

Writing a Letter of Recommendation

Addendum to

**Making the Right Moves:
A Practical Guide to Scientific Management
for Postdocs and New Faculty**

second edition

**Burroughs Wellcome Fund
Howard Hughes Medical Institute**

Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty, second edition

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WRITING A LETTER OF RECOMMENDATION

As a beginning independent investigator, chances are you will soon have to write a letter of recommendation on behalf of a student, a postdoc, or even a colleague. Your job as letter writer will be to describe the candidate's strengths and weaknesses as they relate to the position or program in a way that is both thoughtful and personal. A letter that falls short of this goal will be of little value to those evaluating applications and will not help the candidate get what he or she is after. So, it pays to put in the necessary effort and time to write a “good” letter. This chapter provides insights and advice from experienced investigators on how to do so. It is not meant to be prescriptive but rather to offer some suggestions from which you can pick and choose.

BEING ASKED TO WRITE A LETTER

Letters of recommendation are ubiquitous in an academic research career. If you teach one or more senior-level undergraduate courses or have undergraduate students in your laboratory, you might have to write dozens of letters a year as students become graduate-school bound or look for employment. If you do not teach undergraduates and have primarily graduate students and postdocs in your lab, you will have significantly fewer letters to write—maybe for only one or two people each year.

In addition to the people in your own lab, graduate students and postdocs in your department may ask you to write letters for them when they apply for fellowships or seek new positions. Colleagues might also ask you to write letters of recommendation on their behalf for various promotions or awards, but that may not happen too often until you are more established.

For Whom Should You Write?

As a mentor, you have an obligation to support students and postdocs in your lab in their job search and to help them find a good match for their abilities and aspirations. If they ask you to write a recommendation letter, it is customary to support them in this way. The best thing to do is to sit down with them and discuss their plans *before* they start applying for jobs. If their career goals are unrealistic, talk about what they need to do to become more competitive or help steer them

in a different direction. If you do end up writing a letter for someone in your lab for a job you don't think is a good fit, there are ways to put a positive spin on the negative (see page 6, "Writing a 'Not-So-Enthusiastic' Letter"). If people who are not part of your lab ask you to write a letter for them, it is up to you to decide whether to do so.

Reasons to Turn Someone Down

You should write a letter of recommendation only if you can honestly write a supportive letter for someone for a given position. After all, a letter of recommendation is supposed to be a tool for helping people obtain what they are after. If you don't know the candidate well enough to write a good letter, let the person know. He or she will probably ask someone else.

If you do know the candidate well but have some reservations, let the person know about your concerns, and leave it up to him or her to decide whether you should still write the letter.

PREPARATION

Read Some Sample Letters

If you have never written a letter of recommendation before, read a stack of reference letters to see what works and what doesn't. Most faculty have access to graduate student applications and the letters submitted. Junior faculty can also ask their more experienced colleagues to share "sample" letters they have written or have received from applicants (blocking out names and other personal information). The resource section of this chapter provides links to sample letters.

Collect Information

Once you know what a letter of recommendation looks like, make sure you find out as much as possible about the candidate for whom you are writing. One of the worst things you can do is to write a letter that is too generic.

TIP: When reading a sample recommendation letter, try to put yourself in the position of whoever is going to read it, keeping in mind that you could be reading the letter late at night or when you are pressed for time. Ask yourself which letters stand out and then use them as models for your own letters.

Ask for the following information:

- ◆ For people in your lab—you probably already have a current curriculum vitae (CV), but also ask for as complete a description as possible of the position or program for which the person is applying.

- ◆ For people who are not in your lab—ask for a current CV that includes the dates and locations of their training and a list of publications as well as copies of any papers that are in press or that have been submitted.
- ◆ For people who were in your lab but have since moved on—ask for a written summary of their current work, future plans, and why they are interested in the position for which you are writing the letter.
- ◆ For students who are not in your lab or department but who were in one of the classes you taught—ask for transcripts and check your class records.

Many reference writers find it helpful to meet with the person who has requested the letter of recommendation. In such a meeting you can learn about the person's long-term career goals and how his or her current research and other activities relate to these goals. Ask about the programs or positions for which letters are being requested and what the individual's preference is and why. You should also discuss the candidate's strengths and weaknesses as they relate to these positions.

