IMPACT Lab Policy

Acknowledgement

This document was inspired by the lab policy of the Emotion and Social Cognition Lab at the California Institute of Technology and the Social Computation Representation And Prediction Laboratory at Dartmouth College. This document is work in progress - please feel free to let Chujun know if you have any feedback and ideas on improving the lab policy.

Lab Philosophy - RHO ρ

<u>R - respect</u>

Treat others the way you want to be treated. Understand that individuals are different, having different habits and ways of thinking. Respect others even if you do not agree with them. It is also important to respect yourself. Be proud of your strengths, use them to help other people, and also accept your weakness. Whenever you feel disrespected, speak up.

If you face or observe any forms of discrimination (e.g., based on race, age, gender identity, sexual orientation, national origin, religion, medical condition and disability, mental health, marital status, socioeconomic status) or any forms of harassment (e.g., gestural, verbal, written, physical including sexual and aggressive harassment), let Chujun know immediately.

H - honesty

Conduct research honestly and rigorously. Never fabricate (e.g., make up data), falsify (e.g., change the data), or plagiarize (e.g., copy what others wrote). Copy-pasting what you wrote in your own prior publications and using it in another new publication also counts as plagiarism. Any forms of research misconduct will be destructive to the field, the public, and the entire career of yourself and others who work with you.

Conduct research carefully. Develop a clear plan for your research question, hypotheses, procedures, and analyses before you start carrying out the research. Report your results truthfully and never cherry-pick. Pay particular attention to your code, adding clear comments and testing it section-by-section to make sure it is actually doing what you want it to do. If you make a mistake, do not panic, let Chujun know and we will correct it and learn from it together.

O - openness

Your needs and opinions are valuable and unique. Be open to communicate them to Chujun and others in the lab. Always feel free to ask questions if there is anything that is unclear to you, speak up if you have a different perspective, and provide constructive feedback whenever you can. Keep an open mind as you receive constructive feedback from others and encounter different research ideas and approaches.

If you are struggling with personal or professional issues, be open to seek help. Feel free talk to Chujun and others in the lab. The process of verbally describing a difficult problem to others will in itself help you think about the problem more clearly from a different perspective. If you want to talk to someone outside of the lab, contact <u>Counseling and Psychological Services (CAPS)</u> at (858) 534-3755 if you are a student, or <u>Faculty and Staff Assistance Program (FSAP)</u> at (858) 534-5523 if you are a postdoc, staff, visitor, or household member of campus employees.

General Lab Policies

Safety and Health

Please make your safety and health, including physical and mental health, your priority. Please sign up for <u>the Triton Alert Emergency Notification system</u> and familiarize yourself with other resources for <u>Campus Safety</u>. If you happen to work late, call (858) 534-9255 to request a safety escort. Please wear a helmet (and reflective tape/light) while on bikes and scooters.

Please make sure you secure enough time for sleep every day, ideally at least 7 hours. Please also make time for exercise every week. If you are sick, feel free to reschedule meetings and other obligations. If you catch a cold / contagious illnesses, do not come to the lab. On a longer timescale, please consider taking time off to visit family, friends, or/and new places.

Work Hours

Working hours are flexible. If you are an early person, you may start the day earlier and wrap up earlier; if you are an night owl, you may start the day later and wrap up later. To promote communications between lab members and with others in the department, you are expected to show up in-person in the lab and arrange your work hours in the lab so that they overlap with the normal work hours.

Please aim to complete research goals efficiently rather than simply work for long hours. Stay focus when you work. You may find it helpful to work on one task at a time and turn off your notifications (e.g., phones, social media, emails). It could be helpful to time your focused work time, so that you know how long you have worked on a task and you can take breaks every hour or two. If you are stuck at a problem for a few hours, take a short break - it will help you think.

<u>Time Management</u>

Good time management is key to achieving your research goals. Some strategies you might find helpful include writing down your goals for a range of time scales - goals for the year, goals for the month, and goals for the day. It might be difficult to estimate how much time you need to complete a task and new tasks that you have not planned will come up. So don't feel discouraged if you need to adjust your goals often or if you have not achieved the goals you have planned.

