This document is intended to help you to navigate this dataset.

During the course of this study several types of files have been produced:

* **.lsm** or **.czi** files are confocal images obtained using the Zeiss LSM710 confocal microscope. The free microscope software package ZEN lite can be used to visualize these files. ZEN lite is available for download from <https://www.zeiss.com/microscopy/int/products/microscope-software/zen-lite.html>
* **.dat** files were generated by analysis of confocal images using Neurolucida for Confocal software
* **.xlsm** files are Excel files containing compilations of data acquired (e.g. Neurolucida reconstructions, behavioural experiments, etc.)
* **.boris** files were generated as a result of behavioural data analysis, using the free open-source event-logging software BORIS
* **.pzfx** files are generated by GraphPad Prism, statistical analysis software
* **.abf** files are electrophysiological recordings generated by Clampex software and are readable using Clampfit (both Molecular Devices)
* **.evt** files are electrophysiological analysis files generated by MiniAnalysis (Synatosoft)

The folder names are based on the headings that are used in the “Results” section of the paper:

* 01. Characterisation of GRPR cells identified in the GRPRCreERT2 mouse
  + There is an Excel file summarizing the quantitative analysis of the GRPR cells
  + **.dat** and related **.lsm** files for each animal and section analysed
* 02. Relation of GRPR cells to other excitatory interneuron populations
  + There is an Excel file summarizing the extent of overlap of the GRPR cells with other neurochemical types of interneurons
  + **.dat** and related **.lsm** files for each animal and section analysed
* 03. Somatodendritic morphology of GRPR cells
  + There is an Excel file summarizing the data of the analysed GRPR cells with brainbow
  + **.dat** and related **.lsm** files for each animal and section analysed
* 04. Axonal projections of GRPR cells
  + There is an Excel file summarising the information on axons of GRPR cells
  + **.dat** and related **.lsm** files for each analysed image
  + **.czi** and **.tif** for the sections with Syp virus and for the EM study
* 05. GRPR electrophysiology data
  + This contains electrophysiological recording (**.abf**) and analysis (**.evt**) files
  + Data are sorted into folders based on date and cell
  + Details of electrophysiological protocols are contained within the **.abf** files and are readable in Clampfit
* 06. Responses of GRPR cells to noxious and pruritic stimuli
  + There is an Excel file summarising the responses of the GRPR cells to different stimuli
  + **.dat** and related **.lsm** files for each animal and section analysed
* 07. Chemogenetic activation of GRPR cells
  + There are several Excel files summarising the behavioural data
  + **.pzfx** shows the statistical analysis for behaviour
  + **.mp4** and **.boris** files are the recordings of animal behaviour after vehicle or CNO injection and the related analysis