

# Lab Naming and Versioning Guide

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## 1 Purpose

This document defines the **standardised naming conventions** for all protocols, buffers, metadata files, and rendered outputs in the Abdullah Lab.

Consistent naming ensures reproducibility, traceability, and predictable file structure across the shared lab protocol repository.

## 2 General principles

1. **Everything is versioned** (v1.0, v1.1, v2.0).
2. **No spaces in filenames** — use lowercase snake\_case.
3. **Titles** (YAML title:) should be human-readable and capitalised.
4. **Protocol IDs** are machine-readable and never changed after publication.
5. **File versions and protocol versions always match.**
6. **Species prefix** only appears when necessary (e.g., mouse-specific vs human-specific).

## 3 File naming conventions

### 3.1 Format

<type>\_\_<descriptive\_name>\_\_vX.X.qmd

#### 3.1.1 Examples

- buf\_liver\_digestion\_v1.0.qmd
- prot\_mouse\_liver\_dissociation\_v1.0.qmd
- panel\_mouse\_liver\_sorting\_cd8\_v1.0.qmd

### 3.2 Components

Component	Meaning
<type>	One of: buf, prot, panel, meta
<descriptive_name>	lowercase snake_case, clear and specific
_vX.X	Major/minor version

## 4 YAML title naming conventions

### 4.1 Format

title: “Human-readable Name”

### 4.1.1 Rules

- Use capital letters at the start of major words.
- No internal code prefixes (no species label in the title unless necessary).
- Keep titles clear and short.

### 4.1.2 Examples

- title: "Liver Digestion Buffer"
  - title: "Mouse Liver Single-Cell Dissociation"
  - title: "FACS Panel for Liver Sorting"
- 

## 5 Protocol ID conventions

### 5.1 Format

<type>-<shortcode>-vX.X

#### 5.1.1 Types

Type	Meaning
PROT	Full protocols
BUF	Buffers & reagents
PANEL	Flow panels

(If you prefer lowercase types, we can switch; uppercase is conventional.)

#### 5.1.2 Shortcode design

Shortcodes should be:

- **3–5 uppercase letters**
- Derived from organ + function

#### 5.1.3 Examples

Document type	Example ID	Meaning
Buffer	BUF-LIV-DIG-v1.0	Liver digestion buffer
Protocol	PROT-LIV-DISS-v1.0	Liver dissociation protocol
Panel	PANEL-LIV-CD8-v1.0	Liver CD8 sorting panel

### 5.1.4 Species prefixes

Only add if both mouse and human variants exist:

- PROT-M-LIV-DISS-v1.0 (mouse)
- PROT-H-LIV-DISS-v1.0 (human)

If only mouse exists, no prefix is needed.

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## 6 Folder structure conventions

```
protocols_src/  
  _templates/  
  buffers/  
  computational/  
  flow_panels/  
    human/  
      acquisition/  
      sorting/  
    mouse/  
      acquisition/  
      sorting/  
  general/  
  human/  
  mouse/  
rendered/  
  pdf/  
  html/
```

Each file sits in the corresponding folder.

Rendered PDFs mirror the structure:

rendered/pdf/buffers/buf\_liver\_digestion\_v1.0.pdf

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## 7 Versioning rules

### 7.1 Version format

v<major>.<minor>

- Increase **minor** for editorial revisions, formatting changes, or typo fixes.
- Increase **major** for any scientifically meaningful change (new reagent concentrations, new steps, new gating strategy, etc.).

Examples:

- v1.0 → initial release
  - v1.1 → typo fixes, clarifications
  - v2.0 → method changed (new digestion buffer, new enzyme, new panel)
- 

## 8 Summary tables

### 8.1 Fast checklist

- Filenames: snake\_case
  - Titles: human-readable
  - Protocol IDs: ALL CAPS + dashes
  - Version: vX.X
  - Species prefix only if both human + mouse versions exist
  - Rendered PDFs mirror the folder structure
- 

## 9 Version history

Version	Date	Author	Summary
v1.0	2025-11-20	Dillon Corvino	Initial naming guide