Writing down goals also help with not forgetting urgent tasks (e.g., deadlines) and realizing how much you have accomplished when you look back. If a goal is big (e.g., completing data analysis or a manuscript), break it down (e.g., analysis for hypothesis 1, 2, 3, etc.; writing different sections of the introduction, such as the motivation, literature review, existing challenge, present

research overview, etc.). If a goal has a deadline (or self-set deadline), start with the deadline and plan backwards to see when you need to accomplish each component of the goal.

There are also strategies for using your time more efficiently every day, such as starting your day with working on the most challenging and important task (e.g., research, such as analyzing data or reading papers), then less important but urgent tasks (e.g., classes, such as homework), and finally less important and not urgent tasks (e.g., checking emails, TA related tasks). It may help to end your day with reviewing your accomplished goals today and your goals for tomorrow.

Don't feel discouraged if you find that you have not accomplished much in some days or some weeks. People's productivity fluctuate from time to time, and some of the most seemingly unproductive time may turn out to be the most productive and necessary periods (e.g., when you are slowly learning new topics or methods). If you feel uncertain or unhappy about your research productivity, work-life balance, and related issues, talk to Chujun.

Deadlines

As mentioned above, if you have a deadline, please plan ahead (i.e., break it down into small tasks and use backwards planning to identify the date by which each task should be completed) so that you are not rushing at the last minute. If your deadlines require inputs from others (e.g., obtaining feedback on a manuscript), please notify others ahead of time.

Please notify Chujun two to three months ahead if your deadline requires back-and-forth revisions between you and Chujun, such as manuscript submission and revision, statements for grad school/postdoc/faculty application, fellowship and grant submission, etc. Please notify Chujun two weeks ahead if your deadline does not require a lot of work, such as providing feedback on conference submissions, filling out paperwork, etc.

Lab Maintenance

To ensure the security of personal belonging, equipment, and human subjects' information in the lab, please close both exterior doors when no one is in the lab. For the security of electronically stored human subject's information, be cautious of scam that could compromise our electronic infrastructure such as phishing emails and suspicious websites. In particular, Chujun, or any other faculty and staff members will never send you emails with urgent request for help.

Please keep the lab space tidy and clean. Keep items on your own desk and those in the common lab space organized. Please dispose food waste and associated detritus to the trash cans outside promptly. Try not to spill liquid or food on the floor; if you do, please clean up promptly. Please treat lab equipment and furniture with care.

Most of your labmates will be working at the open lab space, which is sensitive to noise. Please be cautious of the noise you may be producing. Use a headphone if you need to listen to audio in the lab. Use the testing room, the individual office, or the conference room in the lab or find a place outside of the lab if you need to have a virtual or in-person conversation, discussion, or meeting with other people.

Lab Meetings

Lab meetings will be held once a week for around 1.5 hours. These meetings are for lab members to present their research ideas or/and data and receive constructive feedback. Each senior lab member (i.e., postdocs, grad students, visiting grad students) is expected to present at least once per academic quarter. We may also discuss recent papers and invite speakers from other labs to present at our lab meetings. Lab meetings are mandatory. Please show up promptly.

To facilitate bounding between lab members and encourage better mental health, Chujun will also organize non-work-related social events. These may include lab lunches and dinners, group sports such as hiking, visits to fun places such as zoos and museums, etc. Please let Chujun know your preferences so that we can make sure social events are inclusive, taking each individual's preferences into account. Social events are not mandatory but you are encouraged to participate.

One-on-one Meetings

Each senior lab member will meet with Chujun one-on-one weekly for 1 hour. These meetings are for each lab member to have guaranteed, undivided attention from Chujun. They are an opportunity for you to update Chujun with research progress, make plans for next steps, discuss obstacles, talk about project ideas, your short-term and long-term goals, and any other personal and professional issues that you would like to chat about including mental health.

