Revised June 25, 2018

GRADUATE STUDENT AND POSTDOCTORAL FELLOW

ADVISING STATEMENT

(Revised from Yang Lab and Lanyon Lab)

**PREMISE**

* I expect my advisees to develop their own research topic within the discipline of bacterial physiology.
* I expect my advisees to develop research projects that are designed as tests of competing hypotheses.
* The thesis chapters should be written with the expectation that they be submitted as a series of publications. The exception is the first chapter which should be written to describe how the subsequent chapters represent a cohesive research program and should read like a review article. Ideally at least one chapter, or even all, will be submitted for publication prior to the defense.

**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. Prioritize doing lab work during regular work hours. Also, make sure you have taken the appropriate safety training and that this training is up to date.

**LAB NOTEBOOKS AND DATA MANAGEMENT**: You are expected to keep detailed records for everything you do. Record enough information, including mistakes, so that we can reproduce what you did without sending you an email. Please use an electronic notebook that can be accessed by the lab. I recommend Benchling (<https://benchling.com/>).

Back up all your data on a regular basis and use git-based version control for code. You are expected to publish all code with any publication with full annotation so we can recreate your results.

**WORK HOURS:** Work hard but also work smart. There is no set rule on when you need to be in the office or lab. However, it is essential to structure your time and develop a healthy and productive work habit. [Why academics need to focus on structuring their time?](http://www.universityaffairs.ca/career-advice/career-advice-article/academics-need-focus-structuring-time/)

**INDEPENDENCE**: I expect my advisees to work without daily input or guidance from me. I am

available for consultation, but they are expected to use their own good judgment. If an advisee

needs input from me in order to move forward, it is their responsibility to seek me out or

schedule a meeting. I am happy to initially provide more regular guidance to advisees who are

not used to working independently but by the time they leave the university I expect them to be

able to function as independent scientists.

**PUBLICATIONS**: Publishing is essential for most career paths followed by my advisees.

By the time they graduate I expect my advisees to have multiple publications in the publication pipeline (published, in press, in review, in preparation).

**AUTHORSHIP**: Resolving authorship arrangements early is essential if we are to maintain

positive relationships with our colleagues. If someone has had significant involvement in a research project (developing the original idea, collecting data, analyzing data, and/or writing a portion of the manuscript) then I expect them to be listed as an author. I prefer to decide roles and authorship at the first sign that an activity will result in a publication. This decision can be altered by mutual agreement at a later date if roles have changed.

**CAREER PATHS**: My job as an advisor is to help my advisees be successful in their chosen

career. I cannot do that if I do not know what career is desired. I want my advisees to let me know the range of career paths in which they are interested at the earliest possible date. I will do my best to help my advisees obtain the experiences and skills needed to succeed in those various

careers.

**MEETINGS**:

• LAB GROUP MEETINGS: I expect my advisees to attend lab group meetings that I schedule unless they are traveling or have some other unavoidable conflict. I also expect advisees to present their work at lab meetings.

• INDIVIDUAL MEETINGS: I expect my advisees to schedule individual monthly meetings

with me and to schedule additional meetings as necessary (see statement on INDEPENDENCE).

**NATIONAL MEETINGS**: Developing a professional network is essential, regardless of career path. Therefore, I expect all my advisees to attend national meetings and to report on their research at those meetings. I will do my best to help find money to make this possible but obtaining support for meeting attendance should be a joint effort.

**FUNDING**: In collaboration with the graduate program, I guarantee funding for five years. The nature of that funding (TA, RA, fellowship) is often unpredictable but there will be funding. Nevertheless, I expect my advisees to write and submit fellowship proposals where possible. Writing such proposals is excellent experience and receiving such fellowships increases a student’s competitiveness.

