Lowe-Power Mentor-Mentee Compact

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# Lowe-Power Mentor-Mentee Compact

## The scope of my job

It is my job to initiate research that will make tangible contributions to science, mentor students and postdocs, secure funding for the lab, participate in undergraduate and graduate teaching, and perform department and campus level administrative service (e.g. thesis meetings/oral exams, undergraduate/graduate/faculty recruitment efforts, administrative committees). In addition, I am expected to perform outreach and service to the greater scientific community, for example by serving on grant panels, reviewing papers, and participating in conference organization. Finally, a critical component of my position is disseminating our discoveries (and generating enthusiasm for our research!) by giving talks and, of course, publishing papers. Publications are essential not only to the success of each lab member, but also to the success of the lab as a whole because they directly impact our ability to secure grants, as well as our reputation in our research community.

## What I expect from you

I think a very important part of my job as a professor is to train and advise students and postdocs. I must contribute to your professional development and progress in your degree. I will help you set goals and hopefully achieve them. In general, I expect you to:

* Learn how to plan, design, and conduct high quality scientific research
* Learn how to present and document your scientific findings
* Be honest, ethical, and enthusiastic
* Be engaged within the research group and with outside colleagues
* Treat your lab mates, lab funds, and equipment with respect
* Take advantage of professional development opportunities
* Work hard – don’t give up!

## Safety first

Your health and safety are more important than your research. This includes adhering to lab safety codes, as well as maintaining your physical and mental health. Never work in the lab if you are feeling sick or under medication that might affect your ability to work safely. Avoid working in the lab by yourself doing potentially dangerous activities, and please be aware of UC Davis and Dept of [Plant Pathology resources and training on lab safety.

## ➤ You will take ownership over your training experience

**Acknowledge that you have the primary responsibility for the successful completion of your degree or** **fellowship.** You should maintain a high level of professionalism, self-motivation, engagement, scientific curiosity, and ethical standards. I will provide opportunities to help in reviewing papers and writing grants, you should take these opportunities seriously and participate fully.

Ensure that you meet regularly with me and provide me with updates on the progress and results of your activities and experiments. In general, we should meet at least every other week to review primary data. If you cannot make any of the meeting times that we have planned, please let me know and I will find another time that works for both of us. I expect you will come to the meeting with your primary data labeled and organized. Make sure that you also use this time to communicate new ideas that you have about your work and challenges that you are facing.

**Be** **knowledgeable of the policies, deadlines, and requirements of the program and the university.** Comply with all institutional policies, including academic program milestones, laboratory practices, and rules related to lab safety. PhD students are expected to meet with their thesis committee once per year, it is your responsibility to plan these meetings.

**Actively cultivate your professional development.** UC Davis has resources in place to support professional development for students and postdocs. It is important to take advantage of these resources, since becoming a successful scientist involves more than just doing academic research. All graduate degree programs require attendance at a weekly seminar. Attendance at conferences and workshops will also provide professional development opportunities. If you find a training opportunity related to particular skill, share it with me and we will try to make it happen.

**Develop your writing and presentation skills.** As you start to make progress, begin outlining a paper’s figures and drafting the text. Be prepared to go through rounds of revisions before submitting an abstract, poster or paper. Although the availability of travel funds will vary, I encourage everyone to attend at least one conference per year (although it is required that you present a poster or give a talk). Conference abstracts need to be approved by me prior to submission, and we should work on your talk or poster together before it is finalized. Take full advantage of local opportunities to present your research, including local seminar series [[to be determinedxxx]], etc.

## ➤You will be a team player

**Attend and actively participate in all group meetings, as well as seminars.** Participation in lab and group meetings does not mean only presenting your own work, but providing support to others in the lab through shared insight. You should refrain from using your computer, iPad or phone during research meetings (unless you are taking notes). Even if you are using the device to augment the discussion, it is disrespectful to the larger group to have your attention distracted by the device. Do your part to create a climate of engagement and mutual respect.

**Strive to be the very best** **lab citizen.** Take part in shared laboratory responsibilities and use laboratory resources carefully and frugally. Expect to share strains, reagents and presentations with your fellow lab members. To make sharing possible and easy, you will maintain a shared up-to-date and organized list of strains, oligos, pertinent sequences and analyses. Maintain open communication with your lab mates over these shared resources. Concerns over authorship, ownership, acknowledging contributions, experimental data etc., should be discussed early and often with all parties. Maintain a safe and clean laboratory space. Contribute to a productive, inclusive, and friendly environment conducive to learning and research. Respect differences in values, personalities, work styles, and perspectives, and work to make the lab, department, and university a place where everybody feels welcome and appreciated. Be mindful of conflict and work to resolve it by planning ahead and talking about problems before they fester. Be open to your labmates' concerns and work together to resolve conflict.

**Apply for fellowships, awards, and travel grants.** Not only will an award help your career and the overall lab funding situation, the experience of writing the proposal will help you think about what you are doing more deeply. If you see an award you are eligible for, please let me know and I’ll be happy to nominate you and work on it in collaboration with you. I expect PhD students to make use of the travel funds available through the grad division and department, failure to do so may mean that I will not use lab funds to facilitate your travel.

