



## **Welcome to the Horsley lab!**

This handbook is intended to outline the scientific and mentoring expectations of lab members, explain how the lab is organized, describe University policies, to help you find where things are located, and explain common protocols in the lab.

## **Scientific Vision**

Our vision is to understand the cellular and molecular regulation of epithelial tissue development and regeneration. We focus on both the intrinsic transcriptional as well as the extrinsic signaling mechanisms that control these processes.

## **Mission**

Our mission is to stay at the forefront of science by publishing high impact research, performed with scientific integrity, while fostering creativity, innovation and independence through mentorship among lab members in an open, collaborative, and congenial research environment that supports passion and respect for individuality.





## Table of Contents

### I. Scientific and mentoring philosophy

#### Scientific objectives

#### Laboratory behaviors

*Expectations for lab members*

*Expectations for Valerie*

### **III. Lab organization and expectations for success**

Recruitment:

Joining the lab:

Lab Communication:

*1. Lab meetings:*

*2. Lab google site*

*Lab notebooks*

*Keeping up with the literature*

*Seminar Series*

*Leaving the lab*

### **IV. GENERAL LAB PRACTICES**

Publishing your work:

Some Tips for Minimizing time from Bench to Publication:

### **V. Lab Safety and Waste Disposal**

Biological Waste Disposal:

Chemical Safety:

Chemical Waste Disposal:

Green Lab Certification

### **VI. Lab Jobs**

### **VII. Protocols**

**3**

3

5

**9**

9

9

9

9

10

12

13

14

14

**15**

16

17

**18**

18

19

19

20

**21**

**22**

## I. Scientific and mentoring philosophy

### The collective scientific objectives of the Horsley lab are:

To avidly pursue questions related to epithelial tissue development and homeostasis, and to communicate our findings in a timely manner to the scientific community through publications and meetings.

To vigorously push forward the frontiers of new ideas and technologies in our scientific pursuit by keeping abreast of the literature and scientific progress in our field and related fields, and by introducing new strategies and state-of-the-art approaches to the lab when appropriate.

To behave professionally by:

- Maintaining scientific integrity
- Respecting coworkers' space, time, and being sensitive to their needs/values
- Respecting the working environment by maintaining cleanliness and
- Properly using and caring for equipment
- Following lab guidelines

-To maintain our objectivity at all times during the scientific process, when interpreting experimental findings, and during scientific discussions with our colleagues.

-To foster a collaborative environment that values productivity, open communication, and mentorship.

-To educate lab members and promote their scientific success in order to generate independent, respected scientists.

-To make the lab a joyful and harmonious place to work.

### Horsley laboratory behaviors that support our values

- *Creating an environment where everyone feels free to ask questions*
- *Presenting on what is interesting to each team member*
- *Giving ample time to answer questions from the team*
- *Thinking of new ideas for research*
- *Bringing nourishing food and water*
- *Discussing how our research impacts human health*
- *Researching health related topics*
- *Addressing health --physical and emotional health of team members*
- *Catching team members up when they miss lab or meetings*

- *Making sure the expectations for the team members are communicated*
- *Taking turns presenting research and journal clubs*
- *Bringing food to lab meeting when scheduled*
- *Being respectful when holding others accountable*
- *Making long-term plans and checking up on the previous discussions*
- *Giving space for breaks, positive interactions, sharing nourishing foods*
- *Checking in to see how we are doing*
- *Doing activities to assess our values, behaviors, etc in lab meeting*
- *Checking in with the group regularly*
- *Addressing mental, physical, and emotional health*
- *Promoting expression of diverse ideas*
- *Having dialogue to think about problem solving and data interpretation*
- *Being open to new ideas involving your research*
- *Performing team building exercises in lab meeting*
- *Differing lab meeting topics including journal club blitz*
- *Brainstorming ideas for projects, questions, and strategies*
- *Scheduling lab meetings in advance with clear understanding of expectations*
- *Organizing reagents with google drive inventories*
- *Maintaining and scheduling a schedule of agenda items in meetings*
- *Delegating responsibilities for inventory and training*

