Chapter 3
DEFINING AND IMPLEMENTING YOUR MISSION

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This manual is also available online at http://www.hhmi.org/labmanagement.
As a principal investigator, you are responsible for taking charge of all the practical aspects of managing a laboratory, such as hiring staff, obtaining funding, writing papers, and developing processes to track data and projects. These topics are discussed in subsequent chapters in this manual.

In addition to being a manager, you are also the leader of your lab—guiding your staff toward a shared mission of what you want the lab to achieve and motivating each person to make that mission a reality. This chapter discusses some of the elements of lab leadership—defining your lab’s mission and goals, setting expectations for yourself and the people in your lab, and communicating those expectations effectively.

**CRAFTING A MISSION STATEMENT FOR THE LAB**

The first requirement for guiding the people in your lab is to motivate them with the big picture of your vision for the lab and to articulate goals that will lead to achieving that vision. In her book *At the Helm: A Laboratory Navigator*, Kathy Barker advises writing down a few sentences that summarize the mission or the goals for your lab. This mission statement describes the kind of research you want to do, the motivation for your research, and the kind of atmosphere in which you want to work.

Keep in mind the following points:

- Decide what values you want for your lab (e.g., scientific excellence, discipline, teamwork, competition) and then craft a mission statement that reflects these values.
When developing your mission statement, consider not only your scientific life but also your social and financial goals.

Craft a statement that you feel comfortable communicating to your peers, superiors, and lab members.

Once you have a mission statement that embodies your aspirations, you can start to plan the steps to get there. Kathy Barker suggests developing a five-year plan that takes into account your career goals (e.g., do you want to achieve tenure in five years?), your scientific goals (e.g., do you want to enter a more competitive area of research?), your social goals (e.g., do you want to start a family?), your financial goals (e.g., do you want to perform some consulting to supplement your salary?), and the lab culture you are after.

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What are my values? I want to do really good rigorous science and I want to publish that work in respected places. I am also excited about the topic we work on, that it is a disease-causing organism and that we have the overall goal of trying to cure this disease. It is really important to me that lab members learn and advance their careers—that people enjoy what they do and take it seriously, work hard, and are good lab citizens.

—Tamara Doering, Washington University School of Medicine

Our mission here is to train students and postdoctoral fellows to be outstanding scientists. Although our success as faculty members depends on our discoveries and our papers, you are going to be the most successful if you focus on helping your lab members develop their full potential.

—Suzanne Pfeffer, Stanford University School of Medicine

If I were asked to summarize my vision for my lab, it would be respect for each individual’s expertise and contribution, emphasis on integrity and accurate record keeping and reporting of results, and being a good team player.

—Gail Cassell, Eli Lilly and Company
The last point is perhaps the most complex. Lab culture refers to a system of informal rules that spell out how people in the lab should behave. You should ask yourself these questions:

- How much time do I want to spend at the bench?
- Do I want a big or small lab?
- How friendly do I want to be with people in the lab?
- What kind of atmosphere do I want in the lab?

"My vision is that we are going to regenerate the heart after a heart attack. This is really what I would like to accomplish with my career. Initially, I was worried that I would sound “sappy” in some fashion when I told people that I had a vision. I found that at first people may think it’s a little odd, but pretty soon when they hear it again and again, you start seeing people nodding their heads and agreeing with you. Having a clearly stated vision does help to inspire in people the mission behind what you are working on."

—Charles Murry, University of Washington School of Medicine

"Starting your own lab is a lot like getting your driver’s license: It’s an exhilarating time. Now you have the freedom to go where you want to go and go as fast as you want to go. On the other hand, you have to pay for the gas. You’re not just a passenger anymore—you have responsibilities."

—Thomas Cech, HHMI

Take a few moments to think about the kind of lab described in your mission statement. Every decision you make from now on—from hiring staff to choosing scientific projects for the people in the lab to establishing how communication flows—should be made with this statement in mind.
SETTING EXPECTATIONS FOR YOURSELF

After you develop your mission statement, the next step is to understand your responsibilities as the leader of your lab and set your expectations for yourself accordingly.

Your Responsibilities as a Lab Leader

A principal investigator has five key leadership responsibilities: Setting the general scientific direction for the lab, keeping each person motivated, resolving conflicts, setting and communicating expectations, and mentoring and training the next generation of scientists. (The role of the lab leader in mentoring is discussed in chapter 5, “Mentoring and Being Mentored.”)

