



Vredenburg Lab  
San Francisco State University  
1600 Holloway Ave.  
Hensill Hall 645-661  
San Francisco, CA 94132

## **Vredenburg Laboratory Research Student Compact**

***The broad goals of our research program:*** *We investigate the impacts of emerging infectious disease, introduced predators, habitat destruction, and climate change on natural communities and individual species. In our research, we conduct fieldwork, run lab-based experiments, generate, describe and analyze next generation sequences of microbial communities (amphibian skin microbiome), and conduct assays on specimens from natural history collections (e.g. [Museum of Vertebrate Zoology](#), [California Academy of Sciences](#)).*

***My mentorship goals:*** Your professional development and progress in your degree is my primary mentorship duty. I will help you set goals and reasonable timelines. Though, I will not do your work for you, I will provide feedback on your research design, development, data analyses and scientific writing, and help when needed. I want you to succeed and I will mentor you towards publication of your research in a peer-reviewed scientific journal, presentation of your research at scientific conferences, and science communication to the public. I highly value and will encourage you to engage in outreach and informal science education that engages the next generation of scientists. I will also advise you on how to pursue the next steps in your career, whether that be continuing in academia, or finding a job in government natural resource positions, non-governmental non-profit organizations, biotech, public health, or elsewhere.

### **What I will do as your mentor:**

**I will mentor each member of the lab group.** The success of every member of our group is my top priority, no matter their personal strengths and weaknesses, or career goals.

**I will be your scientific advocate.** When you have a problem, I will do my best to help you solve it.

**I will be available for regular meetings and informal conversations.** We will schedule one-on-one meetings to discuss your research and any professional or personal concerns you have. You should tell me if you would like to meet more or less. I am the chair of the Biology Department and have a big lab, so I can't meet with everyone every week. But there are periods in your graduate training where weekly meetings may be appropriate.

**I will help you plan and navigate your program of study.** I will help you interpret graduate program requirements and provide advice for coursework. However, you are responsible for keeping up with deadlines and being knowledgeable about requirements for your specific program.

**I will mentor you throughout your career.** I am committed to advising and guiding your career development, to the degree you wish, after you leave my lab. I will provide honest letters of recommendation for you when you request them. Reminders are helpful and keep in mind that I require at least two weeks advanced notice for letters of recommendations.

**I will train you in general skills needed to be a successful scientist.** This includes oral and written communication, project management, and professional "soft" skills. There are a lot of unwritten "rules" in any career. I will help you navigate these to the best of my ability.

**I will encourage you to attend scientific/professional conferences and provide guidance for preparing for and attending these conferences.** My expectation is that you will present



*Vredenburg Lab  
San Francisco State University  
1600 Holloway Ave.  
Hensill Hall 645-661  
San Francisco, CA 94132*

your research as a poster or talk when you attend a conference. Conferences are an opportunity to further your education and professional network. When you attend a conference, I expect you to attend the scientific sessions and participate in conference activities during the time you are there. Travel fellowships for conferences are available, and I will help you identify and apply for these opportunities. I will encourage you to network and make connections at conferences. You should identify three goals for every large conference you attend.

**I will 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. I believe we should celebrate these differences. It will help me if you keep me informed about your experiences and remember that being a graduate student is a job with very high expectations. I view my role as fostering your professional confidence and encouraging your critical thinking, attention to detail, and creativity. If my attempts to do this are not effective for you, I am open to talking with you about other ways to achieve these goals.

