

UCI Chemistry pre-IDP Self-Evaluation

[Adapted from [this form](#) by © Karen M. Ottemann, 2002; with revisions from Prof. Anne McNeil and Prof. Jen Prescher]

The purpose of this self-evaluation is to help you become a better scientist and to help your advisor become a better mentor to you. Look through the following areas of lab performance and consider how you do each task now, and what you could do better in each case. You do not have to write anything down; the form will not be collected. Just give the questions some thought as you prepare the IDP and before you meet with your advisor to discuss the IDP. If there is anything that you would like to discuss further let your advisor know during your IDP meeting.

Please start by thinking about these three questions:

- Why are you in grad school?
- What are your goals for your time here?
- What do you want to do in the future?

The following list can be viewed as a set guidelines that clearly spell out what the most successful scientists do in their daily/weekly work environment.

A. Experimental

Experiments should be planned in advance, well thought-out, controls included, and accurate.

- Do you perform experiments with enough rigor to justify conclusions?
- Are you displaying appropriate independence? Do you think through experiments on your own? Do you ask for help when you need it?
- Do you know when to quit, change plans or conclude you have done the experiment enough?
- Are you keeping the end goal in mind—what would be in a paper if you were to write one, or holes in your research that would prevent you from drawing conclusions?

B. Productivity

You will always be measured first and foremost by your productivity in the lab. What you accomplish in your time here and who you are as a scientists will determine what career opportunities become available to you. In short, you get what you earn.

- Are you carrying out experiments in an efficient way?
- Are you doing “enough” to accomplish your goals? Should you spend more time carrying out experiments? Are you “fully engaged” during the time you are in the lab?
- Do your at-work hours overlap with those of others so you can both help others and benefit from them?
- Are you prioritizing/doing experiments in an order that allows you to get the most done with your time?

- Are you focused when you are in the lab? Should I be aware of any issues that affect your focus?

C. Notebook, Record Keeping and Organization

- Is your notebook thorough (each experiment described as to methods, results clearly articulated, conclusions and a discussion)?
- Is your notebook kept up-to-date? Or are you writing too much on scraps of paper, and are these bits not being transferred in a timely way to a real notebook or file?
- Is the Table of Contents in your notebook up to date so someone else can easily find an experiment?
- How are you organizing your literature/papers—can you find papers in a timely manner?
- Are you constantly stepping back and thinking about the bigger picture (future papers)?

D. Gain of Scientific Knowledge and Critical Thinking

Your learning curve in graduate school should be exponential, not linear. You should be actively working on expanding your breadth and depth in scientific knowledge. Those with high scientific knowledge (along with high productivity) will have the most options available for a future career.

- What steps are you taking to expand your scientific knowledge on a daily/weekly basis?
- What journals do you regularly look at?
- Are you thinking critically about your experiments? How about finding alternative approaches by searching the literature or talking to others?
- What on-campus seminars do you regularly attend? Is there a way you could improve your participation/what you learn from these?

E. Communication

1. With your PI:

- Do you discuss your results/what you are up to regularly (via Slack or in person)?
- Are you happy with your level of interaction with me?
- Do you seek me out when needed, but operate independently where appropriate?
- Do you answer my requests for more information promptly?
- Do you finish manuscript drafts or other assignments (progress reports) in a timely fashion?

2. With others (inside and outside of the lab):

- Do you regularly tell others in the lab what you are doing?
- Do you discuss current literature and recent results (from the field at large) with your labmates?

- Do you brainstorm new ideas with your labmates?
- Do you communicate with other people outside of our lab? Who? How does that go?
- Are you happy with your level/amount of science discourse?

F. Group Meeting Participation

- Do you contribute to discussions (and ask questions)?
- Do you answer questions and help others when needed?
- When you present your own research, is your presentation clear and organized?

G. Lab citizenship

Being able to work well with and among others is an important skill for a scientist.

- Do you help others? Who do you regularly help or mentor?
- Do you ask others for help? Who has been mentoring/helping you?
- Do you leave shared spaces clean after using them?
- Do you conduct your assigned lab responsibilities well? Are lab duties distributed fairly and evenly?
- Are you aware of what's happening in the lab? Potential safety hazards? Supplies that need replenished? Equipment that needs service or cleaning?

Lastly, take a few moments to ponder & answer these “bigger picture” questions:

- What are your plans following graduation? What is your ideal timeline for this? What steps will you take to position yourself for these goals?
- What are your short-term goals for the next three months?
- What are some things you would like change, or work on changing? What steps will you take to accomplish these goals?
- What is one (or a couple) of things you would change about the lab (including supervisory style)?
- Is there anything that you would like to get out of the work environment that you are not getting now?