Setting the general scientific direction for the lab. As the principal investigator, your role is to ensure that research projects are in alignment with your vision for the lab. You need to determine what the lab should work on and what directions the work should take. Work with your lab members to develop specific scientific goals for each of them. You should support people in developing projects that match their abilities and aspirations. You are also the one who needs to determine when it is time to terminate a project.

My role is setting the general direction and motivating people. I’m in charge of making sure that the lab runs as smoothly as it reasonably can in terms of ensuring that there’s money and support staff, and then steering the lab.

—Charles Murry, University of Washington School of Medicine

I decide the area in which we’re going to work, but I let others have input into where within that area we should go. For example, at our lab retreat, I tell everyone not to talk about what they’ve done but instead to talk about where their projects are going to be in six months, a year, two years. When we plan general lab strategy, we ask the questions Where in the field should we be heading? What kind of people or expertise should we be recruiting? I direct the discussion and have the ultimate veto power, but I find people are much more motivated if they feel that they’ve had input into where the lab is going. It is also very good training for them because eventually, if they become PIs, they’re going to have to decide these kinds of things themselves.

—B. Brett Finlay, University of British Columbia
Keeping each person motivated. One of your key roles is to motivate people to work hard toward achieving your shared vision. While different people respond to different types of internal and external motivation, most people are motivated when their contributions to the laboratory are recognized and appreciated. This can be accomplished by involving them in discussions about general scientific strategy, listening to their ideas, and giving serious thought to anything they say even if it seems a little impractical or naive.

Another good way to keep lab members motivated is to schedule individual meetings as often as once a week. Each meeting can also serve the purpose of setting deadlines, discussing completed or in-progress experiments, solving problems, and planning future experiments.

I do half-hour meetings with each person once a week. If they come in and say, “Nothing worked,” I say, “OK,” and change the subject because I realize that probably 90 percent of the experiments as a scientist don’t work. I’ve found that this approach is a very subtle but effective motivator. Most people don’t want to come into my office week after week and say, “Nothing worked.”

—B. Brett Finlay, University of British Columbia

I think the mistake a lot of us make is to assume all too often that individuals don’t have any contribution to make, just simply because it might be a minor contribution. I think gaining an appreciation of what everyone brings to the table is extremely important.

—Gail Cassell, Eli Lilly and Company

When people present a really good result at a lab meeting, I’ll say, “That seems like a pizza result,” and I’ll buy pizza for the lab in their honor. Sometimes it’s by way of appreciation rather than an important result. If someone—say a junior technician—gets stuck in a cloning project for a long time and then gets the construct he’s been trying to make, that’s a pizza result.

—Tamara Doering, Washington University School of Medicine
It is important to listen to what each person wants to do and understand what his or her goals may be. If a postdoc has decided to pursue a career in industry, trying to motivate him or her to follow in your footsteps into academia will not work. As a lab leader, you need to simultaneously address your lab members’ individual goals while working together to realize your shared vision.

It’s important to me that people get the training that they want and have their career going the way they want it, rather than go by any preconceived notions I have.

—Tamara Doering, Washington University School of Medicine

Finally, enthusiasm is a great motivator. If the work you are doing may someday save human lives, talk about this vision to your lab members—share your enthusiasm. Soon they will follow your lead.

I wanted to be in science and medicine since I was a kid. I could not imagine a profession that fits me better. It is useful to let people know I am doing what I always wanted. Things trickle down from that.

—Charles Murry, University of Washington School of Medicine

**Recognizing low morale.** A lack of motivation may manifest itself as a decrease in productivity. For example, someone who was productive will stop producing results consistently week after week. You will first need to determine the cause for this decrease. Is it an interpersonal problem in the lab, an experimental obstacle, or a personal crisis? Discuss the problem with the lab member and see whether you can jointly develop a strategy to address the issue or minimize the impact of the lab member’s actions. Whatever you do, do not avoid the problem.

**Resolving conflicts.** Don’t ignore conflict in the lab in the hope that it will disappear on its own. Deal with conflict as soon as you become aware of it. If you let a problem fester, it can adversely affect lab morale and productivity. Take the time to meet with each person individually and hear all sides of the story before doing anything. Then bring together all the people involved for an open discussion, which you as the lab leader should moderate. The desired outcome is a mutually agreeable strategy that will resolve the conflict.