- *Asking for and offering help and advice on techniques and project directions*
- *Asking and receiving feedback on research progress and laboratory management*
- *Holding regular meetings with lab members and contributing ideas and suggestions*

### **The mentor-mentee relationship of the Horsley lab is:**

#### **We have mutual interests**

As a professor, I am expected to write grants and initiate original research that will make significant contributions to science, the academic community, and society at large. You will be helping me to carry out this research; I in turn, will help to train you as a scientist. My success depends on your success, and our interests are intertwined. It is therefore imperative that we carry out good scientific method and conduct ourselves in an ethical way at all times.

#### **Pathway to innovative, exciting and world-class science**

No matter what your career goal is after you leave the lab, academic, industry, writing etc., **your success will be evaluated by your publication record.** Therefore, I will publish your work in the best journal(s) we can. We will aim to publish in top journals and will have realistic expectations depending on how the science goes.

#### **Lab team member's role:**

##### **1. Make steady progress towards your research goals at all times.**

- Set short- and medium-term goals.
- Create paper outlines to support efficient, high-impact science. An example of a paper outline is in the google site (horsleylab). This is a flexible/changing template for making progress toward your paper, we'd love for you to bring ideas and innovations you use back to the group for our collective benefit. During our group meetings and individual meetings, we will discuss our paper outlines and request and be open to feedback.

#### **Some Tips for Minimizing time from Bench to Publication:**

(adapted from K. Green, Northwestern)

If you work in a smart, focused manner, your time from bench to publication can be minimized.

- While reproducibility is a key aspect of obtaining statistically significant results worthy of publication, it **just may be the case that the very first experiment you do is the best!** So, think each experimental design through as if you were going to publish the results, from inclusion of the appropriate controls, to loading the gels, to acquiring sufficient publication quality digital images at the microscope.
  - **Make your figures in Adobe Illustrator AS you generate data. Every week or so, take out your figures and your paper outline and revisit where it's going.** Don't become too wedded to a hypothesis and fall into the trap of thinking the data have to turn out a certain way.
  - **If an experiment stops working after you have already had it work a certain way several times, don't assume your hypothesis is incorrect!** In this case it is very likely that there is another parameter whose importance hadn't been previously appreciated (frequently different serum lots cause cells to behave differently, for instance, and MANY things we do in the lab are very sensitive to parameters such as cell density) and/or a reagent is bad. NEVER assume that commercially available reagents are infallible. That will get you in deep trouble. If there is a question about a commercial reagent, get on the phone and ask to speak with a senior technical representative. Be firm!
- c. Prioritize the most important experiments that you should do first to make sure you are on the right track with your hypothesis. By prioritizing the correct experiments, you will do experiments efficiently and not waste time on the wrong track.
- d. Think about the big picture. You will be asked in your annual review meetings to map out a longer road for your research and where you want your efforts to lead; the impact or larger contribution you want to make in our field. Coming up from the weeds of your work and flexing this strategic muscle regularly is key to your success. What excites you most about your work and how can this help you design experiments that are novel.
- e. Exhaust any and all possible processes or tools that keep you motivated and on the right track. Use our individual meetings and other lab members to ensure accountability and to strive for a pace and efficiency of productivity that is a stretch for you. One example is making figures as soon as you have results, which helps you stay on track and feel accomplished along the path toward a paper. This way you won't forget what you have done and you will know whether the data is of publication quality or not. There are many other methods that you will find work for you to feed your motivation and we ask that you share regularly what you are trying and what works.



