Alternate animal order
Ophthalmoscope	Alternate animal order
Haematology	Cage casual randomisation
Clinical Chemistry	Cage casual randomisation
Immunophenotyping	Cage casual randomisation
Heart Weight	Cage casual randomisation
Open field	Cage casual randomisation
Histology collection	Cage casual randomisation
Histology annotation	Cage casual randomisation
ECG	Cage casual randomisation
Echo	Test not run
Plethsmography	Cage casual randomisation
Insulin Blood Level	Test not run
Embryo Lac Z	Alternate animal order
Adult Lac Z	Alternate animal order
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints

ABR	First subject availability strategy
Histology collection	First subject availability strategy

Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	Yes

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	RIKEN BRC
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	Other, Other (please specify) JMC Pipeline

Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 04/01/2008

Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	Line mate control: WT animals that are generated from breeding program of HET*HET, or HET*WT crosses that generated the mutant of interest.
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Weekly control: A process where controls are run weekly

Q29: How many controls are run through the main pipeline per batch for a genetic background?

Male	7
Female	7

Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	Other, Other (please specify) C57BL/6JJcl

Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Single batch: For an allele, animals are processed in one batch for both sexes. Where a batch means they are processed on one day.

Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Test not run
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Test not run
PPI	Blinded
Calorimetry	Test not run
ipGTT	Blinded
ABR collection	Unblinded
ABR annotation	Unblinded
DEXA	Allele Free blinding
X-ray imaging	Test not run
X-ray annotation	Test not run
slit lamp collection	Test not run
slit lamp annotation	Test not run
Ophthalmoscope collection	Allele Free blinding
Ophthalmoscope annotation	Allele Free blinding

Haematology	Blinded
Clinical Blood Chemistry	Blinded
Insulin Blood Level	Test not run
Immunophenotyping collection	Test not run
Immunophenotyping annotation	Test not run
Heart weight	Test not run
Open field	Blinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Allele Free blinding
Echo	Test not run
Plethysmography	Test not run
Adult Lac Z collection	Test not run
Adult Lac Z annotation	Test not run
Embryo Lac Z collection	Test not run
Embryo Lac Z annotation	Test not run
Pain Test	Blinded

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Test not run
Heart Weight	Controlled instrumentation strategy

Grip strength	Test not run
PPI	Causal randomisation and minimisation instrumentation strategy
Calorimetry	Test not run
ipGTT	Causal randomisation instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Causal randomisation instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Test not run
Plethsmography	Causal randomisation and minimisation instrumentation strategy
Histology	Controlled instrumentation strategy
Insulin Blood Level	Test not run
Embryo Lac Z	Test not run
Adult Lac Z	Test not run
Pain Test	Controlled instrumentation strategy
X-ray	Test not run

Q38: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.**

Body Weight	Test not run
Open field	Balanced operator with minimisation
CSD: SHIRPA & dysmorphology	Balanced operator with minimisation
Grip strength	Test not run
PPI	Balanced operator with minimisation
Calorimetry	Test not run
ipGTT	Minimized operator
ABR collection	Single operator.
ABR annotation	Single operator.
DEXA	Single operator.
X-ray imaging	Test not run
X-ray annotation	Test not run
Slit lamp	Test not run
Opthalmoscope	Minimized operator
Hematology	Balanced operator with minimisation
Clinical Chemistry	Balanced operator with minimisation
Immunophenotyping collection	Single operator.
Immunophenotyping analysis	Single operator.
Heart weight	Minimized operator
Histology collection	Balanced operator with minimisation
Histology annotation	Balanced operator with minimisation
ECG	Single operator.
Echo	Test not run
Plethsmography	Single operator.
Insulin Blood Level	Test not run
Embryo Lac Z collection	Test not run
Embryo Lac Z annotation	Test not run
Adult Lac Z collection	Test not run
Adult Lac Z annotation	Test not run
Pain Test	Balanced operator with minimisation
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	Uncontrolled time effect: The local control and knockout animals are not consistently processed on the same day for a procedure.

