Oculomotor Lab Manual

I. Introduction
   a. Land acknowledgement
   b. Personal acknowledgement
   c. Statement on lab culture and expectations

II. General Policies
   a. Safety
   b. Covid-19 policies
   c. Code of Conduct
   d. Research Integrity
   e. Dealing with conflict

III. Daily lab operations
   a. Lab hours
   b. Lab meetings
   c. Individual meetings
   d. Absences
   e. Lab access

IV. Communication
   a. Open door policy
   b. Slack, Email and Phone Calls/Text
   c. Social media

V. Employment and Expenses
   a. Salary
   b. Visas and Immigration
   c. Relocation expenses
   d. Travel expenses
   e. Leaving the lab and Lifelong Mentorship

VI. Data Management
   a. Lab data
   b. Lab notebook
   c. Data sharing

VII. Authorship
   a. Arrangement and expectations
   b. Example of Authorship Assignments

VIII. Specific Expectations
   a. PI’s commitment
   b. Specific expectations of graduate students
   c. Specific expectations of postdoctoral fellows
   d. Specific expectations of undergraduate students

Appendix
   Lab member contact, emergency contact info and Birthdays
I. Introduction

a. Land acknowledgement
The Oculomotor Laboratory acknowledges that its members learn, study and work on the traditional, ancestral, and unceded territories of the xʷməθkʷəy̓əm (Musqueam), sel̓íwitulh (Tsleil-Waututh), and sḵwx̱wú7mesh (Squamish) Coast Salish peoples.

b. Personal acknowledgement by the PI (Miriam Spering)
Miriam grew up in rural Germany, in an environment that was not visibly diverse. Even though she experienced sexism and gendered oppression throughout her education and career, she was not aware of the systemic and intersectional nature of discrimination and the importance and impact of diversity and inclusivity until she started graduate school and then moved to the US as a postdoc. She is now actively examining her own privilege through reading and self-reflection, listening and talking, mistake-making, capacity-building through training and relationship-building.

Miriam acknowledges that she is a privileged (white, heterosexual, able-bodied, educated) person living in and benefitting from a system that perpetuates colonialism, systemic racism and other barriers to equality. She acknowledges diversity in race, gender, sexual orientation and religion (or lack thereof) and differences in how privileged we might have been during our upbringing. She believes that the lab is a place where we all meet and learn from each other. She is humbled by the opportunity to mentor and teach you, and will in turn strive to learn from all of you.

c. Statement on Lab Culture and Expectations
This statement describes lab culture and expectations (both the ones that Miriam has of you and the ones that you can have of Miriam). It also describes what mentoring looks like in the lab, human aspects of our work, and what the lab can offer you in terms of professional development. Miriam would like to acknowledge that this document is the result of a decade of learning from you, the trainees in my lab, and from wonderful colleagues, such as Annie Ciernia at UBC, and Wei Ji Ma at NYU, whose lab culture documents I have based this document on.

Lab culture
- We strive for a welcoming space where people can bring their whole selves to work. Everyone in the lab should be kind, respectful, and supportive of each other.
- The work we do is collective. In the lab, we never compete with each other, but we try to lift each other up. This is also a good attitude to have in the broader scientific community, but it is sometimes hard to not get carried away by the many competitive elements of scientific careers.
- Everyone is encouraged to participate in the lab’s academic events (lab meeting, interest group meetings, external presentations by lab members) to the best of their ability. Participation is not just attending but also paying attention and in internal events, asking questions and commenting.
• In the lab we show interest in and learn about our lab colleagues’ work. This can be done informally, such as stopping by someone’s desk and asking them what they are up to.
• We value open and direct communication. Please feel free to disagree with Miriam at any time, and to bring up when you think that things Miriam does are problematic.

Social Events
• Throughout the year, the lab organizes social events such as dinners out, beach or backyard BBQ, and other informal gatherings. We try to keep these events as open and inclusive as possible. You are encouraged to participate, but it is not expected. Not participating will not reflect negatively on you in any way. If we can help remove some of the obstacles for participation, please come and talk to Miriam.
• UBC only offers limited funds for social events, and most PIs pay out of pocket. Miriam does not believe that students should have to pay if they are invited to social events, but she does not always have the funds to cover everything. This is why we sometimes choose to go to less expensive venues or meet in our backyard. Please come to Miriam with ideas of fun and low-cost events that we can do as a group.