To facilitate a more efficient and organized one-on-one meeting, please document your weekly progress and plans. This document does not need to be formal - just list the content in bullet points. You will open this document when you meet with Chujun to go over what you have done in the past week together. Before the end of the meeting, you will add plans for next week to this document with Chujun. This weekly update could be the same as your goal document.

Do not skip these meetings even if you have not made much progress in a given week. These meetings will be a great opportunity to discuss the obstacles preventing your from making progress and potential solutions. If you don't have much to discuss for a given week, you could keep the meeting short.

Lab Communication

The official language for communication at work is English. Channels for communication in the lab include in-person discussions, online email communication, and online lab calendar. If you have urgent issues to communicate with Chujun, please contact her using Google Chat.

In additional to the meetings mentioned above, if you would like to schedule more time to discuss certain issues/projects/ideas with Chujun, please feel free to let her know in-person or through email anytime. Chujun's office is at McGill Hall 4316.

Money

The lab is funded by Chujun's startup fund and grants. If you would like to purchase researchrelated products or services, contact Chujun before making any purchases. Since there are usually an abundant of suppliers providing the same products or services that you would like, please conduct diligent research to identify the supplier that offers the best possible price.

After any work-related purchases, remember to keep the receipt: if electronic, save it; if physical, take the receipt and keep a photo record of it. If you are using the lab's credit card information for human subject research, store the card information securely: write them down offline with pen and paper, store the card number and security code information separately in two different locations, and never share card information online (e.g., through emails, or photos).

<u>Travel</u>

The lab will support every senior lab member to travel to one conference per year, regardless of whether they are presenting. Attending conferences and other scientific events (e.g., weekly seminars in the department) is important for your career development, helping you keep track of the most recent research topics and approaches and providing you with the opportunity to build connections with other researchers in the field.

For conference traveling, the lab will cover expenses for flight tickets, ground transportation, conference membership and registration, and lodging. Meals are not covered. Please conduct diligent research to keep costs low, such as booking flights and lodging two months in advance, comparing different airlines and airports (e.g., check out Expedia and UCSD Concur), different options of ground transportation (e.g., bus, train, Uber, Lyft), and sharing lodging with others (e.g., share hostel rooms, hotel rooms, or Airbnb rooms).

If you are presenting at the conference, please apply for travel grants. These grants are in general less competitive and will be helpful additions to your CV. For grad students, please look into the <u>GPSA Travel Grants</u> (four rounds per year, please apply early), the <u>Anderson Travel Award</u> (three rounds per year, available for undergrads as well), and specific awards that are generally provided by conferences (e.g., <u>SPSP Registration Stipends</u>).

General Research Policies

Research Integrity

The lab is committed to rigorous and reproducible research. When conceptualizing any new research projects, please devote sufficient efforts and time into addressing the following questions together with Chujun before collecting or analyzing any data.

- WHAT: What is the one big question that your project aims to address? What are the subquestions and your predictions / specific hypotheses?
- WHY: Why is addressing this question important? Why will your approaches advance literature? No one else has studied a question is not a sufficient reason to study it. New approaches that address prior limitations can make studying an old question important.

• HOW: How will you design studies, collect data, and analyze data to test each hypothesis? A psychology publication usually contains two to four studies. If you were a reviewer, how will you critique your designs and methods (e.g., confounds, limitations)?

To promote research rigor, most studies in the lab (e.g., except for small pilot analyses and pilot studies) should be preregistered on the Open Science Framework (OSF). The preregistration will address the above questions, justify sample sizes (e.g., based on power analyses, simulations, etc.), and clarify any contingencies (e.g., how analyses vary depending on the results from other analyses). For multiple planned studies within a project, preregister one study at a time.

To promote transparency and reproducibility, most study materials in the lab, including stimuli (if not from existing databases or participants who do not consent to share), experiment code, anonymized data, analysis code, and data usage instructions should be uploaded to the same OSF project as the project's preregistrations. To protect original ideas, you can keep the OSF project private and the preregistration under embargo until the publication of your project.