Conflicts often arise over “turf wars,” when two individuals are interested in the same project. By staying on top of what each member of your lab is doing, you can
often spot potential problems and deal with them before they become too serious. For example, if you perceive that two projects in the lab are starting to merge or overlap, call a strategy meeting and re-prioritize the activities for each person involved in the projects.

**Setting and communicating expectations.** Expectations for each member of your lab will stem from your mission statement and should include scientific, personal, and ethical considerations. Your lab members need to understand your expectations and consent to fulfill them. If you value teamwork, you will stress collaborative and collegial interactions among lab members. If you value primacy in your field above all else, you will probably expect long hours of work and high productivity. This aspect of lab leadership is discussed more in “Setting Expectations and Communicating Them to Others,” page 48.

**Developing a Leadership Style That Suits Your Personality**

The expectations you set for yourself will be based, in part, on your personal leadership style. Developing your style as a leader is a process of trial and error and may prove difficult at first. It will be shaped by your vision for your lab as well as by your personal strengths and weaknesses. It will also be shaped by your past experiences—good and bad—in other labs. As new people join your lab, you may find that different dimensions of your style emerge.

> When you begin a lab, difficult issues are going to arise, and you’ll talk to your colleagues and ask them for guidance. You will try different approaches and see what works. It’s very challenging, but it does get easier with time.

—Suzanne Pfeffer, Stanford University School of Medicine

**Assess Your Strengths and Weaknesses**

According to Denise Harmening in her book *Laboratory Management: Principles and Processes*, the attributes of a good lab leader are

- **Character:** Having authenticity and purpose; creating value, trust, and compassion.
- **Integrity:** Possessing sincerity and honesty.
- **Vision:** Being able to see the big picture.
- **Passion:** Having great enthusiasm for the job.
- **Credibility:** Having excellent credentials, substantive knowledge, and practical experience.
- **Empowerment:** Being able to delegate responsibility to others when possible.
Courage: Being able to create a new vision and take risks.

Insight: Having the ability to understand people and the organization.

Humility: Being willing to admit that others have good ideas and accepting that you can be wrong.

Sense of humor.

Emotional intelligence: Having self-awareness, social awareness, and social skills.

Positive self-esteem: Being able to work selflessly to support people in your lab.

Think about which of these attributes you possess and work with them. You may develop new skills as you gain experience, but initially, you should rely on your strengths.

SETTING EXPECTATIONS AND COMMUNICATING THEM TO OTHERS

A key aspect of your role as a lab leader is to set and effectively convey expectations that reflect your vision for the lab. Some expectations may apply to a particular group of lab members (e.g., postdocs), and others will be unique to each individual. You may want to work with your lab members to set these expectations—this can increase the likelihood of buy-in and help increase motivation. Below are some general areas that you will want to consider when setting expectations for people in your lab.

Work Hours

Generally, your work hours set the pace in the lab. The members of your lab are watching to see how hard you work and the number of hours you put in. So, if you don’t come back to the lab or work from home at night, you shouldn’t expect people in your lab to work at night. If you never show up in the lab on weekends, you shouldn’t expect them to be there.

Question: How do I avoid potential misunderstandings among lab members regarding work hours and time off?

Answer: The best way to handle this is to convey your expectations about work hours and time off to applicants during the interview. For example, the amount of vacation leave varies from country to country (e.g., it is usually longer in Europe than in the United States), so you should let applicants know about your institution’s policies.

Many principal investigators may feel they should stipulate a specific number of hours per week that they expect grad students or postdocs to work. But that strategy does not necessarily work well and can generate resentment.

Focusing on productivity will prove more successful than focusing on the number of hours or on the specific hours an individual works. Nevertheless, you will probably want your lab members to be in the lab during certain hours—to make sure that they can interact with you and the other lab members. Should this be the case, make sure you explain your rationale.
Prolonged Absences

Communicate your expectation that lab members should give you several weeks’ notice about an upcoming vacation. Inform them of the vacation and personal leave limits at your institution. Your institution will also have guidelines about maternity and paternity leave. It is best to follow these guidelines rigorously.