Q40: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Test not run
CSD:SHIRPA & dysmorphology	Alternate animal order
Grip strength	Test not run
PPI	Cage casual randomisation
Calorimetry	Test not run
ipGTT	Cage casual randomisation
ABR collection	Cage casual randomisation
ABR annotation	Cage casual randomisation
DEXA	Cage casual randomisation
X-ray imaging	Test not run
X-ray annotation	Test not run
Slit Lamp	Alternate animal order
Ophthalmoscope	Alternate animal order
Haematology	Cage casual randomisation
Clinical Chemistry	Cage casual randomisation
Immunophenotyping	Cage casual randomisation
Heart weight	Cage casual randomisation
Open field	Cage casual randomisation
Histology collection	Cage casual randomisation
Histology annotation	Cage casual randomisation
ECG	Cage casual randomisation
Echo	Test not run
Plethsmography	Cage casual randomisation
Insulin Blood Level	Test not run
Embryo Lac Z	Test not run
Adult Lac Z	Test not run
Pain Test	Cage casual randomisation

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints

ABR	First subject availability strategy
Histology collection	First subject availability strategy

#8

COMPLETE

Collector: New Email Invitation (Email)
Started: Tuesday, February 25, 2014 1:53:15 AM
Last Modified: Tuesday, September 23, 2014 7:24:20 AM
Time Spent: Over a month
Email:
IP Address:

PAGE 1

Q1: What are your contact details?	
Name	XXXXX
Email	XXXXX @sanger.ac.uk
Q2: Which phenotyping center is data is being submitted for?	WTSI Wellcome Trust Sanger Institute
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	MGP
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	MGP Pipeline (id: M-G-P_001), Other (please specify) MGP Select (id: MGP_001)

Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 12/12/2011

Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*

Q7: Control design - what controls are run? [ontology parent: control design]	Littermate control: WT animals that are true siblings and hence were generated from a HET*HET, or a HET*WT cross that generated the mutant of interest. , Line mate control: WT animals that are generated from breeding program of HET*HET, or HET*WT crosses that generated the mutant of interest. , Pooled genetic control: WT animals from HET*HET or HET*WT breeding that generate mutant animals. This can be from matings that generate a variety of knockout alleles all of which will be on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Weekly control: A process where controls are run weekly

Q9: How many controls are run through the main pipeline per batch for a genetic background?

Male	7
Female	7

Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NTac
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

PAGE 2

Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Externally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Variable batch: For an allele, animals can be processed either as a single batch or multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician

completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Unblinded
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Unblinded
PPI	Test not run
Calorimetry	Unblinded
ipGTT	Unblinded
ABR collection	Unblinded
ABR annotation	Unblinded
DEXA	Unblinded
X-ray imaging	Unblinded
X-ray annotation	Unblinded
slit lamp collection	Unblinded
slit lamp annotation	Unblinded
Ophthalmoscope collection	Unblinded
Ophthalmoscope annotation	Unblinded
Haematology	Blinded
Clinical Blood Chemistry	Blinded
Insulin Blood Level	Blinded
Immunophenotyping collection	Unblinded
Immunophenotyping annotation	Blinded
Heart weight	Unblinded
Open field	Test not run
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Test not run
Echo	Test not run
Plethysmography	Test not run
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Unblinded

Embryo Lac Z annotation	Unblinded
Pain Test	Test not run

Q17: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Causal randomisation and minimisation instrumentation strategy
Heart Weight	Causal randomisation and minimisation instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Test not run
Calorimetry	Controlled instrumentation strategy
ipGTT	Causal randomisation and minimisation instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Test not run
ECG	Test not run
Echo	Test not run

Plethsmography	Test not run
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Controlled instrumentation strategy
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.**

Body Weight	Minimized operator
Open field	Test not run
CSD: SHIRPA & dysmorphology	Minimized operator
Grip strength	Minimized operator
PPI	Test not run
Calorimetry	Minimized operator
ipGTT	Minimized operator
ABR collection	Minimized operator
ABR annotation	Minimized operator
DEXA	Minimized operator
X-ray imaging	Minimized operator
X-ray annotation	Minimized operator
Slit lamp	Minimized operator
Opthalmoscope	Minimized operator
Hematology	Minimized operator
Clinical Chemistry	Minimized operator

