Research Diary 2024

A compact, searchable laboratory log

Your Name
Research group or laboratory

Leap year edition

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How to use this diary

Keep one dated section for each working day. Record the question before changing the setup, preserve enough numbers for a future reader to reproduce the run, and finish with the next action. Add more monthly chapters or split entries into separate files as the diary grows.

Field	Prompt
Question	What decision or observation is this entry meant to resolve?
Setup	Instrument, sample, software version and relevant conditions.
Evidence	Measurements, files created, deviations and interpretation.
Next action	Owner, due date and the result that would change direction.

Chapter 1

January

1.1 2 January — baseline run

Focus. Establish a repeatable reference measurement before comparing treatments.

Record. _____

Observations. _____

Run	Condition	Response	Unit
1	Reference	0.842	ratio
2	Reference	0.836	ratio
3	Reference	0.839	ratio

1.2 5 January — protocol change

Focus. Test whether a shorter equilibration period changes the measured response.

Record. _____

Observations. _____

The change reduced preparation time, but the replicate spread increased. Keep the original equilibration period for the comparison study and log the shorter variant as a separate protocol.

1.3 12 January — weekly review

Focus. Summarise what another researcher needs to know before repeating the work.

Record. _____

Observations.

- Reproducible result: the reference response is approximately 0.84.
- Open question: does the response drift after a full working day?
- Next action: repeat the reference at the start and end of the next session.

Chapter 2

February

2.1 1 February — new sample series

Focus. Start a second sample series without losing the calibration record from January.

Record. _____

Observations. _____

Use this chapter for the next month and keep raw observations visible. A long year can be split into files by month while preserving the same headings.

Annual index of useful records

Calibration January 2 baseline and February 1 sample series.

Protocol January 5 equilibration comparison.

Review January 12 handoff and next-action checklist.