Authorship of Papers

The inclusion and order of authors on a paper is often a source of discord. In deciding who should be an author on a paper, the principal investigator has to consider who has contributed to what aspect of the work. All lab members who are involved in a particular project should express their expectations concerning authorship credits on the resulting paper and provide their rationale for being considered as an author.

Some labs get a bad reputation when PIs say, “We expect you to be here every Saturday and never take vacations” or something similar. I think what you want to do is set an example and help your people find how to be most effective. It is possible to work regular hours, but one has to be very organized about it. I have had very efficient people who can be very productive working nine to five and just use their time well. I have also had other people who don’t use their time well, and so I try to work with each lab member to help them figure out what works best.

—Suzanne Pfeffer, Stanford University School of Medicine

I have included a student on a paper because he had a conceptual contribution without which the whole study could not have been done. There was no question, everybody wanted this person on the paper—so an author doesn’t have to contribute an actual figure if they’ve contributed something that was essential for that project to go forward.

—Suzanne Pfeffer, Stanford University School of Medicine

Here are some guidelines to consider:

- The first author is normally the individual who is primarily responsible for the project. Occasionally, two individuals may share that responsibility. Most journals permit a statement that indicates that the first two or three authors listed have each contributed equally to the publication.
It is unwise to make up-front promises about authorship. You may choose to make it a policy in your lab to wait until you know how much each person has actually contributed before authorship is assigned.

In deciding whether to include someone as an author, ask, “Could this project have been done without this person’s conceptual or technical contribution?”

**Scientific Ethics**

The best way to communicate ethics to your lab is to live by those ethics. You may also want to talk about some important ethical issues (e.g., scientific rigor and reproducible and discrepant results) in a lab meeting or in a more informal setting. Many universities offer lectures or seminars in scientific ethics, and you should encourage your staff to attend. An introduction to the ethical conduct of research is a report from the Institute of Medicine, *Integrity in Scientific Research: Creating an Environment that Promotes Responsible Conduct*, which is available from National Academies Press at http://www.nap.edu.

**Staying Within Budget**

Developing a budget for the lab and staying within the budget is something for which you, as a principal investigator, will ultimately be responsible. But it’s a good idea to remind lab members that the amount of funds available to your lab is limited and to teach them to be careful when ordering supplies. In addition, involving your postdocs in budgeting will help them prepare for their future roles as principal investigators. (Also see “A Bit About Budgets,” page 145 in chapter 9, “Getting Funded.”)

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*I give a “state of the lab” talk once a year. I start with reviewing the accomplishments, the things that have gone well over the last year. I try to point out things that everyone has done so that there is a sense that everyone has been recognized for their part. Then I go over the lab budget—what our “burn rate” is, where our money is coming from—and talk a little bit about money management issues and strategies.*

—Charles Murry, University of Washington School of Medicine

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**Project Ownership**

The principal investigator, with input from individual members, usually decides what projects people in the lab work on. Some labs have strategy discussions every three to four months during which everyone talks about what projects they would like to continue or initiate.

Work in the lab is most effective and productive when members have clearly defined projects that are sufficiently distinct so that each person can carry out some independent work, and at the same time the projects are interrelated so that no one is
working in a vacuum. This way, everyone in the lab can consult with and motivate each other. Below are some guidelines:

- Encourage collaboration. You should conduct regular discussions to make sure everyone knows what their individual goals are and to determine how people can help each other make the best progress. An added benefit of a collaborative lab is the increased exchange of information and skills among lab members.

  I often encourage people to collaborate or help each other with techniques. So if someone has an idea, I’ll say, “Why don’t you go to so and so, she has been thinking about that or knows how to use that machine. Why don’t you talk to her?” And I try to make it reciprocal as much as I can.

  —Tamara Doering, Washington University School of Medicine

- Allow for independent work styles. Working separately may be a necessity for some people at some stages of their scientific development and in the long run will enable aspiring scientists to begin to think for themselves.

- Discourage competition in the lab. There is enough competition in the world of science outside your lab; encourage your group to think of themselves as members of a team. You want people to be comfortable sharing ideas and helping one another.