To promote accessibility, all papers in the lab will be preprinted on servers such as PsyArXiv before submitting to journals for peer review. The first author is responsible for updating the preprint every time the paper is revised / resubmitted up to acceptance at a journal.

Documentation

Please keep your research files organized. Some helpful strategies include creating different folders for different projects, creating different sub-folders within each folder for different components of a project, and giving each file a name that reminds you what the file is about.

Please keep your code, including experiment code and data analysis code, well commented (e.g., what each section of the code does, if any major changes were made and why). Always test your code using toy data for which you know what the outputs should be to see if it works properly.

Since each study within a project could involve many different components and steps, and may take months to complete, it is not uncommon to forget what one has done for a study after a few months. To free up your working and episodic memories, please keep a summary document for each study. This document should include but not limited to:

- Study design, such as how the stimuli were generated, in which folder they are stored, which experiment code you used to collect data and how it worked (e.g., what stimulus randomization was used, how the stimulus names were recoded, etc.)
- Data collection, such as how the sample size was determined, how the exclusion criteria were determined, when, where, and how the data was collected, how many participants were recruited and what their summary demographic statistics were

• Data analysis, such as how the data was preprocessed, how many trials / participants were excluded and why, what analyses you have done, why you did those analyses and how, where you stored the resulting files and plots

Data Storage

To ensure data security, please store and backup your research files onto the following devices:

- Your laptop: please make sure your laptop is password protected and securely stored
- Microsoft OneDrive: Every one of you (undergrads, grads, postdocs, visitors) has 5TB free storage. You can store and share folders/files on OneDrive. Please <u>sync</u> all research folders/files on your laptop with OneDrive so that they are always automatically backup.
- SSCF (Social Sciences Computing Facility) lab server: whenever you collect new data, they should be stored in the lab server. If you are collecting data online, set the data storage path to the lab server; if you are collecting data in-person, connect your laptop to the ethernet and write the data to the lab server via smb mount. Please properly name your data storage folder in the lab server: your name/project name/study name/data description and date.

Human Subject Research

You must be on an approved IRB protocol to be able to collect data from participants, analyze identifiable data, and be involved in other ways that could have consequences for human participants. You must read and strictly comply with the approved IRB protocol and all its supporting materials that cover your project. Noncompliance with these protocols can lead to severe consequences for the entire lab, including jeopardizing the entire lab's ability to run any human subject research.

If your project cannot be covered by any existing approved IRB protocol in the lab, talk to Chujun about filling an amendment to an existing IRB protocol or submitting a new IRB protocol. You must wait till the amendment or the new protocol has been approved by the IRB to start running your study.

All lab members, including undergrad research assistants, much complete the <u>CITI Training</u>, including the Social & Behavioral Research - Basic/Refresher training course and any other training courses that the specific projects you work on may require. Upon completion, please save a copy of the training certificate and send it to Chujun.

Authorship

Authorship determination in the lab follows the American Psychological Association guidelines,

"Authorship credit should reflect the individual's contribution to the study. An author is considered anyone involved with initial research design, data collection and analysis, manuscript drafting, or final

approval. However, the following do not necessarily qualify for authorship: providing funding or resources, mentorship, or contributing research but not helping with the publication itself. The primary author assumes responsibility for the publication, making sure that the data are accurate, that all deserving authors have been credited, that all authors have given their approval to the final draft; and handles responses to inquiries after the manuscript is published."

The lab member who takes the lead at the start of a new project and follows through the project from start to end can expect to be the first author. The first author is expected to contribute the most to a project, including but not limited to designing the studies, preparing study materials, collecting data, analyzing data, writing the initial manuscript draft, and leading the revisions throughout the peer review process.

Senior lab members are expected to each lead their own projects, with minimal overlap with other lab members' projects. If there is change in the lead role in the middle of the project, first-authorship will be discussed openly among all parties involved. If a project is abandoned by the lead member (e.g., data are collected but not analyzed or written up) after 3 years from the end of data collection, Chujun will re-assign the project to other interested lab members.