- f. Help design all meetings in a way that will bring you the information and experience you need to be motivated. Ask yourself regularly “what is missing from our team’s conversations” and “how can I solve for this” and bring ideas and recommendations.
  - g. Present your work when you have the opportunity. You have the opportunity at lab meeting and in departmental research in progress, at meetings (departmental, Yale, and outside of Yale). This will allow you to organize your thoughts on your project and to get feedback on your project.
- 2. Keep abreast of the published literature for your project.** Learning to use the literature provides you with valuable research skills and helps to guide your research, ensuring that it is an original contribution. To ensure you are practicing this skill you need to:
- a. Do ongoing literature reviews and mine papers for additional leads through Valerie’s suggestions, the journal review. etc.
  - b. Attend and participate fully in journal clubs in our lab meetings
  - c. Read peer review manuscripts that are under consideration at journals
  - d. Go to research in project talks that are relevant to your project at Yale or outside of Yale
- 3. Develop skills to help you have courage and resilience during the scientific process** Research is not easy, and there are often pitfalls and failures. That is perfectly normal. Only with perseverance will you learn to consistently generate high quality results. To ensure you are developing these skills, you need to:
- a. Bring forward with honesty and courage the obstacles in your work that you find most challenging.
  - b. Be open and flexible to candid feedback on your work.
  - c. Understand how managing your emotions especially regarding feedback and rejection can influence your productivity and research at large.
  - d. Help create a culture of realistic optimism and creative problem solving, even celebrating failures as strategies to develop grit and get to great science. Own your own impact and acknowledge others for their support of you.
  - e. Generate a mentoring network of other faculty and peers to support you.
  - f. Share what works for you: wins and resilience strategies within the lab.
- 4. Become masterful at networking and writing.** Use your community (at Yale and outside of Yale) to help you with your specific project. Talking to experts in your field outside of the lab will help you make significant progress and learn about the latest research.
- a. Attending other lab meetings if appropriate.
  - b. Asking for technical help within and outside of the lab.



- c. Networking with other scientists at meetings at Yale and outside of Yale and stay in contact with them and reciprocate whenever possible.
- d. Manage key relationships on an ongoing basis. Tell others when something worked and didn't work for you from an interpersonal standpoint and practicing dialogue, taking other's perspective, and compromising regularly.
- e. Take initiative to learn the process for effective scientific writing through papers, journal reviews, and successful fellowship and grant applications. If you are interested in additional opportunities, please let me know and we can work together to provide training on scientific writing.

## 5. **Be respectful and professional.**

- a. Minimize texting, social media, and other personal activities during work hours and in lab meetings.
- b. Directly and respectfully communicate with other individuals in the laboratory about any expectations that are not being met. If direct conversations do not alleviate concerns, discuss with Valerie. Avoid talking to other lab members about individual conflicts.
- c. Be generous with your time in helping others in the laboratory.

## **Valerie's Role:**

### **I. Effective Communication and leadership of this team.**

- 1) I will strive to communicate in ways that feels respectful and professional to each team member. Remember that I am on your side and have a vested interest in your success. Be courageous in coming to me with your concerns, problems or challenges so we can work together to move through them.
- 2) I will lead our weekly lab meetings. I will help design an agenda that prompts discussion of your research progress in the lab, interesting scientific directions, current literature, and discussions of skills at resilience. I will do my best to answer questions that you have and help you to solve problems in your research.

### **II. Be your Advocate, Mentor and Fund Your Projects**

- 1) You can count on me to coach you on presenting your work. I will provide feedback on: drafts of your manuscripts, your lab meetings, your talks or posters for the Yale community and for national or international meetings. I will help you put together your presentation and guide you through practice presenting it. Provided that sufficient funds are available, I will pay for you to attend meetings to present your work.
- 2) You can count on me to be your advocate. There are two ways in which I can provide this advocacy. If you have a local problem with someone in the lab or at Yale, please come and discuss it with me. In addition, I will be your advocate to the broader scientific community. I will write fair and honest reference letters and to help you advance your career by connecting you with people that have expertise in areas of interest professionally and scientifically.





- 3) I will provide sufficient funds for your research. I will write grants and aid in your fellowship applications.
- 4) I will provide opportunities for planning, thinking about the big picture, and addressing technical and interpersonal issues within the lab. These skills will be emphasized in our group and individual meetings. In addition, at least once a year (usually in January) we will sit down to discuss your experience in the lab and your progress on your research goals. This is a good time to bring forward issues or challenges and “clear the slate” so you have what you need to fulfill your role and engage fully in your science. If you remember the excitement you may have felt joining this lab...or launching an exciting project...this is the commitment and the engagement that we want to cultivate from this meeting.

