

## **JPL Origins and Habitability Lab (OHL) Code of Conduct**

In this Code of Conduct, “OHL member” refers to any member of the OHL research group (in person or remote interns, postdocs) as well as to anyone participating in OHL group meetings and activities even if you are not a formal member of the lab (e.g. visitors or collaborators who attend OHL group meeting or lit club).

### **Overview:**

In the OHL, we value the safe and enthusiastic participation of all group members. Our success as a research group relies on maintaining and providing each other a fulfilling, respectful, and enjoyable research experience. This code of conduct will be adhered to by every OHL member: students, interns, postdocs, research visitors, collaborators.

This code of conduct supplements, and does not supersede, policies from Caltech/JPL / Education or Postdoc Office / intern programs for your level of employment or study.

### **Inclusivity and Diversity:**

We value an inclusive and diverse research environment that makes all OHL members (whether remote or in person) feel safe, secure and supported. All OHL members are thus required to promote a harassment-free experience for everyone, regardless of gender identity and expression, sexual orientation, disability, physical appearance, body size, race, age, and/or religion. We do not tolerate harassment by and/or of OHL members in any form, and expect all OHL members to support each other in upholding the following principles. If you feel at odds with any aspects of the following, you are expected to discuss these with the PI's at the earliest opportunity.

- All communication, be it online or in person, should be appropriate for a professional audience, and be considerate of people from different cultural backgrounds. Sexual language and imagery is not appropriate at any time.
- Be kind to others, and do not insult or put down other group members. Be open to receiving feedback on your behavior if it is hurting other team members. We acknowledge that we will grow as a team, and learn from each other.
- Behave professionally. Remember that harassment and sexist, racist, or exclusionary jokes are not appropriate.
- Harassment includes offensive verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of discussions, inappropriate physical contact, and unwelcome sexual attention.
- Participants asked to stop any harassing behavior are expected to comply immediately.
- Online communication may be public, such as in social media or via (purposeful or inadvertent) forwarding of emails. It is often sensible to be explicit if you require items to remain confidential, though note that we will try to be discreet where possible.
- It is often best to resolve issues through direct communication with the individual in question and/or conversation with the PI, rather than gossip or talking behind someone's back.

- Contribute to discussions with a constructive, positive approach.
- The OHL has a non-hierarchical structure of learning and teaching, e.g. postdocs may be learning from / trained by undergraduates or grad students or vice versa, depending on the research. All members should be respectful to one another and promote an environment of inclusivity particularly in terms of listening to other lab members' professional / scientific expertise, even if they may not be “above” you in the traditional science hierarchy.

Socializing outside of work provides opportunities for informal communication; this can be a great way to strengthen relationships. OHL members should feel welcome to plan social activities, and sometimes the PI's may also organize some activities. However, please keep in mind that the social behavior / social traditions of a lab group affects group's diversity and inclusion, and thus our overall success. Please consider the following aspects and try your best to promote a positive and inclusive lab social environment for yourself and others.

- It is never required (explicitly or implicitly) to attend social events. Do not pressure others to attend or participate in a social event.
- If planning a lab social event – it is most considerate to reach out on one or more of the group communication platforms (e.g. OHL slack) so that everyone is aware and invited.
  - It is fine to invite a sub-set of the group for a focused event (e.g., meetup for CSULA interns) but then please be considerate to invite the whole sub-set.
- Think about whether the particulars of your activity could be more inclusive. Some details to consider include: cost, proximity to transit, seating / disability access, non-alcoholic options, age limits, the food available/provided, welcoming and appropriate atmosphere.
- Socializing with coworkers should not be a requirement to succeed in science. Keep work meetings during work hours so that people are not (even unintentionally) penalized for not socializing.
  - Discussing work in an informal setting is a natural part of socializing with coworkers. However, be conscious of whether a conversation in a social setting has taken a turn into a work meeting in which others who are not present should have input or would greatly benefit. In this case, re-visit the conversation in a work context (schedule a meeting; give an update at group meeting; put it in email). Use your best judgement: the goal is to foster an environment where important career / science conversations are equally available to all OHL members, not just those who want to or are able to attend social events.
- Even in social settings, OHL members are expected to treat one another with respect and abide by the anti-harassment guidelines above.

