Brain and Sleep Research Laboratory Manual

Updated on 1st Feb 2026

Introduction

Science is hard, but curiosity and discovery make it fun.

Our goal is to create a lab environment where we do great science while also growing as people and enjoying the process. We want everyone in the lab to feel happy, supported, and productive during their time here. We hope you'll learn a lot about sleep and brain physiology, pick up new skills in data analysis, writing, and presenting your work, make lasting friendships, and have fun along the way.

This manual is meant to be a starting point: a helpful reference for current lab members and an introduction for people who are thinking about joining the lab. When you join, we ask that you read the manual and follow it. The manual is inspired by other lab manuals (MemoLab manual, PeelleLab manual, and Peixoto Lab) and borrows a lot from them. It's very much a work in progress, so if you have ideas about what to add or what could be clearer, please talk to Luisa and/or Michele.

The Manual defines the standards of behaviour expected from all members of the laboratory, including students, postdoctoral researchers, staff, and visitors. Our goal is to create a safe, respectful, collaborative, and productive research environment that enables everyone to thrive scientifically and personally.

Professional Conduct and Respect

- Treat all colleagues with courtesy, dignity, and respect regardless of role, seniority, or background.
- Discriminatory, harassing, or bullying behaviour will not be tolerated in any form.
- We expect open-mindedness, collegiality, and constructive engagement in all scientific and interpersonal interactions
- Attendance to local scientific events, such as journal clubs, lab meetings and seminars, is considered mandatory. Therefore, show up for them on time. If it is your turn to present, come prepared and bring everything you need to present and discuss your data.
- No photos or videos are allowed in the vivarium using your personal device. Videos or photos of animals cannot be shared outside the lab.

Equity, Diversity, and Inclusion

- Our lab is committed to fostering an environment grounded in equity, diversity, and inclusion, where all members feel valued, respected, and supported.
- All members must contribute to an inclusive environment free from any kind of discrimination.
- Administrative and communal tasks ("academic housework") should be shared equitably.

Communication

- Communicate clearly, respectfully, and in a timely manner.
- Allow space for all voices: avoid interrupting, actively include quieter members, and listen attentively.
- Use inclusive, gender-neutral language in meetings, presentations, and written communication.
- Communicate honestly, even when it's difficult.
- Concerns or conflicts should be raised early. We can't thrive in an environment we aren't comfortable in
- Be proactive—tell us what you need. This includes coming to knock on PI's door even if it seems like you are interrupting, emailing us to set up a time to meet. We may not always check in as often as intended, so it is up to you to make sure nothing falls through the cracks.
- Communicating with people outside the lab is extremely important. Your actions reflect not only on you, but also on the lab, the PIs, the School, and the University. This applies both to study participants, who generously volunteer their time, and to scientific colleagues, whose opinions directly influence our opportunities and success, including the review of our grants and publications. For this reason, whenever we represent the lab, we are expected to do so with a high standard of professionalism.

Research Integrity

- It is critical that everything we do is of the highest quality. Uphold the highest standards of scientific rigor, honesty, and reproducibility. It is never okay to tamper with data, make up data, omit data, or fudge results in any way. Science is about finding out the truth, and negative or unexpected results are still important.
- All data, raw and processed, including the code used for data analysis and the relative results, should be stored securely and backed up regularly on the shared BSR Lab folder on Google Drive, in addition to local backups, so that data loss is minimized. Make sure your work is always backed up!
- Reproducible research is a core principle of science and a requirement for all projects in the lab. To ensure reproducibility, analysis pipelines must be well organized, transparent, and thoroughly documented, in electronic and/or paper form. This includes keeping detailed records of every step in your workflow, from data collection and preprocessing, to model fitting and statistical testing, clearly noting what was done, how it was done, and in what order.
- Science advances through results that are both reproducible and replicable; isolated, one-off findings are not sufficient.
- Follow institutional and national guidelines for data management, animal work, human subjects research, and laboratory safety. Make sure you have all certifications to work in the wet lab and in animal facility

Authorship, Credit, and Intellectual Contributions

- Authorship decisions will follow transparent criteria indicated by CRediT taxonomy and ICMJE guidelines:

'*The ICMJE recommends that authorship be based on the following 4 criteria: 1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND 2) Drafting the work or reviewing it critically for important intellectual content; AND 3) Final approval of the version to be published; AND 4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. In addition to being accountable for the parts of the work done, an author should be able to identify which co-authors are responsible for specific other parts of the work. In addition, authors should have confidence in the integrity of the contributions of their co-authors*. …'