Remember that I am your advocate as well as your mentor. I will be able to **support you** to manage your key relationships with other students, postdocs, professors, or staff which are so integral to your success and often a differentiator in terms of your daily fulfillment. Similarly, we should discuss any requests you have with respect to my role and our partnership. I expect that we will discuss candidly how satisfied each of us is with your overall contribution on the points of your role above and each of our satisfaction with your progress. It will be my responsibility to explain to you any areas that I think you need to need work and suggestion for development so you can become a stronger scientist.

### III. Lab organization and expectations for success

#### Recruitment:

VH and lab members all have the opportunity to be involved in interviewing and entertaining prospective lab members. Feedback on candidates and rotation students is essential to ensure that the lab remains a productive and collegial environment.

#### Lab Communication:

##### 1. Lab meetings:

Punctual attendance at meetings is expected.

##### Weekly group meetings

Purpose: Lab meetings are a chance for the lab to tackle each others' problems together. Our weekly lab meeting format: one lab member is assigned a day to present their work in a formal presentation. If you feel that you do not have substantial data to warrant a formal presentation, discuss with Valerie whether you should do a journal club (you may chose one of three options below).

Full participation in lab meetings by all members, no matter how junior or senior is mandatory. Therefore, make sure when you speak in lab that you are speaking to the whole group, and that **everyone** present understands the big picture of what you are doing. Likewise, if you don't understand what someone in the lab is saying, ASK! It is expected that everyone will have different strengths and weaknesses, but at the



very least everyone should be able to describe the basic aims and approaches of all the projects in the lab.

Formal presentation format:

- Individual powerpoint presentations of data should address what your main question is, how you are addressing your question and your main findings.
- Include appropriate controls and as much raw data as you want to get feedback on your progress
- As your project matures, it may be useful to present figures to the group to get feedback.
- Each person presents approx. 2-3 times a year

Journal club formats:

- Journal club blitz: present concepts and a few figures from 3-4 papers of of interest to expand our knowledge outside of our field.
- Journal club-individual paper: Lab member choses single paper to analyze data in depth. Make this a discussion as much as possible
  - o Minimal introduction to the subject area using powerpoint
  - o Figures in powerpoint so everyone can see them
  - o Lead discussion by asking members what data supports main findings--the abstract can be used to highlight the authors' main points
  - o This meeting should not be a Figure by figure discussion

### **Individual meetings**

Purpose: To give each lab member an opportunity to speak with Valerie so she can stay abreast of their projects and provide guidance and mentorship

## **2. Lab google site**

Purpose: To provide a forum for sharing information electronically including live resources, ordering, protocols, reagents, and calendars for equipment etc.

### **b. Horsley laboratory Calendars:**

*Equipment signup:*

- To sign up for equipment, use the google calendar on the horsleylab site.
- Add your name to the day and time you want to sign up and choose the piece of equipment under the calendar dropdown menu.

*MCDB department calendar:*

You can sign up for the departmental calendar on google:

Go to:

[http://www.google.com/calendar/embed?src=3qnnfi72s49hmc532m40co6otk%40group.calendar.google.com&ctz=America/New\\_York](http://www.google.com/calendar/embed?src=3qnnfi72s49hmc532m40co6otk%40group.calendar.google.com&ctz=America/New_York)

at the bottom right, click + Google Calendar



#### **d. Lab meeting schedule:**

The lab meeting schedule is found on the horsleylab google site. See below for information about lab meeting format and expectations.

#### **3. Slack**

**Purpose:** To provide a forum for sharing information electronically. Renee will invite you to join Slack.

#### **4. Lab notebooks**

Keep track of everything you do, learn, read, and think in the lab in a notebook. This will help keep you organized, and allow you to document your progress. Keep notes about the papers you read. If you collect data or perform an analysis, someone else should be able to follow what you did and recreate it. Sometimes for simulations and large data analysis, it is better to make a binder with data printouts. Be sure to label all plots with as much information as possible, and make a header page for each section describing what analysis was used to generate the plots, what programs were used to generate them, what data files were used, and what features of the data the plots are meant to show. A brief conclusion or list of interesting points should be included too. You will be surprised and how quickly you will forget everything if you do not document it....then you'll have to reprocess your data.