#### **What I expect you to do as my mentee:**

- Conduct productive scholarly research for about 20 hours per week during the academic terms and 40 hours per week during summer and winter intersessions. During the academic year, the other 20 hours a week should be devoted to school and coursework.
- Be prepared for scheduled mentorship meetings with an agenda of what we should discuss
- Attend and participate in the regularly scheduled lab group meetings
- Adhere to all laboratory rules and safety regulations
- Act in a manner that assures the safety of others and the laboratory equipment
- Treat your colleagues, funding, equipment, and study organisms with respect
- Plan, conduct, and interpret high quality scientific research
- Always conduct yourself in a professional manner (that doesn't mean no fun!)
- Document your work in adequate detail in your lab and field notebooks
- Ask questions immediately when something is not clear
- Develop skills in troubleshooting and problem solving
- Be honest, ethical, and enthusiastic
- Be engaged within the research group by making the lab a high-priority activity in your life
- Take advantage of professional development opportunities
- Engage in opportunities for science communication and outreach
- Seek out funding opportunities to support your research
- Work hard and persevere; don't give up when things aren't working!

**Additionally, I expect you to take ownership over your educational experience.** As a part of that ownership, you should do the following:

**Acknowledge that you have the primary responsibility for the successful completion of your degree.** This includes commitment to your work in classrooms and the laboratory. You should maintain a high level of professionalism, self-motivation, engagement, scientific curiosity, and ethical standards. You should also enjoy this experience!

**Ensure that you meet regularly with me and provide me with updates on the progress and results of your activities and experiments.** Make sure that you also use this time to communicate new ideas that you have about your work and challenges that you are facing.



*Vredenburg Lab  
San Francisco State University  
1600 Holloway Ave.  
Hensill Hall 645-661  
San Francisco, CA 94132*

Remember: I cannot address or advise about issues that you do not bring to my attention. Do not cancel meetings with me only if you feel that you have not made adequate progress on your research; these might be the most critical times to meet with a mentor if I can help you figure out how to make progress.

**Be knowledgeable of the policies, deadlines, and requirements of the undergraduate or graduate program and the university.** Comply with all institutional policies, including academic program milestones, laboratory practices, and rules related to chemical safety, biosafety, animal handling, and fieldwork.

**Publish.** Students pursuing a Master's degree will be expected to be a primary author on at least one manuscript (their thesis manuscript), but making major contributions to additional manuscripts is in your best interest. One way to be more productive is to be a generous and helpful lab member to your labmates. I expect Master's students to submit a submission-ready manuscript draft to me 4 weeks prior to their thesis defense. If a manuscript is not submitted to a journal one year after graduation, you will no longer be first author on the paper unless an exception is discussed with me. Understand that data and work you do in the lab is property of the lab.

**Thoroughly read the scientific literature.** It is necessary that you understand the current context in which your research fits. Schedule time each week to do literature searches and read papers. These papers should not just be in your direct research field. Read broadly and widely. You are getting a degree in Integrative Biology. Also, consider participating in journal clubs or relevant graduate seminar courses. Aim to read 5-10 papers a week.

**Maintain detailed, organized, and accurate laboratory records.** Be aware that your notes, records, and all tangible research data are SFSU property. When you leave the lab, you may take copies of your data with you. But the original, full set of all data must stay in the lab, with appropriate and accessible documentation. Update protocols and data on the Vredenburg Lab Box Folder Site. All Bd disease data should be uploaded to the Amphibian Disease Portal. Sequence data should be stored on the Vredenburg Lab Box folder.

**Be responsive to advice and constructive criticism.** The feedback you get from me, your colleagues, your committee members, and your course instructors is intended to improve your scientific work. Be sure that you listen and use that feedback to improve your work.

**Be a good laboratory citizen.** You are expected to follow good laboratory practices and maintain a clean working environment. This includes the additional work of cleaning, organizing, and maintaining laboratory spaces. Every student is expected to contribute to maintain a clean and safe laboratory environment. Personal items and samples should be cleaned up or properly catalogued when you graduate.

**Meet deadlines.** We will establish mutually agreed upon deadlines for each phase of your work during one-on-one and group meetings. I expect you to maintain a balance between all your professional activities (e.g., research, class sessions, employment). It is your responsibility to talk with me if you are having difficulty completing your work and I will work with you to strategize ways in which you can better accomplish completion of your professional work.