Work-life Balance
• You are expected to work all the time. It is important to sleep, rest, exercise, and eat healthy food, to take breaks during the day, and to manage other responsibilities or hobbies. Doing science should never come at the expense of everything else.

Miriam’s Weaknesses (written by Miriam)
Mentoring trainees has helped me to reflect on my own strengths and weaknesses, and there are certain things that I’ve noticed about myself that might be useful for you to be aware of. You can help me improve by giving me feedback.
• I am chronically late for meetings. This is a scheduling problem, and it has become worse throughout the pandemic. I tend to leave too little time between meetings, and always run over time. Sometimes things come up last minute, both at work and at home. Please do not take it personally if I am late, or if I reschedule a meeting. If this happens, I will do my best to offer an alternate meeting time within a few days.
• I tend to micromanage and point out many details when it comes to conference presentations, posters, or research papers. Whereas I strongly believe that orientation to detail is important and that you will benefit by presenting the cleanest possible poster to your audience, this can be annoying to some people. If you find this hard to deal with, please let me know and I will back off.
• Because my work life consists of research, teaching, and a large administrative load, I have to constantly switch topics and contexts. You can help me run our individual meetings (see below) efficiently by providing a short summary of your project, what you are currently working on, and your plans. This will help me to switch out of my previous meeting and into the next, and arrive in the moment. I will be of more help to you if you remind me of your specific questions and goals. Again, do not take this as a reflection of any lack of interest or support. I
champion all projects in the lab. It just shows that I am often overwhelmed and very tired.

- When you send me a piece of writing for feedback or comments, you will find that I tend to edit it heavily. This can sometimes come across as overly strict and critical. Do not worry: the more edits you see in your manuscript or writing, the more time I spent with it, and the more value I think it has! You should be very concerned if you receive a manuscript back with only a handful of edits. Having said that: if you are attached to your own writing style, let me know in advance and I will back off and focus on the bigger picture.

- I tend to be very direct. In part, this is my personality, in part this is my German cultural heritage. Some students love it, others hate it. To some, I might even sound abrasive. Please talk to me about this if you feel that my style is too direct. I constantly try to work on this and with age and with bringing up my own kids (who are harsh critics!) I have become a softer version of myself. I am work in progress!

No-guilt policy

- Academia is a high-pressure environment, in which we are trained to have high expectations of others and of ourselves. This leads almost inevitably to feelings of guilt when you feel you have not met expectations. Sometimes, we can fall into a vicious cycle of feeling guilty, avoiding the work that makes us feel guilty, getting less done, and feeling even guiltier. Guilt can make any suboptimal situation worse. As much as possible, we will encourage and remind each other to reduce the chances of feeling guilty, and if we end up feeling guilty, to help each other find the underlying cause. Were my or your expectations too high? Did anything happen that stopped you from achieving your expectations? Do you need a break?

II. General Policies

a. Safety

Safety is the first and foremost priority. If there is a serious emergency such as a fire, injury, etc., call 911. Then immediately call campus police (604) 822-2222 and Miriam at (604) 822-0198 or at (604) 363-3326. A complete list of contact info of all lab members, including emergency contacts, can be found at the end of this manual. Any safety concern should be brought up to the PI right away.

The lab currently has two locations, one shared lab space in the Institute for Information, Computing, and Cognitive Systems (ICICS), 2366 Main Mall, Rm X715, and one at UBC Hospital, Koerner Pavilion, 2215 Wesbrook Mall, Rm S257. Please familiarize yourself with the safety and security procedures at both locations:

- ICICS: https://icics2017.sites.olt.ubc.ca/files/2017/02/ICICS_Fire_Safety_Plan.pdf; contact Fatima Damji (admin@icics.ubc.ca)
- UBC Hospital: contact Melanie Bertrand (mbertrand@brain.ubc.ca).

