

# General Expectations of Tonks Group Members:

## A. Expectations of Students and Postdocs

Above all else, I want you to be excited about your project and excited about science. If you're passionate about your research, you will be in lab enough to get good work done and be driven to learn what's necessary to be an expert in your field.

One of our collective goals is to establish a group culture that is **excited**, **friendly**, **creative**, **collaborative** and **supportive**. I believe that this culture is critical for developing creative and independent thinkers and for **including** students of different learning styles, personalities, and backgrounds.

Below is a list adapted from Bill Tolman's "*Attributes of an Excellent Student (and Postdoc)*." I think that the points addressed in this list speak to my general desire for nurturing lab culture.

1. **Take intellectual ownership of the thesis project as soon as possible.** This means, among other things, making choices about the next steps in research based on what you think should be done, rather than on what you think your advisor wants. In the end, you should become the world's expert on your thesis topic, prior to the PhD final oral exam. One essential step to this end is to read the literature regularly and thoroughly.
2. **Be professional in all things.** This means, among other things, showing up to all meetings on time; making all written and oral presentations clear and of high quality. Take TA responsibilities seriously. Keep a good lab notebook. Follow good safety practices at all times. Behave in an ethical manner (properly attribute all work in written and oral presentations, don't plagiarize, etc.).
3. **Be completely reliable.** This means, among other things, that your advisor can trust your experimental results, can depend on you to do the appropriate control experiments, and that you report exactly what happened, not the results you think your advisor wants to hear. (*IAT: and that you reliably maintain/properly use equipment and adequately perform your group jobs*) Honesty and integrity are expected at all times.
4. Develop your critical faculties, and apply them both to your own work **and to the work of others**.
5. **Be intellectually curious.** This means, among other things, attending seminars outside your area, reading outside your area, and asking questions at seminars and group meetings.
6. **Work hard.** Assess your level of effort on the basis of what you have actually accomplished, not just on the time you have spent. (*IAT: I will not be keeping set hours for work. However, the nature of synthetic chemistry requires 50-60 hours a week to make reasonable headway in most projects. Prudent planning and execution is critical to succeeding in a timely manner: remember, quality and efficiency, not quantity! You will be happier this way anyway.*)
7. Be a cooperative, collaborative, and enthusiastic member of your research group. (*IAT: Freely offer help and ideas to your labmates; mentor younger students; talk about chemistry and **be excited about science!***)

8. **Talk to Ian** and ask for help if you need it. Communication is absolutely critical, on many levels. I am a good resource for chemistry advice, and you should utilize that resource (but not have it be a crutch). Furthermore, I want you to be happy and I want you to succeed. *If you ever have a problem with anything*, come talk to me. We will figure things out, or find the right people to do so.

## B. Expectations of Professor Tonks:

My job as your research advisor is to mentor and provide you with the tools necessary to help you grow as a scientist, independent thinker and person. In addition to holding me to the expectations above, if you commit on your end, I am committed to (amongst other things)...

1. **Be your advocate** during defenses, presentations and in the lab. It is expected that ultimately you will be able to defend your own ideas and articulate your chemistry, but during the learning process I will be there to help as necessary.
2. **Participate in the creative process** for your project, if my help is wanted or needed, and in general keep up to date, informed and active with student projects.
3. **Set high expectations and goals.** You have to shoot for the stars to reach the moon.
4. **Give timely and constructive advice and criticism.** The only way to improve is to know when something is awry. I will provide critiques and advice in a timely manner such that you can grow and improve.
5. **Support travel to conferences and presentations.** This is somewhat funding-dependent but I will financially support, as much as possible, students in good standing who wish to present their research at conferences.
6. **Edit, critique and publish your work in a timely manner.** I expect students to write initial drafts and work closely with me on manuscript preparation.
7. **Foster a positive and nurturing work environment.** I am not your personal arbitrator and expect students to resolve their own conflicts, but I will set a positive tone for the lab and step in when absolutely necessary.
8. **Support your career decisions.** Not everyone wants to stay in academia after grad school; not everyone wants to stay in *chemistry* after grad school. I will give you my honest opinion on your decisions, but ultimately it's your choice. As your mentor it is my duty to guide and support you in achieving whatever your goals are.
9. **Write an honest recommendation letter.** This is important on many fronts. If you have exceptional qualities and have met/exceeded expectations, I will make sure to highlight your

accomplishments. Likewise, I will *not* dilute the strength or integrity of my recommendation letter by exaggerating recommendations for poor students.

By signing below, you indicate that you have read and understand the content of this document.

Name: \_\_\_\_\_

Date: \_\_\_\_\_