**Provide adequate time for feedback.** Allow a minimum of one week prior to submission deadlines for me to read and respond to short materials such as conference abstracts or



*Vredenburg Lab  
San Francisco State University  
1600 Holloway Ave.  
Hensill Hall 645-661  
San Francisco, CA 94132*

posters, and at least two weeks for me to work on manuscripts or grant proposals or letters of recommendation.

**Let me know if my mentorship is inadequate.** If there is something about my mentoring that you feel could be improved, please tell me so that you give me an opportunity to find an approach that works for you.

**Communicate with me using e-mail and Slack, appropriately.** Use e-mail for communication in which there is any information that should be archived (e.g., your writing, data, R-scripts, ideas, etc...). E-mail is archived so we can always access that information, no matter how much time has passed. Use Slack or e-mail for communication that is only for in the moment and does not need to be archived. Frequently check (at least daily) and promptly (within a day) respond to emails or Slack messages from anyone in our lab group. If you need more than a day to gather information in response to an email, please acknowledge receipt of the message and indicate when you will be able to provide the requested information.

**Discuss absences and vacation with me.** Consult with me and notify fellow lab members in advance of any planned absences. I believe that work-life balance and vacation time are essential for creative thinking and good health and encourage you to take vacation time to recharge. But, I need to know that you will be away and that there is a plan for how we can help to take care of your research while you're gone. Winter and summer intersession periods are some of the most important periods for making progress in your research. I expect Master's students to be present and conducting research during these periods.

**Discuss authorship of manuscripts and conference presentations.** I expect all lab members to be engaged in communicating the results of their research as primary authors. Lab members who contribute key aspects to your projects can be co-authors. Committee members are typically not authors on your publications, though they should be acknowledged and can be added as co-authors if they offer significant help with writing or data analysis. If you wish to add other individuals as authors to your papers, please discuss this with me early on and before discussing the situation with the potential co-authors.

**Be a good collaborator.** Engage in collaborations within and beyond our lab group. Collaborations are more than just publishing papers together. They demand effective and frequent communication, mutual respect, trust, and shared goals. Effective collaboration is an extremely important component of the mission of our lab.

**Help other students with their projects and mentor/train other students.** This is a critical component for transfer of knowledge within the lab and a valuable experience for you to teach what you know to others! All graduate students are expected to over-see and mentor 1-2 undergraduate students each year.

**Respect your colleagues:** Keep data and research confidentiality protected. Be respectful, tolerant of, and work collegially with all laboratory colleagues: respect individual differences in values, personalities, work styles, and perspectives. Give your colleagues your undivided attention at times it is required (e.g., during lab meetings) and provide useful feedback.

**Be a good lab citizen.** Take part in shared laboratory responsibilities and use laboratory resources carefully. Help your peers and participate in general lab cleanups when they happen. We share our lab space with another lab group, the Sweil lab, be sure to communicate and be respectful of their space and equipment as well.



*Vredenburg Lab  
San Francisco State University  
1600 Holloway Ave.  
Hensill Hall 645-661  
San Francisco, CA 94132*

**Take excellent care of lab equipment and materials.** When a piece of equipment breaks or is not working, tell me immediately so we can repair or replace the item. Don't panic over broken equipment. Mistakes happen. But it is not acceptable to hide that an instrument is broken.

***Semester evaluation:***

Each semester we will meet to discuss progress and goals. At that time, you should remember to tell me if you are unhappy with any aspect of your experience as a student at SFSU. Remember that I am your advocate, as well as your advisor, and I can help you solve issues with other students, professors, or staff. We will discuss any concerns that you have with my role as your mentor, and I will provide you with my observations regarding your professional development, research progress, and progress towards your degree. This meeting is an opportunity to address issues and solve them before they become major problems and unsolvable, ensuring the best experience for mentor and mentee.

***This Compact is Agreed to Between:***

*Mentor: Vance T. Vredenburg*

*Mentee name:*

*Signature:*

*Signature:*

*Date:*

*Date:*