  Competition happens all the time. I will tell the more aggressive person that I appreciate that they are very ambitious and that they want to be successful but that they are really edging over onto someone else’s territory. I’ll say, “Don’t you have so many projects of your own? You should stay away from this person’s project.” Or I’ll try to let them know that they are perceived in the laboratory as being aggressive and ask them, “Do you really want that reputation?” To the person who is being encroached upon—these are rarely competitions between equals—I’ll say, “I’ve really been impressed by the way you’ve put up with this; I think you’ve handled this very professionally. I know that it’s been tough, but I’ve talked with the other person and I hope things will get better. If they don’t, I’d like you to come talk with me and I’ll give it another round.” I also point out to people that ambition is not all that bad. It is one of the characteristics of a successful scientist.

  —B. Brett Finlay, University of British Columbia
Policy on Letting Projects Leave the Lab

You should develop a clear policy concerning whether or not you will allow postdocs to take their projects with them when they leave your lab. Communicate this policy to all prospective postdocs. Some principal investigators let their postdocs take whatever they had worked on during their stay in their labs, with no strings attached. Others will let postdocs take their projects or some aspects of them to serve as the focus for their new labs. In these cases, the principal investigator makes sure that he or she does not compete directly with the former postdoc’s project for a few years, until the postdoc’s lab is well established.

When you develop your policy, think about how you would want to handle a situation in which the research results are different from what you anticipated or a situation in which the results lead to interesting new avenues of research.

If you have a small research group and a focused area of research, you may not be able to let departing postdocs take their projects with them. In this case, you might have to develop some alternatives to benefit them. One possibility is to give your postdocs six months of salary and resources to generate preliminary data for a new research question or direction.

Communicating Expectations Effectively

The best way to communicate expectations is to convey them continually—at the first interview, on the first day on the job, at lunch time, during lab meetings, and, most importantly, by setting an example. It’s also a good idea to communicate your expectations in writing, especially for new lab members and when conducting staff reviews, and to periodically review them with your staff.

“I personally think it’s unfair to say to someone who has slaved away in your lab for three years and goes looking for a job, "You can’t continue what you’ve been working on," because then that person won’t be able to get a grant.”

—B. Brett Finlay, University of British Columbia

“The head of a lab needs to be generous, and that is hard for junior PIs because you feel like you are just starting and everything is crucial to the success of your research program. So it’s hard to let postdocs take projects with them. But they need to, and the main thing is to communicate about it.”

—Tamara Doering, Washington University School of Medicine
Set an Example
As a general rule, you should live by the expectations you set for your lab members. Show your workers that you enjoy what you are doing. Especially in the early years, be present in the lab, working side by side with them. They will be able to see how you work and what is important to you.

“...We have a package that we give people on arrival that tells them what their lab duties are and how the lab is run. The faster you can get new lab members to the bench and get them going, the better it will be.

—B. Brett Finlay, University of British Columbia

“...There's a strong correlation between a new investigator’s ongoing presence in the lab and success, promotion, and tenure.

—Thomas Cech, HHMI

“...They don't just walk in the door and I say to them, “OK, here are my values.” You have to lead by example, be honest. Integrity has to start at square one.

—B. Brett Finlay, University of British Columbia

Lab Meetings
Regular, formal lab meetings are an organized way to ensure that everyone is kept informed of the lab’s activities and results and for you to reiterate your expectations and values. By all means, hold regular goal-setting and evaluation sessions: an annual lab retreat, periodic lab meetings involving the full staff, weekly or more frequent small-group meetings to discuss specific issues, and regularly scheduled one-on-one advisory meetings and performance evaluations. More importantly, make sure that the informal lines of communication are always open. Talk to people in your lab on a daily basis—they should not have to make an appointment to see and talk to you. Informal group activities, held periodically, are also important for building morale and encouraging lab members to think of themselves as part of a team.

Research group meetings. Many research groups hold weekly meetings. One or more people in the lab take turns presenting what they’ve done since they gave their last presentations. They give an introduction, share their results and their interpretation, and then discuss what they plan to do next. Comments and suggestions from
the research team usually follow. In some labs, especially larger ones, a research group meeting is a semiformal presentation with overheads or PowerPoint slides and can be a somewhat intimidating experience, especially for a graduate student. In smaller labs, these meetings may be more informal—for example, each person discusses what he or she did that week. These meetings are much more interactive. Yet even in smaller labs, it’s important to schedule occasional formal presentations so that students and postdocs can hone their ability to speak about their research.