Immunophenotyping collection	Minimized operator
Immunophenotyping analysis	Minimized operator
Heart weight	Minimized operator
Histology collection	Minimized operator
Histology annotation	Minimized operator
ECG	Test not run
Echo	Test not run
Plethsmography	Test not run
Insulin Blood Level	Single operator.
Embryo Lac Z collection	Minimized operator
Embryo Lac Z annotation	Minimized operator
Adult Lac Z collection	Minimized operator
Adult Lac Z annotation	Minimized operator
Pain Test	Test not run
Q19: **How do you manage potential time effects? [parent ontology: time effect strategy]**	Uncontrolled time effect: The local control and knockout animals are not consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Cage casual randomisation
CSD:SHIRPA & dysmorphology	Cage casual randomisation
Grip strength	Cage casual randomisation
PPI	Test not run
Calorimetry	Cage casual randomisation
ipGTT	Cage casual randomisation
ABR collection	Cage casual randomisation
ABR annotation	Cage casual randomisation
DEXA	Cage casual randomisation
X-ray imaging	Cage casual randomisation
X-ray annotation	Cage casual randomisation
Slit Lamp	Cage casual randomisation
Ophthalmoscope	Cage casual randomisation
Haematology	Cage casual randomisation
Clinical Chemistry	Cage casual randomisation
Immunophenotyping	Cage casual randomisation
Heart Weight	Cage casual randomisation
Open field	Test not run
Histology collection	Cage casual randomisation
Histology annotation	Cage casual randomisation
ECG	Test not run
Echo	Test not run
Plethsmography	Test not run
Insulin Blood Level	Cage casual randomisation
Embryo Lac Z	Cage casual randomisation
Adult Lac Z	Cage casual randomisation
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	First subject availability strategy
Histology collection	First subject availability strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

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Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Respondent skipped this question

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*

#9

COMPLETE

Collector: New Email Invitation (Email)
Started: Wednesday, February 19, 2014 7:03:00 AM **Last Modified:** Tuesday, September 23, 2014 7:26:09 AM
Time Spent: Over a month
Email:
IP Address:

PAGE 1

Q1: What are your contact details?

Name	XXXXX
Email	XXXXX @helmholtz-muenchen.de

Q2: Which phenotyping center is data is being submitted for?	GMC Helmholtz Zentrum München
Q3: What is/are the name(s) of your phenotyping project(s) the following responses refer to?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	Helmholtz GMC
Q4: What is/are the name(s) of your phenotyping pipelines(s) the following responses refer to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	GMC Pipeline (id: GMC_001), Other (please specify) German Mouse Clinic (id: HMGU_001)

Q5: Please specify the date from which this information applies.This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.

Start Date 01/01/2011

Q6: If known, please specify the end date for which this information applies.	*Respondent skipped this question*
Q7: Control design - what controls are run? [ontology parent: control design]	Production colony control: WT animals from a breeding colony on the same genetic background.
Q8: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	Parallel control with knockout: The process of running control phenotyping concurrently (same day) with knockouts.

Q9: How many controls are run through the main pipeline per batch for a genetic background?

Male	7
Female	7

Q10: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	C57BL/6NTac
Q11: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	Yes

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Q12: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q13: Where are the core colony obtained from? [ontology parent: core colony provider]	Internally sourced
Q14: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	Control breeding: Actively refresh core nucleus/pedigree at a set generational point e.g. by 10 generation and then cryopreserve.
Q15: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	Variable batch: For an allele, animals can be processed either as a single batch or multiple batches. Where a batch means they are processed on one day.

Q16: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.

Body Weight	Unblinded
CSD:SHIRPA & dysmorphology	Unblinded
Grip strength	Unblinded
PPI	Unblinded
Calorimetry	Unblinded
ipGTT	Unblinded
ABR collection	Unblinded
ABR annotation	Unblinded
DEXA	Unblinded
X-ray imaging	Unblinded
X-ray annotation	Unblinded
slit lamp collection	Unblinded
slit lamp annotation	Unblinded

Ophthalmoscope collection	Unblinded
Ophthalmoscope annotation	Unblinded
Haematology	Unblinded
Clinical Blood Chemistry	Unblinded
Insulin Blood Level	Unblinded
Immunophenotyping collection	Unblinded
Immunophenotyping annotation	Unblinded
Heart weight	Unblinded
Open field	Unblinded
Histology collection	Unblinded
Histology annotation	Unblinded
ECG	Unblinded
Echo	Unblinded
Plethysmography	Test not run
Adult Lac Z collection	Unblinded
Adult Lac Z annotation	Unblinded
Embryo Lac Z collection	Test not run
Embryo Lac Z annotation	Test not run
Pain Test	Test not run

Q17: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.

