Proposal title

# Aims and hypothesis:

*A description of the research questions being tackled.*

*A few paragraphs should describe prior art.*

*Here, some of the questions and goals of this project should be listed as a bullet list.*

* *Aim/hypothesis 1*
* *Aim/hypothesis 2*
* *Aim/hypothesis 3*

# Experimental design and methodology:

## Stimuli/task design:

*Here you should provide a detailed description of the experiment design that tackles the aim and questions described above. Describe novel components that your experiment required and the associated trade-offs.*

## Data Generation Plan:

*This should detail the neuronal recording sessions and provide sufficient information to set the entirety of the dataset. This table below is for 2P imaging but can be adapated for Neuropixels recordings.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Cre-line** | **Visual Area / Depth** | **Number of mice** |
| Stim 1 | Slc17a7-Cre; Camk2a-tTA; Ai93(TITL-GCaMP6f) | VISp / Layer I + 2/3+ 4 + 5 | 10 |
| VISl / Layer I + 2/3+ 4 + 5 |
| Stim 2 | Slc17a7-Cre; Camk2a-tTA; Ai93(TITL-GCaMP6f) | VISp / Layer I + 2/3+ 4 + 5 | 10 |
| VISl / Layer I + 2/3+ 4 + 5 |
| Stim 3 | Slc17a7-Cre; Camk2a-tTA; Ai93(TITL-GCaMP6f) | VISp/ Layer I + 2/3+ 4 + 5 | 10 |
| VISl/ Layer I + 2/3+ 4 + 5 |

## Quality control consideration:

Here should be listed specific aspects of the datasets that will require more attention to ensure the best data quality. For example, whether a specific order of stimuli session is important or if a given session is more important than others. Keep in mind, the operational team could repeat sessions that failed for any reason.

# Analysis plan:

How each hypothesis/aim listed in Aims and hypothesis will be tested with the generated dataset.

* Aim/hypothesis 1

A brief high level description of the analysis performed on the data to address this aim.

* Aim/hypothesis 2

A brief high level description of the analysis performed on the data to address this aim.

* Aim/hypothesis 3

A brief high level description of the analysis performed on the data to address this aim.

Consider including any pre-analysis performed on already available public datasets here.

# References (no maximum):