For those OHL members who are formally affiliated with JPL / Caltech, there are JPL and/or Caltech resources and procedures for reporting of incidents that you can utilize; we will provide this information at the start of your internship or postdoc with us.

### **Group Policies and Expectations:**

**Working hours:** The OHL does not have specific working or “on lab” hours; your individual schedule will depend on your research and will be arranged with your mentor. **Student interns**

**cannot work alone in the lab and must coordinate with a supervisor. (Availability of supervisors is coordinated as a group in lab meeting).** Typically lab members are only at work during Pacific Time business hours; there is no expectation that you will be in lab on weekends or evenings. JPL is on the “Regular Day Off” (RDO) schedule where we work 9 hours a day and then every other Friday is a day off; the PI’s keep this schedule and you are encouraged to as well.

All members are required to attend weekly OHL group meeting; as of Jan 2023 this is 3-4pm Pacific Time on Tuesdays and is hybrid virtual (we meet in a room at JPL and on WebEx). OHL group meeting is immediately followed by lab meeting, which is required for all personnel who work on site at JPL.

**Holidays / time off:** You are encouraged to take vacation, holidays, and mental health / sick days as you prefer to maintain a good work/life balance. Please let the PI’s know in advance (in a JPL email) when you are taking time off. We are supportive of you doing so but it helps us logistically to know because: a) during vacation your charging to our grants is different so it helps to know when the explanation is simply “people were on vacation”; b) for interns, we need to email the Education Office a week or two in advance to pause your stipend for vacation, to avoid time-consuming stipend corrections later on; c) if other lab mates were planning around you being in (e.g., supervisors) then if you need to take a sick day it is considerate to ping the OHL slack so that colleagues can adjust their schedule accordingly.

**OHL Group meeting policies:** Group meeting consists of an intro of general updates (logistics items relevant to the entire group, that will be on slides), “walk-on’s” (group members’ science activities e.g. papers / grants, that are verbally mentioned), and a presentation. All members can contribute to the general updates by adding to a document on the OHL shared drive by noon the day before the meeting (so that we have time to update slides and coordinate with presenters depending on the length of updates). All OHL members are required to take turns presenting at group meeting. These are closed presentations so you can share unpublished data. If you suspect someone is sharing data in group meeting that they should not be, or is sharing OHL unpublished data outside of group meeting, please bring this up with your mentor and/or the appropriate PI. We do not do “guest” presentations because we want the meeting to be an ongoing conversation over the months with people who have been seeing each other’s talks. So, if you’re a new collaborator and want to join group meeting, we want you to attend and participate for a while before you take a turn presenting. To invite someone to a group meeting, ask the PI’s first.

**Other responsibilities of OHL members:** All OHL members, including remote interns or collaborators who attend group meeting, will complete any applicable items on the “OHL checklist for new personnel” (you do not have to do the lab items if you are not in lab, but the list also includes administrative items such as being added to the relevant calendar invites, and introductory meetings with PI’s and other lab mates). Everyone participates in “all-hands OHL” activities including weekly group meeting, lab meeting, occasional seminars. There is an optional but highly encouraged astrobiology journal club run by OHL postdocs. All OHL members will also participate in general lab upkeep – e.g., lab cleanup, chemical inventory, assisting with equipment maintenance. In addition each OHL member will be assigned a “lab role” where they will be trained to become the point person for an instrument or technique; this

helps the group retain knowledge and is a good way to learn something new that you can put on your resume. Everyone has to complete required JPL lab trainings, as well as possibly some other trainings depending what you work on. Depending how your research is funded, you may also have “project meetings” for that grant, and may help the PI by giving input for project reports or reviews. OHL members also interface with external collaborators as appropriate for their research.