● Some of the facilities that we conduct research in are located in health care settings and masking might still be mandatory in some buildings on campus. Please pay attention to signage at building entrances and abide by provincial health guidelines with regard to vaccination and masking requirements.
● Please stay home and take care of yourself if you are experiencing covid-like or any other symptoms of illness.

c. Code of Conduct
The lab is committed to promoting, providing, and protecting an inclusive, positive, supportive, and safe learning environment and workspace for all its members. Any acts of harassment, discrimination, bullying or violence, and sexual misconduct, including gendered insults, are not acceptable. Examples of unacceptable behaviours include, but are not limited to, public humiliation, verbal abuse or taunting, creating an intimidating or hostile learning atmosphere, threatening behaviour, unwelcome physical contact, physical violence or violent gestures, offensive comments or behaviour regarding gender, race, ethnicity, religion (or lack thereof), sexual orientation, age, or disability. If you have experienced inappropriate behaviour, or have witnessed such behaviour, I ask that you report it so that we may take steps to correct the problem and offer support. The following resources are available to you to report mistreatment.
1) Please talk to Miriam. Any communication will be treated as confidential. If the behaviour involves Miriam, please see below for “Dealing with conflicts”.
2) Consider filing a report at https://mistreatmenthelp.med.ubc.ca/
3) Reach out to the UBC Respectful Environment, Equity, Diversity and Inclusion Office, https://redi.med.ubc.ca/

d. Research Integrity
● We expect lab members to be honest in scientific communications both within and outside the lab.
● We expect that lab members will design experiments in a manner that minimizes both bias and self-deception.
● We expect that lab members will keep agreements, be careful, and share their code and results openly with the scientific community.
● We expect that credit will be given where credit is due, including in scientific writing. Plagiarism is not tolerated, and it is your responsibility to know the definition and scope of plagiarism.
● It is never okay to tamper with data, make up data, omit data, or fudge results in any way. **Research misconduct is not acceptable.**
● To learn more about ethical conduct for research involving humans, all lab members are expected to complete TCPS 2: CORE and send completion certificate to Miriam for record keeping. See UBC Office of Research Ethics for more information and training.

e. Dealing with Conflicts
● Interpersonal conflicts with other lab members should be reported to Miriam.
● Conflicts with Miriam should be directed to the Director of the Graduate Program in Neuroscience, Dr. Catharine Winstanley (catharine.winstanley@ubc.ca). You can also direct your enquiries to the Head of the Department of Ophthalmology &
Visual Sciences (currently Dr. Neeru Gupta, neeru.gupta@ubc.ca).

- UBC Graduate and Postdoctoral Studies have formalized conflict resolution processes and resources for graduate students and postdocs (under Additional Resources/Conflict Resolution and PDF coordinator)
- The Equity & Inclusion Office is committed to ensuring that UBC is a community in which human rights are respected and equity and diversity are integral to university life. They offer resources for handling complaints regarding discrimination and harassment.
- Graduate Student Society (GSS) Advocacy: The GSS Advocates are graduate students who provide confidential assistance to fellow individual graduate students experiencing difficulties with their supervisors, advisors, program, faculty or the University.
- Office of the Ombudsperson for Students works with UBC community members to ensure students are treated fairly and can learn, work and live in a fair, equitable and respectful environment. Reporting to the President, the office is an independent, impartial and confidential resource for students at UBC, jointly funded by the AMS, GSS, and UBC.

III. Daily lab operations

a. Lab Hours
The Lab does not institute fixed work hours. However, most research activities and interactions occur during core hours (10 am to 4 pm) on weekdays. Whereas there is no fixed expectation that graduate students and postdocs work a regular 40-hr week, everyone is expected to work in accordance with your individual goals and expectations agreed upon jointly with Miriam.

All new members are expected to first start with a regular 9 am to 5 pm schedule. Eventually, you may find that your schedule becomes more dependent on the demands of your experiments, and after some time and independence, this schedule can be modified to suit your working style. You are generally expected to be available for meetings scheduled in regular work hours, but exceptions will be respected.

You are not expected to work or respond during evenings or weekends; however, right before external deadlines (such as for conferences or grants), I might ask you to make an exception. The lab observes all UBC statutory holidays. We will not have lab meetings and individual meetings in the two weeks surrounding Dec 25 - Jan 1. Lab meetings and individual meetings during the summer months may follow an altered schedule, depending on conferences and Miriam’s travel.

b. Lab Meetings
Everyone is expected to attend our weekly lab meetings. These are currently held weekly on either in person or on Zoom, depending on availability and topic. The purpose of lab meetings is to touch base with each other and check in on project progress, to discuss any problems that might have come up in the past week, to share
new knowledge or interesting ideas and papers, and to regularly present our work to each other.