If a principal investigator has 20 people in the lab and you ask the PI at any moment, “What is person number 17 doing?” he or she should be able to give you a two-hour talk on this without any preparation. The sine qua non for being a good lab director is having all of this in your head.

—Thomas Cech, HHMI

One-on-one meetings. Regardless of the frequency of research group meetings, you should meet often with each lab member to keep current with progress and problems. Invite your students, postdocs, and technicians to come into your office with their lab notebooks and show you what they’ve been working on. Many principal investigators meet with lab members for an hour each week. They may meet with them more frequently immediately after lab members have finished a series of experiments or when they notice that a lab member is struggling.

Small-group meetings. Some labs also have meetings attended by individuals working on specific projects or with specific techniques. This is where lab members deal with logistics and technical matters, and they hammer out experiments, trying to get different approaches to work.

Strategy sessions. Should you decide that your research needs to take a new direction, you may want to call an official strategy session. A strategy session helps the group identify the next most important questions and what experiments will answer these questions. Such a meeting also helps the group develop a shared understanding of the lab’s direction and clarifies what needs to be done and who is interested in what aspects of the new research area. In addition, these meetings help you determine how potential conflicts and competing interests can be avoided.

In my lab, there are five or six breakout groups that meet once a week or two, and that works really well. It gives them a team-building experience.

—B. Brett Finlay, University of British Columbia
Journal club meetings. These meetings are an integral part of training new scientists and can vary in frequency from weekly to monthly, or as desired. The discussion of a scientific report serves to illustrate how to and how not to construct and test a hypothesis, what constitutes effective analysis, and how to report scientific findings. In addition, a journal club meeting reinforces the idea that reading current papers is essential to keeping up with the field. These meetings also provide an opportunity to communicate your values about science and other people's work.

We discuss papers and talk about weaknesses, and it makes it clear that we don't want our papers to have those kinds of weaknesses. I think the scientific rigor issues come up as we go along.

—Tamara Doering, Washington University School of Medicine

Informal group activities. Organizing social occasions to celebrate a major accomplishment—publication of a paper, a job, a grant—is important for promoting your shared vision of the lab and building morale. In addition, most principal investigators agree that it is important that lab members occasionally socialize in a relaxed, nonwork environment. Such get-togethers can help promote team building and enhance communication among lab members. As you are establishing your lab, you might have to arrange these outings. After a while, they will occur more spontaneously. Don’t feel that you always have to participate, and don’t feel offended if you are not invited to all after-hours occasions.

Managing Performance

Day-to-day feedback. Give your lab members feedback regularly and immediately. Praise their accomplishments, but also let them know right away when they are not doing what you expect them to do and that there are consequences for this.

Although I know it’s important, I hate letting people know when their behavior does not meet my expectations. When I first opened the lab, I was more uncomfortable with this than I am now. Basically, I’m quicker to call people on it now. If things are not working and the quality of their work is somehow slipping, or the effort that they are putting in is somewhat slipping, I have an easier time saying, “This isn’t right, you have to change it now.”

—Charles Murry, University of Washington School of Medicine
Performance review. Although regular feedback is important, it does not take the place of a formal review. The performance review meeting is an opportunity for you and members of your lab to clarify your expectations, review their recent accomplishments, and set performance goals. It is also a good time to talk about their career goals and how their work in your lab contributes to achieving those goals. Another important purpose of performance evaluations is to give your lab members an opportunity to give you feedback on your leadership style. Work with your institution’s human resources department to make sure you conform to your institution’s performance management process.

"The specific goal is that we talk about their career development. I give them a form ahead of time so that they have to think about their major accomplishments, their goals, new directions that interest them, and also about their interactions with me from both sides—how they would like to change what they do, and how they would like to change what I do."

—Tamara Doering, Washington University School of Medicine

Starting a Research Group in 1978: Are Any of the Lessons Still Relevant?

In his keynote address at the BFW-HHMI Course in Scientific Management, HHMI President and Nobel laureate Thomas R. Cech described his entry into biomedical science in the 1970s.

