

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"
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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.

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

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)
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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