**Responsibilities of mentors:** A mentor is the direct research supervisor of a student or postdoc; in the OHL there are various people who may serve as informal mentors but your primary mentor has certain responsibilities. These include: the mentor will make themselves reasonably available to advise the mentee and answer questions; the mentor will clearly relay their expectations for performance to the mentee and will inform the mentee if expectations aren't being met; and the mentor will act in the mentee's best interest and make reasonable effort to help them achieve their research and career goals. However the details of mentoring plan and philosophy will vary among mentors, so we advise asking about this when you have your first conversation with a PI / mentor upon applying to the OHL.

**Lab spaces / equipment:** The lab is a shared space and we need to be respectful within our group. This means keeping the lab clean and safe. You are expected to clean up after yourself and to be respectful of shared instruments.

As in any lab environment, you should not touch or use anything that does not belong to our lab group or go into another lab groups' space unless you have permission. If you want to use some equipment that belongs to another lab, the correct procedure is to talk to your PI / mentor, and they will approach the other PI to discuss (interns and postdocs from another group do not have authorization to let you into their lab; make sure both of your PI's are looped in). If someone from another lab group approaches you to use something in the OHL, talk to your mentor / PI and they will discuss with the appropriate PI.

For equipment / consumables / chemicals that the OHL owns, you should still discuss your plans at lab meeting and with your mentor because different items have different responsible users and procedures. For example, we may have allocated a bench for certain types of experiments only; a chemical may be restricted to use by one lab member for contamination reasons and we would buy you your own; the analytical equipment is restricted until you have completed a training and a specific lab member has certified you. Even within the OHL, different items are supported by different people or grants, and so you must talk to the “person in charge” of that item before using. For example, you may not submit samples for NMR unless you have communicated with the PI of the grant who pays for the NMR bill; you may not put things in the glove box unless you coordinate with the lab member in charge of the glove box.

All lab members are expected to follow JPL safety rules and failure to do so may result in loss of lab access. All OHL members will complete the “OHL checklist for new personnel” (which includes safety on boarding procedures) when they begin their work, and the “OHL closeout checklist” when they graduate from their time with us (which includes rules for data transfer).

**Communication:**

Generally, we urge OHL members to be over communicative rather than under communicative – it is completely fine to send an email just as a FYI or to reiterate an in person discussion, to CC a labmate or your mentor, post or reply on the Slack, or bring up an issue in your mentor meetings or lab meeting even if you're not sure if it's important. It is easier to deal with things before they become big problems, so we encourage you to communicate early and often about whatever is on your mind. It is expected that you will read all OHL communications promptly and respond accordingly, and that you will reach out if there is anything the PI's, your mentor, or labmates should know about.

We use a variety of communication tools; below are some guidelines for how we prefer you to use them:

**OHL Slack:** The majority of group and lab communication occurs on the OHL Slack channel. Before COVID, we were all in lab all the time and the resulting unplanned, informal interactions were critical in keeping our lab protocol / cleanliness / safety to a high standard. Now with our hybrid remote work situation, the OHL has adopted Slack as our way to “all be in the same room” and to promote a communicative atmosphere for lab questions and safety, between people working from different locations. In order for this to work, **OHL members need to monitor the Slack channel continuously throughout working hours** and we need group members to be interactive and communicative on Slack, whether you are on lab or working from home (WFH) that day. Some common uses of OHL Slack include:

- Posting completion of lab tasks as a record (e.g., changing a gas tank or glovebox catalyst)
- Posting for awareness of safety related items (e.g., that a hazardous chemical is open, or a hot reactor is cooling in the sink)
- Ordering (taking polls / lists and record of who ordered what)
- Time sensitive questions and requests from those in lab to those WFH and vice versa.
- Coordination of delivering samples to Caltech or running samples on our instruments
- Coordinating lunches, meetings, visitor escorts, service visits, equipment maintenance
- Lab cleanliness issues and tasks

Slack etiquette:

- It is good to at least react so that we know you have seen the post.
- To respond to something – comment on the post so that comments are nested, rather than leaving a new post (don't use Slack like instant messaging when it is to a group).