Graduate students, postdocs, and visiting scholars are encouraged to present at lab meetings on a regular basis. We encourage undergraduate students to present as well.

c. Individual Meetings

- Every graduate student and postdoc will meet with Miriam on a 1:1 basis once in two weeks (or weekly, depending on need) at a pre-determined schedule. These meetings can also be used to discuss career plans and research progress. Prior to 1:1s, lab members will fill up a meeting agenda that covers 1) recent progress, 2) plans for next week, and 3) other items for discussion
- Student-supervisor agreement. All graduate students are supervised through the Graduate Program in Neuroscience, which requires a student-supervisor agreement is filled out at the beginning of the working relationship. Graduate students will revisit and review this agreement with Miriam once a year.
- Training plan. All graduate students will have an individual training or career development plan that will be reviewed with Miriam once a year.

d. Absences

- Unplanned longer absences: Notify the PI of any unplanned absences of more than two days as soon as possible. It’s the lab member’s responsibility to arrange help with others in the lab in case of ongoing experiments.
- Vacations: Graduate students and postdocs are entitled to two weeks of paid vacation, in addition to all work-related travel.
- Medical and Parental leave: These will be arranged with the help of department administration. Lab members are expected to notify the PI as soon as possible to arrange for long-term project management.

e. Lab Access

- Access to our lab in ICICS is with your UBC student or employee ID. To gain access, please send an email to Miriam with your ID #, email address, full name, and duration that access is required for. Miriam will then contact access@icics.ubc.ca for access, which will usually be activated within one hour.
- Access to our lab in the UBC Hospital requires a VCH Hospital ID. For this, please send Miriam your full name, and a photo that fulfills the following very strict requirements: jpg format under 2 MB, landscape orientation, from above head to navel level, white plain background, no digital enhancements/alterations, no hats but religious head coverings are okay, no sunglasses.

IV. Communication

a. Open door policy
Miriam can typically be found in her office in the UBC Hospital Koerner Pavilion (Rm. S103) on Mondays before and after lab meetings and most Wednesdays. On Tuesdays and Thursdays, Miriam is typically in the Dean’s Office in the IRC and not available for drop-in meetings but accessible via email or Teams.

b. Teams, Email, phone calls and texting

Some lab communication within the group and with the PI can be handled through Teams. Individual meeting requests or project communication as well as updates about experimental progress should still be sent via email. As per UBC policy, any confidential data regarding patient or participant data should be communicated through UBC-hosted email accounts (e.g., @ubc.ca @alumni.ubc.ca @student.ubc.ca).

You may receive messages from Miriam during off-work times, but responses are not expected until normal work times. We have recently (November 2023) decided to try to minimize email conversations on the weekends and refrain from sending emails unless it is urgent.

Phone calls will be limited to emergency use only. If there are problems with Slack, texting will be an alternate means of contact. Please do not call Miriam on her cell phone before 8 am or after 8 pm unless it is an emergency (text and email is always possible).

c. Social Media

Lab members are encouraged to communicate about their research through public social media, such as Twitter. If you choose to do so then you are expected to follow our code of conduct in any accounts that reflect your professional persona.

Other social media are more personal and private (Facebook, Instagram, Tik Tok, etc). Lab members are expected to respect others’ wishes on whether to keep personal social media more private.

V. Employment and Expenses

a. Salary

- Stipends. Graduate students will receive the current minimum stipend of $22,500 CAD for Masters (for 2 years) and $26,000 CAD for PhD students (for 4 years), as determined by the Graduate Program in Neuroscience.
- Fellowship and Award Top-up: Graduate students receiving a fellowship will receive a top up of $3,000 per year of their fellowship, or the minimum stipend, whichever is more. Exceptions to this rule apply for graduate students who also choose to work as TA or in other positions outside of the lab. Postdocs with fellowships will receive a top up of $5,000 per year of their fellowship.
- Equal pay will be observed for all genders.
● All stipends and salaries will be processed by the Department of Ophthalmology & Visual Sciences (Miriam’s home department) through a UBC software called Workday. When you are first appointed, you will have to provide personal information, including your name, address, phone number, birthday, citizenship status, etc. to the department so your appointment can be initiated. Unfortunately, this process can take some time, and it can be stressful to have to wait for your salary. Please let Miriam know if the delay appears unreasonably long.

