# MicroCT E18.5 IMPC_EMA_001

## Purpose

To assess morphological defects in E18.5 embryos from lethal or subviable strains with MicroCT.

## Experimental Design

- Set up timed matings with heterozygous mice
- Day 0 is defined as the midpoint of the prior dark cycle following the identification of a copulation plug.
- Collect embryos at E18.5 with 3 minimum homozygous and 1 littermate control
- Ensure embryos are bleed as much as possible.
- Reconstruct the scans according to manufacturer's instructions.

## Procedure

1. **Set up timed mating with heterozygous animals. Dissect and collect >=3 homozygote embryos.**
2. **Process the embryos using the centre's staining and embedding protocol . Centre-specific methods are recorded within a document**
3. **Scan and generate reconstructions of embryos.**

## Notes

Embryos may be processed for Histopathology.

## Parameters and Metadata

## Embryo reconstruction IMPC_EMA_001_001 | v1.1

seriesMediaParameter

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

**Increments:** Minimum 1

-------------------------------------------------------------------------------------

## Experimenter ID IMPC_EMA_002_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

---------------------------------------------------------------------------------

## Equipment ID IMPC_EMA_003_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

---------------------------------------------------------------------------------

## Equipment Manufacturer IMPC_EMA_004_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

---------------------------------------------------------------------------------

## Equipment Model IMPC_EMA_005_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

---------------------------------------------------------------------------------

## Equipment Version IMPC_EMA_006_001 | v1.0

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

---

## Image Pixel Size IMPC_EMA_007_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

**Unit Measured:** μm

---

## E18.5 MicroCT Preparation protocol IMPC_EMA_008_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

---

## Date equipment last calibrated IMPC_EMA_009_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** false          **Is Annotated:** false

---

## Date of Sacrifice IMPC_EMA_010_001 | v1.0

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

------------------------------------------------------------

## Date Preparation Finished IMPC_EMA_011_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

------------------------------------------------------------

## Date of Scan IMPC_EMA_012_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

------------------------------------------------------------

## Source Voltage IMPC_EMA_013_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

**Unit Measured:** kV

------------------------------------------------------------

## Source Current IMPC_EMA_014_001 | v1.1

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

**Unit Measured:** uA

----------------------------------------------------------------------------------------------

# Object to Source IMPC_EMA_015_001 | v1.0

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

**Unit Measured:** mm

----------------------------------------------------------------------------------------------

# Camera to Source IMPC_EMA_016_001 | v1.1

procedureMetadata

**Req. Analysis:** false          **Req. Upload:** true          **Is Annotated:** false

**Unit Measured:** mm

----------------------------------------------------------------------------------------------

# Screenshots IMPC_EMA_017_001 | v1.1

seriesMediaParameter

**Req. Analysis:** false          **Req. Upload:** false          **Is Annotated:** false

**Increments:** Minimum 1

----------------------------------------------------------------------------------------