## Arcus Research Data Management Best Practices in Creating README Files arcus.rdm@chop.edu arcus-support@chop.edu

## Overview

A README file is a quick and easy way to provide additional context and guidance around files and processes in your research. When organizing your research project, we recommend creating readme files for each directory and subdirectory. These can help your team better understand how they should be managing, organizing, and utilizing files, as well as make transitions easier between team members and over time.

## Format & Approach

When possible, try to write README documents in non-proprietary formats. Plain text files often work best, because they can be opened and read by any operating system. Also consider the long-term maintenance of the README - who will be responsible for it, and at what interval should it be revisited/updated? Try to set reasonable goals and be realistic about the commitment needed.

## What to Include

There are no hard and fast rules for what to include in a README, and what you incorporate may differ based on the needs of your research and your lab. Here are some options you can consider:

<u>People</u>: who created the document? Who is the point of contact for any questions about content in the README? Who is the point of contact for any questions about the files & data described in the README?

<u>Overview</u>: a narrative description of the data & files addressed by this README and how they fit into the overall research effort.

<u>Naming conventions</u>: a README is a great place to document naming conventions for the files & data it describes

<u>Dates</u>: when was the README created? When did your research (or this part of your research) start? When did you make changes to your methods? These dates are useful for interpreting research data for analysis, and it is useful to write them down somewhere.

<u>References to other files</u>: pointers to other files help users of the README navigate to the information they need. If there are files that provide context, instruction, or documentation about data & processes described by the README, those can be linked for easy reference.

<u>Process information</u>: it may make sense to describe details of your process, methods, settings, or parameters directly in the README.

<u>Change log</u>: if you are not using version control software, you may find it useful to track major changes to the README over time. This can be done in a log section, where changes are briefly described and noted with the name of the author and date of the change.