#### **Seminar Series**

##### **MCDB Departmental Seminar Series**

The MCDB Seminar Series is at 4 PM on Wednesdays, usually in OML 202. Please check the seminar listings and calendars for upcoming speakers. We are fortunate to be able to bring in leading experts in the field. Please let me know if you have any suggestions for speakers. You should make every effort to attend this series even if the topic is not directly related to your work since this supports the departmental community.

##### **Departmental Research in Progress**

The MCDB Graduate Program has a research-in-progress series. Check the seminar calendar for a list of upcoming speakers, and please make every effort to attend since this supports the departmental community.

##### **Other Departments to check for speakers:**

The Departments of Genetics and Cell Biology and the Yale Stem Cell Center may invite speakers that are useful for our research. Check their websites for upcoming speakers and let the lab know if there is an upcoming talk of interest.

## **IV. GENERAL LAB PRACTICES**

### **Lab Jobs:**

Each member of the laboratory is assigned certain "lab jobs" which are listed on the following pages. This provides a community effort to keeping the lab running smoothly.

### **Equipment Assignment:**

Each member is assigned certain equipment(s) to take care of in case of malfunction or maintenance. If your assigned equipment breaks, it is your responsibility to contact the vendor and make necessary arrangements to have someone fix the equipment.

### **Ordering:**

The person responsible (i.e., Teresa) for ordering needs to be notified when supplies are running low. See lab communication section for information on ordering.

### **Courtesy and Cleanliness:**

The lab works best if everyone is a good citizen, if you see something that needs to be done, do it if the person assigned that job isn't able to or if it isn't an assigned job. If you use the majority of something, replace it regardless of whose job it is. Also, be as neat as possible, this means not leaving dirty glassware around the lab, particularly on other people's benches or in common areas such as the hood. Dispose of hazards such as needles, razor blades, broken glassware, and toxic waste properly.

Finally, do not be a hoarder! Take only small aliquots of antibodies and other reagents for your own use. When you order a new antibody, don't just put it into your own box; fill out an antibody sheet, give it to the database recorder, aliquot the antibody, take one aliquot out for your own use, and put the remainder of the antibody into the appropriate antibody box in the freezer. For some antibodies there are large (e.g. 1ml) aliquots that should be further aliquoted and replaced into the box when all small aliquots are gone. DO NOT take huge aliquots for your own use and leave them at 20 deg C. We have recovered a number of antibodies that people thought had been completely used up by going through the boxes of previous lab members who had large aliquots stashed in their boxes that had never been used. Finally, never remove stock DNAs from the freezer and put them into your own box--these stocks are sacred and the only (somewhat) dependable source of original DNA in the lab.

### **Working hours/Vacations:**

Everyone is provided with time off according to the Yale policies for their position. In addition, Yale has designated campus-wide holidays. If you intend to be away, please let Valerie and any collaborators know at least a week (preferably 2 weeks) beforehand. Additional time beyond that allocated by Yale may be made available depending on your productivity, please contact me about this. If you need to take time off for personal reasons, or if you are sick, please let me know; we will worry about you if you don't show up for work. Also, we will try our best to help keep your research going in your absence. For November and December holidays, we will set up a system to ensure that live resources and the lab can be cared for when most people are away. You should



take vacation when you need it! Valerie takes at least 4 weeks off a year (2 weeks in December and 2 other weeks during the year).

Lab work can be flexible and as long as you are moving your projects forward, you can make your own hours. In general, it is a good idea to be in lab for the majority of the major working hours 9-5pm during the week so you can interact and get help from others.

