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Lab Handbook Template

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1 Works for me dx.doi.org/10.17504/protocols.io.53mg8k6

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ABSTRACT

[Imported from this thread.]

We are writing a lab handbook, so I spent my afternoon reading 25 lab handbooks to figure out all the things that people put in lab handbooks. Here they are so that you don't have to read 25 lab handbooks. (This is not exhaustive and many of the topics overlap, obviously.)

MISSION STATEMENT.
research goals; philosophy of how the lab works; chronological and academic history of the lab; ideas about future projects; why we do what we do

ROLES & EXPECTATIONS.
who's who and what they do all day, including the PI; expectations of everybody from everyone else's perspective

OPEN SCIENCE.
why and how the lab deals with sharing data, code, materials; how the lab does version control; how to do this stuff with lab collaborators

COMMUNICATION.
how people in the lab talk to each other; things like "always use Slack", "phone calls are only for emergencies"; how long to wait before nudging the PI on something you need; how meetings with PI work and what to prepare for them; check-ins/stand-ups/huddles

LOGISTICS.
when and for how long people work; policy on remote work; vacation; where the lab is located and how to get there (especially how to tell *others* how to get there); how to book a conference room; what to do if you get locked out

INTERNAL RESOURCES.
these are usually a long list of things people in the lab need access to: servers, software packages, commonly used web tools, shared credentials, room keys and other physical resources, etc

EXTERNAL RESOURCES.
how to get a library card; which building has the best photocopier; useful websites and tutorials, etc

ONBOARDING.
master list of everything that new lab members need to deal with when starting out, including credentials, software, hardware, keys, university ID, etc

RECURRING EVENTS.
logistics and structure of lab meetings, departmental seminars, etc; daily and weekly task lists (differing by lab roles)

DAY-TO-DAY.
dress code & hygiene; can you bring your dog to the lab; person X has a peanut allergy so please pack your lunch carefully; health stuff; work-life balance

BEHAVIOR.

official code of conduct; policies on scientific integrity, sexual harassment, discrimination; lab culture stuff "the kind of lab we are trying to be" and "things about our lab students like/dislike"; what to do if you have a problem; university-level information

ETHICS AND SAFETY.
irb procedures; safety procedures; what to do when something goes wrong; what to do/who to call in an emergency

ENGAGEMENT.
how lab website and social media work; expectations surrounding public outreach, including from official lab accounts; social media policy for personal accounts; protocol for recruiting participants in the community; being a good departmental citizen

HOW TO RUN EXPERIMENTS.
detailed instructions for doing research; some labs do this for all experiments separately while others have a general set of instructions like "how you should interact with participants"; how to compensate participants

DATA ANALYSIS.
how the lab does analyses; expectations concerning how code is written, version controlled, and archived; how to handle data protection and security. this one overlaps with OPEN SCIENCE quite a bit

PUBLICATIONS.
how the lab deals with authorship, including the differences between listing in acknowledgments & co-authors; checklist of everything to do before a paper is published; policies on preprints, postprints, and open access; preferences about journals

CONFERENCES.
how to give a talk; which conferences do lab members usually attend and why; technology considerations surrounding visualizations; data considerations for work-in-progress; discussion of #betterposter or #worseposter, etc

MONEY.
what grants pay for the lab and why; what the lab will and won't pay for, usually (differs by roles); what grants people could/should apply for; what to expect for conference expenses, computers, etc

OFFBOARDING.
what to do when you leave the lab; making sure all data & materials are archived properly; transferring credentials; how to stay in touch (what happens to your Slack account)

MENTORSHIP AND DEVELOPMENT.
how to choose a project; how to get feedback from others on new ideas; how to initiate collaborations inside/outside the lab; doing a thesis/dissertation; professional development at university level; rec letters

WHAT TO DO IF YOU NEED HELP.
how to get support from inside or outside the lab; schedule of routine training for new members; things that bear repeating like "always ask questions!"; how to make mistakes productively

READING LIST.
a list of papers, blog posts, and news articles that all students and lab members should read

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OK that should about cover it but if I missed stuff please post below. In terms of platforms, I saw handbooks hosted in standalone files (word, pdf, rmd), gdocs, text on github, OSF wikis, gitbooks, and more. (we're using gitbook for now!) time for a cup of tea, bye