## ➤ You will develop strong research skills

**Prepare scientific articles that effectively present your work to others in the field.** The ‘currency’ in science is published papers, and we have an obligation to funding agencies to complete and disseminate our findings. I will push you to publish your research as you move through your training program, not only at the end. PhD students will be expected to be lead author on at least two research manuscripts. Similarly, postdocs should aim for at least 2-3 first author papers. We will deposit all our manuscripts on a preprint server like bioRxiv at the same time as we submit them to a peer-reviewed journal.

**Keep up with the literature so that you can have a hand in guiding your own research**. Block at least one hour per week to read papers. You are expected to keep on top of both current and past literature related to your project. Because of the volume of individual research projects in the lab and my other teaching and administrative duties, I do not have the bandwidth to be on top of all of the literature for everyone’s project—*I* *expect you to be the expert*! Please forward me papers you come across that you think are particularly relevant, and I will do the same.

**Maintain detailed, organized, and accurate laboratory records.** You will maintain an electronic lab notebook through Notability. Your notes should allow your work to be reproduced (meaning they must be understandable by people other than yourself) and will help to assign credit for authorship. They are required by funding agencies and for any potential patents. Be aware that your notes, records and all tangible research data, including sequences and analyses, are property of the lab. When you leave the lab, I encourage you to take copies of your data with you, but one full set of all data must stay in the lab, with appropriate and accessible documentation. Regularly backup your computer data. Write and improve the lab protocols (hosted on <https://github.com/lowepowerlab/protocols>).

**Approach your scientific and professional career with a “Growth Mindset”.** Believe that ability is malleable and can be developed. Effort is good; it’s how you get better. What matters is learning, so you can improve your ability. Failure is the beginning of the story: time to try again, either with an improved plan, improved skill, or with an alternate strategy.

**Acknowledge that performing experiments and using lab resources is a privilege.** If you are unable to organize, disseminate or otherwise handle your research project I maintain the right to scale back your project responsibilities so that what research is performed is done with integrity and to the highest standards. Everyone makes mistakes and gets overwhelmed, however, if your records and analyses are not getting the attention needed to ensure reproducibility then your use of lab resources will be put on hold.

## ➤ You will communicate clearly

**Remember that all of us are “new” at various points in our careers.** If you feel uncertain, overwhelmed, or want additional support, please overtly ask for it. I welcome these conversations and view them as necessary.

**Let me know the style of communication or schedule of meetings that you prefer**. If there is something about my mentoring style that is proving difficult for you, please tell me so that you give me an opportunity to find an approach that works for you. No single style works for everyone; no one style is expected to work all the time. Do not skip meetings with me if you feel that you have not made adequate progress on your research; these might be the most critical times to meet.

**Discuss policies on work hours, sick leave and vacation with me.** I am not as interested in tracking hours as I am in seeing that you are productive. That said, I expect that, on average, *the majority* of your time in lab should overlap with regular working hours (e.g. ~9AM-­5:30PM), as this will enable you to interact with and get advice from others in the lab and vice versa. I expect to see everyone start their day by 10AM at the latest, but of course I understand that there will occasional exceptions (appointments, need a little extra sleep now and then etc). I likewise expect that everyone meets a minimum of time in lab of 8 hours/day, 5 days/week. I expect that you will take vacation and that you may need to adjust your work hours for deadlines or because you need a break. Please notify me (and fellow lab members) in advance of planned absences using the lab calendar. I believe that work-life balance and vacation time are essential for creative thinking and good health, but it helps if everyone knows if you will be absent. If you are unexpectedly unable to come to lab, or will be unusually late please let me know as I will likely worry otherwise.

## What you should expect from me

**I will set the scientific direction for the lab and provide the means to pursue those directions.** This will include helping you to find a research topic, writing grants to fund the research, and seeking out collaborators for our work and to further your opportunities.

**I will** **be available for** **regular meeting and informal conversations.** My schedule often requires that we plan in advance for meetings. However, I also welcome informal discussions, so feel free to come in anytime my door is open.

**I am committed to mentoring you now and in the future.** I am committed to your education and training while in my lab, and to advising and guiding your career development. I will work to promote you and your work.

**I will discuss data ownership and authorship policies regarding papers with you.** These can create unnecessary conflict within the lab and among collaborators. It is important that we communicate openly and regularly about them. Do not hesitate to voice concerns when you have them.

**I will encourage you to attend scientific/professional meetings.** I will not be able to cover all requests but you can generally expect to attend at least one major conference per year, when you have material to present. Securing outside funding (e.g. a fellowship or travel award) will likely enable you to attend additional meetings. I will work together with you to optimize your presentation skills.

**I will strive to be supportive, equitable, accessible, encouraging, and respectful.** I will try my best to understand your unique situation, and mentor you accordingly. I am mindful that each student comes from a different background and has different professional goals. It will help if you keep me in formed about your experiences.