● Appointments are renewed each year (they run Sept 1 to Aug 31). Please remind Miriam ahead of time so the appointment can be renewed in time and without causing a pay gap.

b. Visas and Immigration

The Lab supports the training of international students and postdocs and will negotiate with individual trainees to support appropriate visa applications as needed. Trainees requiring such visas are responsible for monitoring the deadlines of their visas. Unfortunately, the lab does not have a say in who gets a visa or work permit. Graduate students will work with the Graduate Program in Neuroscience and UBC G+PS (Graduate and Postdoctoral Studies) for their visas, and postdocs will work with UBC HR.

Please ensure that the Dept. of Ophthalmology has your most up to date immigration docs: Shaikh, Aqsa aqsa.shaikh@ubc.ca

c. Relocation Expenses

Because moving expenses cannot be covered by grants, the lab does not have a mechanism to cover relocation expenses.

d. Travel Expenses

If the PI approves your attendance to a scientific meeting, the lab will pay for you to go including travel, accommodation, registration, and poster printing. You will pay for all conference expenses up front and then get reimbursed after you attend the conference. Keep itemized receipts for everything. Request reimbursements within one month from returning from travel. Trainees are expected to apply for travel awards when possible. Note that in addition to the G+PS and the GPN, research centers such as ICICS might also offer travel awards. Postdocs can apply for Faculty of Medicine/PDFO Travel Awards.

e. Leaving the Lab and Lifelong Mentorship

To ensure a smooth transition, please let Miriam know as soon as possible when you will be moving on. When you leave the lab, we expect you to clean out your possessions. Please make sure you organize your data so that others can follow your work. You must discuss a plan for changing project ownership and manuscript
authorship with Miriam. We may also want you to train a successor before you leave the lab. Please remember to return keys to the lab. My role as a mentor does not end the moment you leave the lab. Recommendation letters aside, you should always feel free to ask me for advice or just let me know how you are doing. I am still in regular touch with my own past mentors. One circumstance in which I could be helpful is if you are in a difficult or sensitive situation in your new job, and you want an outside, confidential perspective.

VI. Data Management

a. Lab Data

- Data storage: Each lab member should back up raw data and all processing/analyses. Lab data should be stored in at least two of the following places: 1) local hard drive, 2) external hard drive, and 3) lab drive (Dropbox or MedIT server).
- Raw data: You should not manipulate master datasets. Please make a local copy on your computer and work off that. Your experimental notes and analysis codes are a crucial resource for the lab. They must be available upon request and usable for verifying data in any publication, should questions arise.
- Leaving the lab: Before you leave the lab for good, or upon completion of a project, you must archive old datasets and back them up.

b. Data sharing

- Sharing within lab: All lab members are expected to share their code and data with others in the lab when asked. Many lab members use a github that was first introduced by lab alumni Jolande Fookenn (https://github.com/Ookenfooken/Shared-eye-movement-code). Abibat is currently (November 2023) working on creating a new github platform for the lab.
- Outside the lab: Prior to publication, sharing data outside the lab will occur upon PI discretion. This gives us an opportunity to work with the data to meet our needs (including grant needs!) before releasing it for other people to use. Generally, we will try to make our data and code publicly available within one year of publishing the results.
- Preprints: We will also share our work with the world as soon as we ready, which means through preprints. The lab policy is to upload a preprint of a manuscript simultaneously with initial submission to a journal. The preferred preprint server is bioRxiv. We also put PDFs of all our papers on the lab website (http://www.visualcognition.ca/spering/publications.html).

VII. Authorship

a. Arrangements and Expectations
• Lead authorship: Lead author(s) should be responsible for the bulk of the data acquisition, analysis, figure preparation, and writing (cover letter, main text, figure legends, and response to reviewers). Whereas the first author is expected to shepherd the paper to completion, it may not be possible for one person to oversee the whole project. If the original lead author must step down, a replacement will have to be assigned or elected.

• Co-authorship: Co-authors are expected to contribute scientifically and participate actively in helping the leading author in the writing, editing, and proofing of the manuscript at all stages. Whereas we generally err on the side of generosity, gift authorship will not be considered.