“In 1978, I moved from MIT, where I had completed a two-year postdoc, to the University of Colorado–Boulder, where I had landed a tenure-track assistant professor position. I was given a former undergraduate teaching lab for my research space, with a formaldehyde-preserved rat still inhabiting one of the drawers, and $20,000 in start-up money to equip it. My teaching assignment was 90 lectures per year, often in courses that I had not taken myself. My new colleagues were pleasant, but they rarely engaged in anything that could be called mentoring. The prevailing attitude was to give new faculty an opportunity to succeed by themselves and come back in seven years to evaluate the results.

“Although clearly many of the pressures and opportunities for new faculty have changed in the past 25 years, many of the challenges I had to meet are the same ones that you are facing now. One of the main challenges concerns the management of people. Over the years, I’ve had numerous postdoctoral fellows, graduate students, and undergraduates in my laboratory. I’ve found that it’s really important to treat people with respect and to set an example. It’s also important to develop a sense of teamwork and identity for your lab. If you get a good environment built up in your lab and you have more people wanting to come into your lab than you have room for—that is a sign of success. So, if I had one piece of advice to give, it’s that although you’ve been hired for your scientific skills and research potential, your eventual success will depend heavily on your ability to guide, lead, and empower others to do their best work.”

Excerpts from Dr. Cech’s address can be found at http://www.hhmi.org/labmanagement.
Appendix 1 shows a sample performance review form courtesy of Dr. Tamara Doering. Dr. Doering sends the form to lab members a few days before the meeting. The form consists of two parts: a self-assessment section that is completed by the lab member before the meeting and a joint feedback section that is completed during the meeting. In addition to a focused discussion of short- and long-term goals, the twice-yearly meeting gives lab members an opportunity to give feedback on Dr. Doering’s leadership style. The form offers some suggestions about what to evaluate and how to engage lab members in self-evaluation.

Appendix 2 contains a checklist courtesy of HHMI’s human resources department that can help you prepare for a performance feedback session with a lab member.

**RESOURCES**


APPENDIX I

Performance Review Form

Part A. Six-Month Review of Goals

Please complete the first page in advance and bring it to our meeting or e-mail it to me. We will discuss the second page together at our meeting, but you might want to look over the topics.

Name: ____________________________________________________________

Date: ______________

I. Accomplishments

II. Goals for the next six months

III. Long-term goals
Performance Review Form (page 2)

Part B. Joint-Feedback Meeting

I. Feedback on mentoring
Frequency of interactions
Quality of interactions
Level of involvement
Positive aspects of interactions
Areas for effort/improvement

II. Comments from mentor
Quality of work
Organization and efficiency
Knowledge base
Communication skills
Working relationships
Leadership/Supervisory skills
Areas for effort/improvement

III. Summary of discussion
Strengths/achievements
Areas for effort/improvement
Scientific goals
Long-term plans

Lab Director: ________________________________

Lab Member: ________________________________

Date: __________

This form is courtesy of Tamara L. Doering, Washington University School of Medicine.
APPENDIX 2

Performance Feedback Checklist for Managers

Opening the performance review discussion
Create a sincere, open, and friendly atmosphere. This includes

◆ Reviewing the purpose of the discussion.
◆ Emphasizing that it is a joint discussion for the purpose of problem solving and goal setting.
◆ Striving to put the employee at ease.

Conducting the performance review discussion
Keep the focus on job performance and related factors. This includes

◆ Discussing job elements—employee strengths, accomplishments, and improvement needs—and evaluating results of performance against objectives set during previous reviews and discussions.
◆ Being prepared to cite observations for each point you want to discuss.
◆ Encouraging the employee to review his or her own performance.
◆ Using open-ended, reflective, and directive questions to promote thought, understanding, and problem solving.

Encourage the employee to outline his or her personal plans for self-development before suggesting ideas of your own. In the process, you should

◆ Try to get the employee to set development and improvement targets.
◆ Strive to reach agreement on appropriate development plans that detail what the employee intends to do, a timetable, and the support you are prepared to give.

Discuss work assignments, projects, and goals for the next performance review period and ask the employee to come prepared with suggestions.

Closing the performance review discussion
Summarize your agreements. In closing, you should

◆ Summarize what has been discussed.
◆ Show enthusiasm for plans that have been made.
◆ Give the employee an opportunity to make additional suggestions.
◆ End on a positive, friendly, harmonious note.

This form is courtesy of HHMI’s Human Resources Department.