- Authorship will be discussed at the start of each project to ensure clear expectations. Changes may occur during the course of the project if new contributors join or if someone does not fulfil their planned role. Generally, graduate students and postdocs who lead a project will be listed as first authors, while the PI will be the last author.
- Project "ownership" is retained by the original primary lead for up to three years after data collection ends, or until they voluntarily relinquish their rights to the study, whichever comes first. After this period, the lab reserves the right to reassign the project, or make other decisions, to ensure timely publication. This policy is designed to prevent datasets from remaining unpublished for extended periods while still giving priority to the original primary lead.
- Do not use another person's data or ideas without explicit permission
- When preparing a written assay, including scientific abstracts, reports, articles and the thesis, follow the guidelines provided by the university on the use of AI. Here, we summarize the main points, but please refer to the complete document:

  - ***Permitted use (with declaration)***
  - *Brainstorming ideas and possible titles.*
  - *Support in defining or refining research questions and the structure of the work.*
  - *Grammatical and stylistic revision of texts independently written by the student.*
  - *Service translations, summaries, and outlines of texts that have already been read and understood.*
  - *Suggestions for code, graphs, tables, and figures, to be critically reviewed.*
  - ***Permitted use only if explicitly authorized by the instructor/supervisor and with a detailed declaration***
  - *Generation of draft paragraphs to be rewritten and critically integrated.*
  - *Preliminary analysis of non-personal and non-sensitive data (e.g. public datasets).*
  - *Generation of images, infographics, or slides for presentations.*
  - ***Non-permitted use***
  - *Full or near-full production of thesis text, assignments, reports, papers, or presentations without substantial personal reworking.*
  - *Generation and use of fictitious data presented as real, invented interviews, non-existent court rulings, or fabricated bibliographic sources.*
  - *Uploading personal data, health data, sensitive data, or materials subject to confidentiality obligations into AI tools, including non-public research data.*

- 3rd year PhD students need to discuss the timeline for the thesis submission and viva dissertation with their supervisor at least 6 months prior to the end of their fellowship. If you need to submit an extension request for the thesis submission, the letter needs to be signed by your supervisor.
- The thesis has to show your knowledge about the topic of research and must include a thorough literature review and discussion of the results, in addition to methodology and results. Your supervisor will carefully review it and most likely ask for changes to improve it. This process can require multiple

rounds of revision and can take a long time. Therefore, plan to have at least 2 months after you finish writing the first complete draft before the submission deadline.

- PhD students are expected to participate actively in preparing the first draft of a paper where they are a coauthor, especially contributing to writing the description of the methodology and the results.
- Laboratory members are required to share their data (or code, if applicable) with other lab members. Outside of the lab, you need to check with your supervisor before you present any work that was generated in the lab or share any data. We will also share our work with the world as soon as we are ready.

Working Environment and Work–Life Balance

- Take care of your mental and physical health.
- Advocate for our own needs, including personal and career goals.
- Be independent when possible. Each lab member is expected to take ownership of their primary research project, working independently, proactively, and with scientific integrity.
- Ask for help when necessary. We work as a team, supporting one another by sharing expertise, assisting colleagues when needed, and contributing to common tasks. We operate on the principle that we share both the work and the successes it enables. Know that you have people supporting you but also that we are counting on you to do your part.
- If you are unwell, please stay home and focus on taking care of yourself—both for your own wellbeing and to avoid spreading illness to others. Please inform your supervisor by email in the case of sick leave, annual leave/holiday leave, or any other absence from work. Add your absence in the lab google calendar
- Don't rush your work. Think about it. Implement it. Double and triple check it. Being a little obsessive is essential to good science.
- Stay up to date on the latest research by reading the literature carefully.
- PhD students are expected to engage actively in their training by collaborating, participating in diverse experimental and scientific activities in the lab, and seeking opportunities to expand their skills and understanding.
- The lab supports flexible working arrangements, provided they are discussed and agreed in advance with the supervisor and compatible with experimental requirements.
- Members are expected to respect common spaces, equipment, and booking systems. Keep everything awesome, including the coffee table and the lab sinks
- If you notice supply is running low in the lab, notify the supervisor and coordinate to order more: first check the laboratory inventory spreadsheet to see where we ordered it in the past, ask a quote and send it to the supervisor. Follow up on the order request and supply delivery, especially if it is critical to your experiments. Do not expect supply to be always available on its own.
- Ordering material can take months, therefore we need to maximize the effort and the time. Coordinate with other lab members (and the supervisors) to know if anyone needs to order from the same supplier and ask one quote containing all the items
- Once an item has been delivered, store it properly (check storage temperature), update the laboratory inventory spreadsheet, sign and leave the DTT (documento di trasporto) on your supervisor's desk