• Authorship will be discussed on the outset and throughout project development. Negotiation of authorship (both inclusion and order) should be open, professional, and respectful. Any changes in authorship should be approved by all the original authors. If you need clarification on authorship issues, please talk to the PI. Anyone who fails to fulfill the minimal requirements (see Necessary but Insufficient) will be taken off the author list.

• Senior authorship: As a general rule, Miriam will be senior author on all publications coming out of the lab. This is based on the premise that Miriam applies for and holds the funding necessary to support our research. Even though an individual idea might be your own, it is usually developed and nurtured in an environment that Miriam has built with care over more than a decade. In some rare circumstances, Miriam might discuss a shared senior authorship arrangement with a senior PhD student or postdoc, if such an arrangement is vital for the trainee’s career.

b. Examples of Authorship Assignments

• Deciding: Collection of vital data (e.g. key and initial observations, traces/images for figures), conceptualizing, designing, and refining research, provision of resources necessary for the study.

• Sufficient: the conception of the study, processing and interpretation of data, designs of the study, provision of specialized expertise, novel reagents and analyses.

• Necessary but Insufficient: discussing the results and implications, reviewing, editing, and critiquing the manuscript at all stages, final approval of the version to be submitted/published.

• Insufficient: technical services, editorial assistance, formatting of manuscript, preparation of research result (e.g. figures), performing basic statistical analyses, literature search, general training/supervision of junior researchers.

VIII. Specific Expectations

a. PI's commitment (written by Miriam)

• At the beginning of your time in the lab, you and I will discuss your career goals and carve a project tailored to your interests and goals. I will help you refine your project to achieve clear actionable targets and to develop a project timeline. I will
provide scientific, infrastructural, and financial support for you to accomplish your goals. And if I am unable to help with a critical component of your project, I will connect you with experts in the field that can provide the necessary support.

- If appropriate, I will help you to seek external funding opportunities.
- I will meet with you each week, or as needed.
- I will meet with you at least once a year to have a yearly progress report (each June) where we will go over your accomplishments for the year, set out new goals for the coming year, and revisit our initial agreement and training plan.
- I will read and provide feedback on anything you write (grants, manuscripts, reviews, etc.) in a timely manner.
- I will read and comment on your Masters or PhD thesis. Please allow enough time for me to do so. We will make a detailed timeline to ensure that there is sufficient time for several rounds of edits.
- I will promote your research, introduce you to colleagues, write recommendation letters, and support your future decisions as you move toward your career goal, irrespective of whether this is inside or outside of academia.

b. Specific expectations of graduate students (Masters and PhD)

- Develop concepts of your research project with me
- Write your thesis proposal independently
- Apply for appropriate funding opportunities
- Prepare for and attend weekly 1:1s and yearly review meetings with me
- Be proactive with all safety requirements
- Write and submit manuscripts for at least one (Masters) / three (PhD) peer-reviewed publications
- Write and finish thesis/dissertation and to this end, acquire the necessary English language capability to allow you to write a comprehensive thesis
- Communicate your timeline to graduation clearly, and allow sufficient buffer time for the PI and committee to read and edit your thesis
- Communicate with me if you want to TA or take on any additional jobs outside of the lab. As a general rule, any time spent away from the lab will slow down your research work, and the PI reserves the right to reduce the stipend accordingly
- Optional but highly encouraged: attend departmental seminars and/or training courses
- Optional but encouraged as you become more senior: mentor undergraduates in the lab

c. Specific expectations of postdoctoral fellows

- Finish all PhD related matters in a timely manner
- Together with me, you will develop project ideas, including independent projects that can be taken with you
- Apply for appropriate funding opportunities
- Prepare for weekly 1:1s and yearly review meetings with me
- Be proactive with all safety requirements
- Write and submit manuscripts for at least 2 peer-reviewed publications
• Contracts are renewed on a yearly basis
• Communicate career goals with me
• Optional but highly encouraged: attend departmental seminars and/or training courses
• Optional but encouraged: mentor undergraduates in the lab

d. Specific expectations of undergrads
• Decide and agree upon a defined schedule for work hours in the lab
• Arrive on time to all lab meetings and designated lab hours
• Be proactive with all safety requirements
• Start and end the week by meeting with specific mentor to outline the goals of the week, and discuss progress and plan the next week
• Prepare for weekly 1:1s either with me or direct lab mentor