

Lab Manual

This lab manual lays out what we work on, how we work together, and what we expect from one another. It's a living document that will be updated as required.

Mission

We work towards a **unified theory of human cognition**, taking the form of computational models that can simulate, predict, and explain human behavior across a wide range of situations. That involves solving several challenges:

- **The engineering challenge:** How do we build such models in the first place?
- **The scientific challenge:** How do we use them to understand something about human cognition?
- **The applied challenge:** How do we translate this understanding into real-world applications?

Beyond this, we are interested in automated scientific discovery, alignment, and cognition in naturalistic environments.

Roles

- **PI:** sets research direction and works closely with every member on their projects.
- **Postdocs:** establish their own research programs in collaboration with the PI.
- **PhD students:** grow into fully independent researchers over the course of their PhD.
- **Research assistants:** get their first research experiences.

Expectations

Working together. The core office days are Tuesday to Thursday. Everyone is expected to be present in the lab on those days (of course excluding vacation, sickness, or emergencies). Research assistants are expected to be in the lab one or two days a week, depending on their contract. We hold a weekly lab meeting with expected attendance. Be on time, communicate when you can't be, and keep shared spaces tidy. The lab language is English and our main communication channel is Slack.

Research norms. Everyone, including research assistants, fully owns their main research project. If you contributed to a project, you will be a co-author on an eventual publication, and authorship order is discussed early. I expect a first draft with the majority of results and story four weeks before a deadline — otherwise we don't push for it. We make all our data and code open-source whenever possible.

Supervision

Meetings. We meet weekly one-on-one — use the time as you want, whether for project updates, research discussion, or career advice. These meetings may become less frequent as you grow more senior. We also hold appraisal meetings, where we can discuss more high-level topics, every six months. If you have any criticism, worries, or anything else, please bring it up as early as possible. Furthermore, we will organize a lab retreat once per year.

Trajectory. Your first project is closely staked out and supervised, usually within my own core expertise and lower-risk by design, aiming for a publication within a year. Independence grows with each subsequent project, with the goal of full scientific independence by the end of your PhD. Postdocs are expected to develop their own independent research program with the help of my input. My main goal is to equip you as best as I can for your next position.

Logistics. The default duration for a PhD is four years, with funding guaranteed for the full duration. PhD students enroll and graduate via [IMPRS-IS](#). Lab visits and internships of up to six months are encouraged, and I'll help facilitate them where I can. Travel for conferences defaults to one international and one close-by conference per year, with a summer school encouraged early in the PhD, and anything beyond that is case-by-case.

Wellbeing

If you are ill or need time, stay home and take care of yourself. You are not expected to work weekends, holidays, or late nights. We own our mistakes, stay honest, celebrate our wins, and — most importantly — have fun. The lab must be free of harassment and discrimination, and we are committed to a diverse, inclusive environment where people of all backgrounds can do their best work.