- It is your responsibility to have everything you need for the experiment you are leading. Plan the steps in advance, including animal breeding. If you need help, ask your supervisor
- We admit our mistakes; we correct them and move on. If you make a mistake, you should tell your supervisor so that a proper solution can be found.

Lab resources on line

- Be aware of the following resources:
  - https://www.bsr-laboratory.org/ is the official lab website. If you wish to add, remove or update information about yourself, please contact your supervisor
  - https://github.com/BSRLab and https://zenodo.org/records/15295870 public repository for data associated with publications
  - BSRlab-PROJECTS: shared folder on Google Drive for backup
  - Projects Gantt Chart: shared spreadsheet with progress status of individual projects
  - Inventory 2.0: shared spreadsheet with list of supplies available in the lab, quantity and where to buy them

Mentorship and Feedback

- Supervisors are available for regular one-on-one meetings in person or remotely to discuss scientific progress, wellbeing, and career goals.
- Feedback should be constructive, specific, and delivered respectfully.
- Supervisors will support you (scientifically and financially) and give you honest feedback on a timely basis, including feedback on project ideas, conference posters, talks, manuscripts, figures, grants. All trainees will meet once a week with their supervisor unless circumstances don't allow it.
- The PIs provide the funding necessary to keep the laboratory going, give perspective on where the laboratory is going, where the field is going, and tips about surviving and thriving in academia.
- The Pi will support your career development by introducing you to other researchers in the field, promoting your work at talks, writing recommendation letters for you, and letting you attend conferences as often as finances permit.
- Your supervisor will help you prepare for the next step of your career, whether it's a post-doc, a faculty job, or a job outside of academia
- Postdocs and senior PhD students are expected to help mentoring undergraduate students or new lab members when they are asked to

Recommendation letters

- We will write recommendations letters for your new position and for grant applications, provided that you have worked in the lab for at least 3 months (for undergraduate students) or more
- If you need a letter, notify us as soon as possible and send us your CV and the details of the application (which position or grant you are applying to). In some cases, you will be asked to send a draft of the letter with the relevant information you need to include: the draft we will modified by us to include our experience with you.

Travels, conferences, missions abroad and reimbursement

- If you are planning a grant/fellowship/travel grant submission, you should schedule a meeting to discuss a timeline at least 3 months in advance
- If you are planning on submitting a poster, presentation or report, you should send the file or the slides to your supervisor at least 2 weeks before the deadline. If you're giving a poster or a talk, make sure to schedule a practice presentation with the lab and the supervisor at least one week beforehand.
- PhD students have a small budget for research related activities, including bench material, congress fees, travel and accommodation, publication fees. Discuss with your supervisor how to best use this money.
- If you are planning on attending a conference, workshop or a training event for which you will ask a reimbursement, discuss the available budget with your supervisor before paying anything in advance. Unauthorized expenses might not be reimbursed.
- All requests for reimbursement have to be made through the university platform and the form must be emailed to your supervisor who will sign it and return it to you.
- You are required to present new work at international conferences. If you wish to present the same work at different conferences, you need to check this with your supervisor. In all cases, always discuss travel plans with us at least 3 months prior to the deadline for abstract submission.
- You are required to share a hotel room with another colleague. If you want your own room, you will need to cover the difference. We will not cover late registration fees; you need to register by the early date. We will not cover extremely high airfares resulting from booking travel at the last minute (e.g., after early registration has closed).

Conflict Resolution and Reporting

- Lab members should first attempt respectful direct communication when safe to do so.
- Concerns may be raised confidentially with the supervisor. We hope you feel safe enough to talk to us.
- Formal institutional reporting channels are available and can be used without fear of retaliation. Perceived discrimination or ethical misconduct can be raised confidentially by emailing: cdf@unicam.it. A third party will help you.

Accountability

- By joining the laboratory, members agree to adhere to these guide lines.
- The Lab Manual will be reviewed every 6 months with input from all members.