### Attending scientific conferences:

There are two types of meetings that are relevant for most of the lab's work: tissue specific and stem cell-based conferences. Skin specific conferences are: The Epithelial Differentiation and Keratinization Gordon Conference (biannually odd years; held in late spring/summer) or the Society for Investigative Dermatology annual meeting (held in May). Stem cell-based conferences include the Keystone meeting (winter meeting) or the International Society for Stem Cell Research (June). In general, it is best to attend a conference when you have data to present in the form of a poster or oral presentation.

If you are interested in attending a meeting, please discuss whether funding is available and/or whether your project is suitable for presentation at a meeting. For graduate students and postdocs, I am happy to support your attendance for one conference during your tenure in the lab. If you are able to procure funds from other sources (such as the Yale graduate school, conference travel fellowships or other fellowships), you can likely attend more than one meeting during your time in the lab.

If you submit an abstract for a meeting, you are representing the lab (yourself and Valerie) at the meeting. You must get approval from Valerie before submitting an abstract for a poster or oral presentation to a meeting, which means submitting a draft to Valerie at least a week before the submission deadline. Make sure you include any funding information on posters/presentations. If you attend a meeting, you will be expected to present a summary of the meeting to the lab during lab meeting. If more than one person from the lab attends, you should work together to present the meeting summary to the lab upon your return.

### Keeping up with the literature

Reading the literature is essential to forming a framework for understanding the broader issues important in skin/stem cell biology, as well as the specific advancements in the current project that you are working on.

Reading papers is hard at first. It may take a long time to get through one paper. Remember that you do not have to understand every detail at first. In addition, you do not have to read it straight through. Read the Introduction, the Discussion, Results, and Methods. Be critical. Do not believe everything you read, make them convince you.

Below are the journals that we frequently read. You should peruse them every month for new articles. You can also take old papers and do a forward search using Web of



Science. This will allow you to see who has cited a certain paper. *When you read a paper, it is also a good idea to look up and read the important papers that are cited.*

Cell	Journal of Cell Science
Nature	Journal of Cell Biology
Science	Immunity
Development	Nature Cell Biology
Cell Stem Cell	Nature Medicine
Cell Metabolism	Developmental Cell
Stem Cell	Nature Communications
Genes and Development	Cell Reports
Developmental Biology	Stem Cell Reports

Access to these journals as well as search databases can be found on pubmed or [http://sfx.library.yale.edu/sfx\\_local/azlist](http://sfx.library.yale.edu/sfx_local/azlist)

- Every 2 weeks do a pubmed search with keywords relevant for your project
- Journal review: Every lab member will be in charge of 2 journals that they will look over the table of contents.
  - a. Relevant papers can be emailed to the lab
  - b. Relevant paper should be added to the Papers of Interest Document in the horsleylab google documents site:

## Publishing your work:

Publications are the currency of science. They are required for funding and career progression in science. In general, you should expect to have 2 publications before leaving the laboratory and this level of accomplishment will take 3-5 years depending on your project, luck and work ethic.

## Well-being (adapted from J. Heemstra, Emory University)

We are all here to grow as scientists, leaders, and people by pursuing ambitious research goals. However, that should never come at the cost of your well-being. Your mental and physical health are by far the most important consideration in all that you do while in our lab. Moreover, success should not come at the cost of maintaining your interests/hobbies or healthy relationships in your life. In fact, you are more likely to be successful if you take care of yourself and give time to the things outside of work that matter to you. Below are some general guidelines on well-being, but every situation is unique, and Valerie is always open to discussion on this topic, so don't hesitate to ask.

### Mental and physical health concerns:

You can access Yale resources for mental health [here](#).