Lab members who help out a project in substantial ways may be added to the author list. However, one-time contribution such as providing a few study materials, helping with a small analysis, or providing quick feedback generally do not qualify for authorship, and will instead be mentioned in the acknowledgement.

All issues related to authorship will be discussed openly, in particular, at the start of a new project, so that everyone has a clear expectation of their role and responsibility. If you are not sure of the authorship of yourself or any other lab members in a project, or if you want to modify current authorship status, please bring it up to Chujun. Chujun will typically be the last author.

Recommendation Letters

Chujun will be happy to write you letters if you have been in the lab for at least one year. This rule applies to undergrad research assistants as well. Exception can be made if you are a senior lab member and you are applying for fellowships or grants shortly after joining the lab.

If you need a letter, please let Chujun know as soon as possible with the deadline, application information, and a few bullet points highlighting the content you think are important to convey (e.g., your accomplishments, contributions to the lab, etc.; your goal document may be a helpful reference). For undergrad research assistants, Chujun will ask your mentors in the lab for inputs.

Role-Specific Expectations

Postdoctoral Scholars

Postdoctoral training is key to pursuing an academic career. Postdocs in the lab can expect to receive training in further developing their own research program / identity, learn new research approaches that are different from what they used in grad school and prior training, and connect with other researchers who share similar research interests as them.

Postdocs are expected to share the lab's research interests, but in general with expertise (from grad school training or/and prior postdoctoral training) that is complementary to those of the lab. The research topics of postdocs depend on their funding sources. Postdocs funded by Chujun's startup funding will have a greater degree of freedom in choosing research topics within the lab's research directions. Postdocs funded by their own or the lab's internal or external funding are expected to focus on projects related to the grant.

As the most senior members in the lab other than Chujun, postdocs are expected to share their knowledge with the lab and set a good example for others. This may be implemented through sharing opinions in lab meetings and RA meetings, providing feedback on manuscripts and proposals, and offering help when other lab members encounter obstacles. Postdocs are not expected to mentor junior lab members on specific projects, which is Chujun's responsibility. Postdocs may mentor undergraduate RAs if their projects require RAs and if they prefer.

Postdocs can count on Chujun to provide extensive support for your career development. Chujun will be happy to work with you on your application materials, writing recommendation letters, workshopping your interviews and job talks, guiding you through the job negotiation processes, connecting you with other researchers through research collaborations and conferences, and supporting you for any award and grant applications that you would like to pursue.

Graduate Students

Graduate school is one of the most critical periods for one's academic career. For most grad students, it is the first time they transit from "reading a book" (e.g., learning what prior research has found) to "writing a book" (e.g., conducting their own research to advance psychological science). It is an exciting time to explore one's passions, learn skills, and build connections.

Grad students in the lab can expect to receive training in research methods, including how to conceptualize research questions and designs, how to conduct research in a rigorous way, how to program in different languages and perform statistical analyses, and how to present findings verbally and in written manuscripts. The goal is to figure out your own research passions/identity and grow towards an independent researcher.

Grad students can also expect to receive training in important soft skills that will benefit your career in the long run. This includes problem solving skills (e.g., you may find results that are unexpected and need to figure out why), resilience (e.g., you will encounter rejections but will also learn to embrace them), critical thinking skills (e.g., even published work has limitations), and management skills (e.g., time management and being organized).

To receive the above training, besides coursework, grad students are expected to complete research projects according to the guideline below. Grad students will discuss project ideas with Chujun to ensure that projects are of mutual interest. In addition, grad students are expected to attend departmental seminars as well as attend and present at academic conferences.