Body Weight	Controlled instrumentation strategy
Heart Weight	Controlled instrumentation strategy
Grip strength	Controlled instrumentation strategy
PPI	Controlled instrumentation strategy
Calorimetry	Controlled instrumentation strategy
ipGTT	Controlled instrumentation strategy
ABR	Controlled instrumentation strategy
DEXA	Controlled instrumentation strategy
Slit Lamp	Controlled instrumentation strategy
Ophthalmoscope	Controlled instrumentation strategy
Haematology	Controlled instrumentation strategy
Clinical Chemistry	Controlled instrumentation strategy
Immunophenotyping	Controlled instrumentation strategy
Open field	Controlled instrumentation strategy
ECG	Controlled instrumentation strategy
Echo	Controlled instrumentation strategy
Plethsmography	Test not run
Histology	Controlled instrumentation strategy
Insulin Blood Level	Controlled instrumentation strategy
Embryo Lac Z	Test not run
Adult Lac Z	Controlled instrumentation strategy
Pain Test	Test not run
X-ray	Controlled instrumentation strategy

Q18: **How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.**

Body Weight	Single operator.
Open field	Single operator.
CSD: SHIRPA & dysmorphology	Single operator.
Grip strength	Single operator.
PPI	Single operator.
Calorimetry	Single operator.
ipGTT	Balanced operator with minimisation
ABR collection	Single operator.
ABR annotation	Single operator.
DEXA	Single operator.
X-ray imaging	Single operator.
X-ray annotation	Single operator.
Slit lamp	Single operator.
Opthalmoscope	Single operator.
Hematology	Single operator.
Clinical Chemistry	Single operator.
Immunophenotyping collection	Balanced operator with minimisation
Immunophenotyping analysis	Single operator.
Heart weight	Single operator.
Histology collection	Single operator.
Histology annotation	Single operator.
ECG	Minimized operator
Echo	Minimized operator
Plethsmography	Test not run
Insulin Blood Level	Single operator.
Embryo Lac Z collection	Test not run
Embryo Lac Z annotation	Test not run
Adult Lac Z collection	Single operator.
Adult Lac Z annotation	Single operator.
Pain Test	Test not run
Q19: How do you manage potential time effects? [parent ontology: time effect strategy]	Controlled time effect: Local control and knockout animals are consistently processed on the same day for a procedure.

Q20: How do you manage potential order effects?[parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.

Body Weight	Cage casual randomisation
CSD:SHIRPA & dysmorphology	Cage casual randomisation
Grip strength	Cage casual randomisation
PPI	Cage casual randomisation
Calorimetry	Cage casual randomisation
ipGTT	Cage casual randomisation
ABR collection	Cage casual randomisation
ABR annotation	Cage casual randomisation
DEXA	Cage casual randomisation
X-ray imaging	Cage casual randomisation
X-ray annotation	Cage casual randomisation
Slit Lamp	Cage casual randomisation
Ophthalmoscope	Cage casual randomisation
Haematology	Cage casual randomisation
Clinical Chemistry	Cage casual randomisation
Immunophenotyping	Cage casual randomisation
Heart Weight	Cage casual randomisation
Open field	Cage casual randomisation
Histology collection	Cage casual randomisation
Histology annotation	Cage casual randomisation
ECG	Cage casual randomisation
Echo	Cage casual randomisation
Plethsmography	Test not run
Insulin Blood Level	Cage casual randomisation
Embryo Lac Z	Test not run
Adult Lac Z	Cage casual randomisation
Pain Test	Test not run

Q21: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	
ABR	First subject availability strategy
Histology collection	First subject availability strategy
Q22: Are there other projects or pipelines for which the expeirmental work flow answers are different?	No