*If you are not feeling well, either physically or mentally, take the time off you need to seek out help and take care of yourself.* If you are struggling with depression or anxiety and wondering: "Is it okay to go see a counselor instead of setting up that PCR?" the answer is "Absolutely! Get the help that you need." If you have an acute



situation that requires help, take the day (or a few days) off with no questions asked. If you are going to be out for more than 3 days or miss a group meeting, just give Valerie a heads up so that she knows you are okay – no need to give details if you don't want to, it is sufficient to email and say that you have a “personal health emergency.” If you need to take more substantial amounts of time off, you can work with Valerie to facilitate this. Being an undergraduate, grad student, or postdoc is stressful. *We all care about you and are here to support you – just let us know how we can help.*

### **Personal emergencies:**

If you are a member of our group for multiple years, the chances that a life situation (or multiple life situations) will arise are fairly high. As an example, Valerie dealt with the loss of her Dad during grad school and her mom/grandmother in 2013. In these situations, the top priority is taking care of yourself and dealing with the situation. If possible, communicate with Valerie to let her know that you are dealing with something and approximately how much time you will need off. You can share as much or as little detail as you feel comfortable with. Life situations like loss are inherently stressful, so also make sure you are taking care of yourself and getting help if needed.

### **Work-life integration:**

Being ambitious and working hard are part of our lab culture, but it should come from a perspective of driving yourself out of the fun of pushing your limits and exploring what you are capable of. The key is to know your limits. Similar to playing sports, you advance by pushing out of your comfort zone, but if you push too hard you end up injured and stuck on the sidelines. Managing your motivation and work habits while integrating interests and commitments outside of work is a key self-leadership skill that will serve you well throughout your career, and now is a great time to build that skill. You can get useful tips and advice on this from Valerie, your labmates, and other resources (books, podcasts, etc). Also, see the “Working hours/vacation” section for more information on our lab philosophy for integrating work and life.

### **Racial, Gender, and Sexual Harassment:**

From a 2018 [Report from the National Academy of Science, Engineering, and Medicine](#): “Addressing and preventing sexual harassment requires attending to all three forms of sexual harassment: 1) gender harassment (sexist hostility and crude behavior), (2) unwanted sexual attention (unwelcome verbal or physical sexual advances), and (3) sexual coercion (when favorable professional or educational treatment is conditioned on sexual activity). Gender harassment is by far the most common form of sexual harassment, and when severe or frequent, it can result in the same level of negative outcomes as one instance of sexual coercion....More than 50 percent of women faculty and staff report having been harassed. Student surveys of university systems show disturbingly similar high rates, with 20–50 percent of women.”



In the Horsley laboratory, [we will not tolerate harassment](#) within or outside of our laboratory. We will be aware of [Yale's policies regarding harassment](#) and get help from each other, Valerie, or [other resources](#) at Yale. We will utilize training approaches to develop skills to interrupt and intervene when inappropriate behavior occurs. We will also recognize that we all have implicit bias that impacts our interactions with others and will take steps [to identify](#) and [address these biases](#).

Other resources related to bias and harassment:

1. [State of the Science: Implicit Bias Review 2014](#). Kirwan Institute for the Study of Race and Ethnicity.
2. [The New Science of Unconscious Bias: Workforce & Patient Care Implications](#). This program explores the scientific basis for this new understanding of human bias and the implications of unconscious bias theory for the health care system both in terms of workforce bias and in terms of threats to clinical objectivity.
3. [The Science of Equality, Volume 1: Addressing Implicit Bias, Racial Anxiety, and Stereotype Threat in Education and Health Care](#). Perception Institute.
4. [Unconscious Bias](#). Cook Ross. Learn more about unconscious bias. Includes links to learn more about training and thought leadership in unconscious bias.
5. [Unconscious Bias Training for the Health Professions](#). Association of American Medical Colleges (AAMC).
6. [Women in Science](#). This special issue of Nature takes a hard look at the gender gap — from bench to boardroom — and at what is being done to close it.
7. [The Neuroscience of Unconscious Bias](#). The American Bar Association Litigation Section.
8. [Unconscious Bias in Academic Medicine](#). Proceedings of the 2017 AAMC Diversity and Inclusion Innovation Forum.

## Summary

Our holistic approach to scientific discovery, mentoring, and sponsorship is intended to foster personal and scientific excellence as well as health. These policies and expectations attend to all aspects of individuals as we are all growing and becoming better scientists and professionals. By committing to each other and our community, we can educate and discover new aspects of tissue biology that we hope will impact human health in the short- or long-term.