- A first year paper: this is an empirical research paper consists of at least two studies; it does not need to be published by the end of your first year, but should be publishable (e.g., careful designs of your question and studies and good research practices help); you are strongly encouraged to discuss your project with Chujun as soon as the Fall quarter starts, and aim to develop a clear plan and complete the preliminary meeting with Chujun and one additional faculty member of your chose (Chujun will guide you on this) by the end of the Fall quarter of your first year.
- A qualifying paper: you may choose the qualifying exam instead of qualifying paper per the department guideline; Chujun recommends the qualifying paper; this is a review-/perspective-style paper; it does not need to be published but should be publishable (e.g., presenting a unique perspective instead of merely summarizing past research helps); you are strongly encouraged to discuss your paper proposal with Chujun starting your first summer; you are required to form a qualifying committee (i.e., identifying one additional faculty member besides Chujun, again Chujun will guide you on this) by Sep 1st of your second year, and complete the paper proposal by Oct 1st of your second year.
- A second empirical paper: this is not explicitly required in the department guideline, but it is commonly expected that as grad students work on their qualifying paper, they also continue conducting empirical research in their second (and third) year; this will be make your life much easier when putting together your dissertation later (see below) and very helpful if you are targeting an academic career; you are encouraged to discuss your project with Chujun around the Fall and Winter quarters of your second year.
- Dissertation proposal: your dissertation will in general consist of your qualifying paper (as introduction/discussion chapters), your first and second empirical papers (as independent chapters), and your third empirical paper that you will complete during your fourth and fifth years (as another chapter); this will in general save you from spending too much extra time on obtaining your degree apart from your career goal (e.g., working on actual publications that are critical for your academic career); you are encouraged to discuss your third empirical project with Chujun during your third summer, and develop a clear plan for your third empirical project and thus your dissertation proposal by Sept 1st before the start of your fourth year; if your first and second empirical papers happen to be big, you may discuss with Chujun about other options for your dissertation (e.g., using individual studies as chapters); you are also required to form your dissertation committee by Nov 1st of your fourth year.
- Grad students in the lab are expected to graduate in around 5 years; if you prefer, you may take an additional half, or one year at most, to wrap up your existing projects and apply for the next position (e.g., postdoc); by the end of grad school, most grad students can expect to complete around three empirical research projects where they are the lead researcher; during your first three years, please do not worry too much about how to tie together your research projects into a coherent program a coherent program is never defined in a narrow sense and it is never difficult to tell a coherent story in retrospect; instead, when planning your projects, you are encouraged to focus on developing interesting research ideas and methods.

Considering that the first two years will be particularly challenging for grad students as you are trying to settle in grad school and fulfill your research, coursework, and TA requirements, grad students in the lab are not expected to mentor any undergraduate research assistants in their 1st and 2nd year. This will also be helpful for grad students to learn every aspect of completing a research project as they need to complete it by themselves. Starting from the 3rd year, grad students may recruit undergrad research assistants if their project has such a need (e.g., the project requires running participants in person).

Visiting Graduate Students

Grad students and scholars from other institutes around the world are very welcomed to visit the lab, ideally for at least one year. Visitors can expect to be the lead researcher, and thus the first author, for at least one research project. Besides research and technical skills, visitors can expect to receive training in important soft skills, including communication and organization skills (e.g., presentation, time management, goal planning), and build professional connections with other researchers through attending departmental seminars and regional conferences.

Visitors are part of the lab's senior members. You are expected to fully engage with the lab through conducting research, attending and presenting at lab meetings, participating in lab social events, and meeting with Chujun weekly. Visitors should be fully funded by their home institute for the entire duration of the visit.

Undergraduate Research Assistants

Undergrad research assistants typically join the lab through PSCY199 and other undergrad research courses. RAs can expect to receive training in research topics and methods, research procedures (in particular, open science practices), programming skills, statistical skills, communication skills (e.g., giving presentations), organization skills (e.g., time management, goal planning), and professional development (e.g., pursuing a scientific career).

RAs will receive the above training through working closely with one of the senior lab members on their research projects and attending weekly lab meetings. RAs are expected to work in the lab for at least 12 hours per week (you need to be physically present in the lab), meet with senior lab member mentors for 30 minutes to discuss progress once a week, show up for lab meetings, present at the end-of-quarter lab meeting, and meet with Chujun at least once per quarter at the beginning of the quarter. You are encouraged to keep a weekly progress document that keep track of your to-do list every week and your progress.