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Q23: What is the name(s) of the project the following responses relate too?If you have more than one project and the answers depend on the project then you will later have an option to enter a second project and answers for that project.	*Respondent skipped this question*
Q24: What is the name of the pipeline the following responses relate to?If you have more than one pipeline and the answers depend on the pipeline then you will later have an option to enter results for a second pipeline.	*Respondent skipped this question*
Q25: From what date did the answers you are going to provide take effect?This information will be used to associate this data with a mouse line from a particular insitutute, project and pipeline.	*Respondent skipped this question*
Q26: If known, please specify the end date for which this information applies	*Respondent skipped this question*
Q27: Control design - what controls are run? [ontology parent: control design]	*Respondent skipped this question*
Q28: How often are controls run for a genetic background per gender? [ontology parent: control phenotyping design]	*Respondent skipped this question*
Q29: How many controls are run through the main pipeline per batch for a genetic background?	*Respondent skipped this question*
Q30: What genetic background are you using as controls? [ontology parent: control mouse genetic background]	*Respondent skipped this question*
Q31: Are these control animals produced at the same facility as the knockout animals? [ontology parent: control mouse production location]	*Respondent skipped this question*

Q32: IF you have answered [Q6], where are the animals produced?	*Respondent skipped this question*
Q33: Where are the core colony obtained from? [ontology parent: core colony provider]	*Respondent skipped this question*
Q34: How are core breeding stock managed to avoid genetic drift? [ontology parent: control stock management]	*Respondent skipped this question*
Q35: For mice knockout lines are all animals processed as one batch or multiple batches? [ontology parent: knockout phenotyping design]	*Respondent skipped this question*
Q36: What is the blinding strategy? [parent ontology: blinding strategy]Unblinded: The technician completing the procedure can see the genotype and allele information.Blinded: The technician completing the procedure does not know the genotype nor the allele information.Genotype Free blinding: The technician completing the procedure cannot see the genotype information but will know the allele information.Allele Free blinding: The technician completing the procedure cannot see the allele information but will know the genotype.	*Respondent skipped this question*

Q37: How do you manage potential instrumentation effects?[parent ontology: instrumentation bias management]Controlled instrumentation strategy: Instrument effects will not be an issue as it is standardised i.e. the same is used for both types of animals.Active randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number).Active randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using a randomisation technique (e.g. odd or even last digit of sample number). Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Causal randomisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals.Causal randomisation and minimisation instrumentation strategy: Instrument differences are managed by randomly assigning the animals, processed within a day, to the different instruments using an operator to randomly place the animals. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.Minimisation instrumentation strategy: Steps are taken to minimise the potential effect of differences in instrumentation e.g. calibration.Balance instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument.Balance and minimisation instrumentation strategy: Instrument effects will affect the 'local' control and knockout animals equally as equal numbers of the control and knockout animals are processed by a specific instrument. Steps are also taken to minimise the potential effect of differences in instrumentation e.g. calibration.	*Respondent skipped this question*

Q38: How do you manage potential operator effects?[parent ontology: operator effect control strategy] Single operator: Operator effects will not be an issue as it is standardised i.e. for a procedure the same operator completes the procedure for an allele. Active operator randomisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Active operator randomisation with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as the control and knockout animals are randomly assigned to an operator using a randomisation technique (e.g. alternate allocation). Steps are also taken to minimise the potential differences in the effector by training and monitoring of operator. Balanced operator: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Balanced operator with minimisation: Operator effects will affect the 'local' control (controls collected at same time) and knockout animals equally as equal numbers of the control and knockout animals are processed by an operator for a process. Steps are also taken to minimise the potential differences by training and monitoring. Minimized operator: Steps are taken to minimise the potential differences by training and monitoring.	*Respondent skipped this question*
Q39: How do you manage potential time effects? [parent ontology: time effect strategy]	*Respondent skipped this question*
Q40: How do you manage potential order effects? [parent ontology: order effect control strategy] Alternate animal order: Within a batch, alternate wildtype and knockout are processed. Cage active randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is actively randomised by the use of a randomisation technique (e.g. alternate cage or odd or even last digit of cage number). Cage casual randomisation: On a day, the order of the cage, where a cage houses animals of one genotype or one animal, is casually randomised by the operator selecting the cage randomly from those being processed in the day. Casual randomisation within a cage: On a day, the order of mice from a cage, where a cage house a mixture of genotypes for an allele, is casually randomised for genotype.	*Respondent skipped this question*

Q41: Where a test is completed on a subset of the animals, what is the subject selection strategy? [parent ontology: subject selection strategy]First subject availability strategy: First animals through the pipeline for an allele Active subject selection strategy: The mice are selected using a randomisation techniquePassive subject selection strategy: The mice are selected via timetabling constraints	*Respondent skipped this question*