Manuscript Title

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✉ — Correspondence possible via [GitHub Issues](https://github.com/habi/InMiceMethodPaper/issues)

## Abstract

## Background & Summary

We scanned a *lot* of different mouse strains and so-called hybrids, both male and female. One scan for each strain, each hybrid and each sex gives already 90 samples.

## Methods

### Sample preparation

* Mice were euthanized
* Mice were decapitated
* Mouse skulls were stored in EMA
* Separated into 4 batches of approximately 110 animals, labeled as Bbatch\_number*animal numberA and Bbatch\_number*animal numberB.

### Tomographic imaging

* SkyScan 1272 with sample changer
* *All* log files available here: https://github.unibe.ch/david-haberthuer/InMice/tree/main/logfiles
* Report scaning settings and reconstruction parameter data according to[1](#ref-AFlzOIJq)
* Use a notebook to pull *all* the relevant data to report directly into the text here, or into a file that is loaded by manubot.

### QA

* Use a collection of logfile wrangling code[2](#ref-H6XCd3xt) to go through *all* the log files of all the aquired scans
  + Use this to surface issues related to aquisition (wrong setting) and reconstruction
* Look at average and maximal brightness of (a subset of) all the projection images aquired
  + Use this to surface issues related to acquisiton, e.g. sometimes the x-ray source inadvertedly shut down, or the counts were too low on the camera, etc.

### Image processing

* *Jupyter*[3](#ref-pQ6Wbz73) notebooks, available here: https://github.unibe.ch/david-haberthuer/InMice/, for reproducible research.
  + Ingest complete, uncropped reconstructions with dask[4](#ref-XiaoRBMn)/
  + Crop, based on axial MIPs
  + Save cropped data out as .zarr-files, ready to be loaded with n5-ij[5](#ref-fYJW62aO) in Fiji[6](#ref-Fkmz2cmo)
  + Save in other formats, to either use 3D Slicer[7](#ref-2wCiF0bw)/,[**doidoi:10.1016/j.mri.2012.05.001?**](#ref-doidoi:10.1016/j.mri.2012.05.001) or Dragonfly[8](#ref-UclosTg9)/

## Data Records

## Technical Validation

## Usage Notes

## Code Availability

* [Jupyter notebooks](https://github.unibe.ch/david-haberthuer/InMice)

## References

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## Author Contributions

[Contributor Roles Taxonomy (CRediT)](https://credit.niso.org/), as defined in[9](#ref-11ofsO2hq):

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* [Data curation](https://credit.niso.org/contributor-roles/data-curation/): David Haberthür, Larisa Petra Kaija
* [Formal analysis](https://credit.niso.org/contributor-roles/formal-analysis/): David Haberthür, Bernhard Voelkl
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## Competing Interests

| Author | Competing Interests | Last Reviewed |
| --- | --- | --- |
| David Haberthür | None | 2025-06-27 |
| Pui Ching Chu | None | 2025-06-27 |
| Larisa Petra Kaija | None |  |
| Bernhard Voelkl | None | 2025-08-19 |
| Hanno Würbel | None | 2025-08-19 |

## Acknowledgements

We are grateful to the [Microscopy Imaging Center](https://mic.unibe.ch/) of the University of Bern for their infrastructural support. We also thank the manubot project[10](#ref-YuJbg3zO) for facilitating collaborative writing of this manuscript.