**COURSEWORK**: I do not have any standard course requirements beyond those of the graduate

program. Instead I expect my advisees to have, or to develop while at the university, a solid

background in the concepts and skills that their research and career path require. This could be

accomplished in the form of coursework but also workshops and informal arrangements with

other individuals (students, postdocs, faculty or staff).

**GRANT PROPOSAL WRITING**: Grant proposal writing is a critically important skill regardless of career path pursued. Therefore, I expect all my advisees to be active in writing proposals for both university and external funding opportunities (fellowships, research grants, travel grants…).

**ORIGINAL LITERATURE AND SEMINARS**: Regardless of career path, a current knowledge of the literature is essential. Therefore, I expect my advisees to spend significant time each week reading. Lab meetings will also involve a short presentation on a recent publication. These presentations will be carried out by the student who presented his/her work in the previous lab meeting. I also encourage students to attend the wide range of seminars offered by the college, especially from PMB, MICaB, and BTI.

**TEACHING**: Teaching is a tremendous way to learn to communicate complex concepts to a diverse audience. I expect all my advisees to be involved in teaching. The graduate program has a specific requirement, but I encourage students to take more opportunities to teach so they may learn to become excellent communicators. Furthermore, any career path pursued by my advisees will require that they be able to balance multiple diverse responsibilities (such as teaching and research). Graduate school is a low-risk place to learn to balance such responsibilities. I encourage students pursuing teaching careers to TA for multiple courses during their graduate career. This is more demanding of their time but this diversity of experiences is

excellent training for the heavier and more diverse course loads of faculty at primarily teaching

colleges. For postdocs interested in pursuing a faculty career, I will try to find an opportunity

for them to do sabbatical replacement teaching at the university or at one of the metro-area

institutions. I invite all my advisees to give a guest lecture in one of my courses.

**PERSONAL LIFE**: I expect my advisees to have one. People who spend all their time on work

activities generally tend to be less productive over the long term, less creative in their work,

and frankly less fun as colleagues. People with a partner, and especially those with children,

become severely stressed if they do not put sufficient effort and time into their personal lives.

**TIME MANAGEMENT**: This document makes it clear that I expect a lot of my advisees. The less efficient a person is, the more hours/week it will take to meet those expectations. Therefore, I expect my advisees to learn and to practice good time management.

**RELATIONSHIPS WITH OTHER ADVISEES**: My advisees learn the most from other students and/or postdocs. Therefore, I expect my advisees to develop a great professional relationship with other people in my lab and in the graduate program generally. This relationship should be supportive, not competitive. Early career students should seek out the advice of late career students and postdocs. In turn, late career students and postdocs should be generous in

providing advice.

In general, we use Slack for communication within the lab in addition to face-to-face interactions. It promotes frequent, informal communication and helps avoid long email chains. Do not feel obliged to reply to slack chats outside of regular work hours. It should go without saying that all communications should be respectful and supportive. Anyone using Slack inappropriately will be removed. Let me know if you do not have access to the Fixen Lab Slack channel.

**DEPT./UNIV. SERVICE**: I feel strongly that organizations run more efficiently and make better and more mission-driven decisions when everyone contributes their time to shared governance activities. Therefore, I think it is important for my advisees to gain experience in such activities. I do not expect these activities to take more than 1 or 2% of their effort.

**ETHICS**: My advisees should familiarize themselves with, and abide by, the University of

Minnesota’s “Code of Conduct”.

http://regents.umn.edu/sites/regents.umn.edu/files/policies/Code\_of\_Conduct.pdf

**RESOLVING CONFLICTS**: Communication is key to minimizing conflicts. For example, this

document is an effort to clearly communicate my expectations to reduce the possibility of

misunderstandings between my advisees and me. If you have concerns about your interaction

with me or with anyone else, please do not hesitate to come talk with me. If you are

uncomfortable speaking with me, please contact the DGS, the Department Head, the College HR Lead, or the Office of Student Conflict Resolution. If you wish a conversation to remain anonymous, be sure to indicate that at the start of the conversation.