**Email:** In the OHL we use email for one on one communication (e.g., research updates to your mentor), feedback on slides or documents, setting up meetings using calendar appointments (see below), requests for reference letters, or larger memos. It is expected that you will monitor emails from mentor, PI, and anything to the OHL email list and respond accordingly. It is recommended that if you have a meeting or conversation in person or on Webex, to follow it up / summarize with an email, so that we can put it on file or as an action as appropriate.

**Meetings & Calendar:** In the OHL most things are formally scheduled as a meeting - “if it's not on the calendar, it doesn't exist”. If you want to schedule a chat with someone, send them an email to coordinate followed by a calendar invite that specifies the purpose of the meeting, and

specify whether the meeting is virtual (provide a Webex link) or in person (provide a location). To move / cancel a meeting, always follow up the email or conversation with editing or deleting the calendar invite.

In a “hybrid virtual” meeting (where participants are both in person and virtual), all participants in the conference room should individually log into WebEx and mute (so they will show up to the virtual attendees), and when speaking into the room mic, identify themselves so that virtual attendees can tell who is speaking. **Hybrid virtual meetings are different than meetings that are in person; it is important for whoever is running the meeting to make sure the conversation is fully inclusive to those who are attending virtually.** This means, e.g., using the white board features in Webex; sharing slides on Webex rather than on the projector in the room; monitoring raised hands online; taking turns speaking; using cameras when possible.

## **Publishing and Data Management**

### **Manuscripts:**

All in progress research projects in the OHL will be presented (usually multiple times) at group meeting. Authorship on any manuscript will be discussed with the relevant OHL members involved in the work, each author should be aware of who else is an author on the publication, and should include everyone who has made a significant contribution to the work. Author order will typically follow traditional chemistry conventions of the first author will be the student or postdoc leading the study, and last author will be the PI; the PI will be a corresponding author and in some cases (if the journal allows it, and both parties agree) the first author may also be corresponding author if they wish. The order of authors should be discussed early and often throughout the research progress and manuscript preparation; when conflict arises, the PI will facilitate discussion to help resolve this. Do not invite someone to be an author on a paper without permission from the PI. In general, talk to your PI first before you involve another lab member or collaborator in your research project (e.g. having a different person than planned run your samples), because this can lead to a conversation about authorship.

**All authors must have provided written acknowledgement in order to submit a paper for peer review. Unpublished paper drafts should not be shared with anyone outside the author list except by permission of the PI. JPL requires all manuscripts be approved by URS before submission to a journal.**

### **Conference posters and talks:**

**All data presented on conference slides or on your conference posters, as well as conference abstracts, must be approved by your mentor prior to printing the poster or giving (or recording) the talk.** This is for the lab group’s benefit; we are trying to make sure that the students and postdocs will be able to publish their data in peer-reviewed manuscripts and not be ‘scooped’. All data presented in a talk or poster should be your own; any inclusion of a lab mate’s data must be discussed and approved by the researchers in question and their PI. All contributors to the data presented on the poster / talk should be included as authors and/or properly acknowledged. The PI’s are available to give guidance on these matters.

There are also various JPL specific procedures and restrictions for conference presentations; discuss early and often with your mentor about the details of your conference travel. **JPL requires all conference abstracts, posters and talks be approved by URS before submission to a journal or conference.**

### **Thesis work:**

Sometimes, OHL interns do work that will be published in peer-reviewed journals as well as included in their Ph.D. or M.S. thesis. This is encouraged, but note that for certain journals, it is required that the work have not been previously published in order to submit. In this case we would work with your university advisor to embargo your thesis until the journal paper is published. So it is good practice to involve your OHL mentor and your university advisor together in conversations early on about what material will be in your thesis, and what the publishing plans and timeline are for your JPL work.

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