TIP: Don't ask the candidate to write a draft of the letter for you. Most heads of labs say this rarely saves time and sometimes leads to a weaker letter. It is better for the candidate to provide you with all the necessary information, from which you can then pick and choose as you write your letter.

If you cannot have a face-to-face meeting, ask the candidate for a detailed written description of these issues.

Allot Sufficient Time to Write and Send the Letter

Once you have gathered the data and marked the deadline on your calendar, make sure you set aside enough time to write the letter. It can take one to two hours, sometimes longer, to craft a well-written letter for one individual. (It takes less time to tweak this initial letter for different programs or positions the same individual has applied to.)

The candidate should give you clear instructions on how and where to send the letter. Some letters have to be submitted online, some e-mailed, and others sent by snail mail.

WHAT THE LETTER SHOULD SAY

KKeep the following pointers in mind when you craft your letter.

Introduce Yourself and the Candidate

Begin the letter by describing how you know the candidate. Briefly state your own qualifications so that people who don't know you can decide whether to

trust your judgment. But don't go overboard and make the letter about yourself!

For example, "During my years of training as a postdoc and now as a faculty member, I have worked with and personally trained more than xx graduate students in laboratories at the University of Michigan, Harvard Medical School, and, currently, at Emory University. In my opinion, candidate x is among the top 5 percent of the graduate students I have known." (You may want to include students you trained as a postdoc, if you have not yet had many students in your own lab.)

Present the Candidate Truthfully but Positively

Devote several paragraphs to discussing the candidate's scientific work and personality, following the suggestions below.

Be specific. Give meaningful examples of achievements and provide stories or anecdotes that illustrate the candidate's strengths. Don't just praise by using generalities (such as "quick learner"), but say what the candidate did to give you that impression. These details will show you have a strong relationship and also bring the candidate alive on the page. If the candidate works in your laboratory, make sure the letter talks about his or her specific contributions to the lab's research.

- ◆ "Student x is the first person to successfully master in vivo imaging in my laboratory and did all the trouble-shooting calibration and testing completely independently."
- ◆ "Student x is the first student in my lab to have a first-author *Cell* paper. She contributed data for five of the figures and made an important intellectual contribution to the experimental design and to writing the discussion."
- ◆ "Candidate x's research was submitted as an abstract and was accepted for a podium presentation at the American Association for Cancer Research national meeting earlier this year. Although she is an undergraduate student, I treated candidate x in the same manner I would treat an experienced graduate student by having her prepare and present the talk independently. At the meeting, she presented the work and answered all the questions from the audience in a clear and professional manner. After the talk several scientists came up to express how impressed they were with the presentation."

TIP: Don't make the letter too short, because it will give the reader a negative impression of the candidate. Letters of recommendation should be between one and two pages.

You don't just have to describe the candidate as he or she is right now—you can discuss the development the person has undergone.

- ◆ “When candidate x came to the lab he showed promise but was not able to plan experiments effectively. Through his own hard work he has acquired this skill and has become an excellent scientist.”

Quantify and compare. Find a way to quantify the candidate's abilities, especially with respect to other scientists who have achieved success in the field and who the letter reader might know. Many letter writers rank the applicants according to their own measure of what makes a good researcher, graduate student, or technician. Depending on the position, most people rank candidates according to a combination of research strength, leadership skills, writing ability, oral communication, teaching ability, and collegiality.

- ◆ “There are currently 17 graduate students in our department and I rank candidate x as 4/17. Her bench skills are the best I have ever had in my own lab, but she still needs to develop better communication skills.”

Address the requirements of the position. Make sure the letter discusses the most important skills and personality traits needed for success in the job.

- ◆ “I understand that you are looking for a person who will be able to establish a program to study nuclear structure and architecture using imaging technologies. Candidate x has performed similar studies using fluorescent imaging in living cells. Her mastery of these experimental techniques is demonstrated by her recent first-author publications in *Journal of Cell Biology* and *Nature Cell Biology*.”

If you are writing a letter for someone applying for a position as a physician-scientist, you should comment on his or her bedside manner. For example, if you are a chief of service, comment on the candidate's clinical skills and personality and how he or she interacts with patients.

Talk about personal attributes. Does the candidate work well with others? Has she or he taught other people in the lab? Has the candidate shown motivation

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We look for more than research accomplishments—comments on creativity, originality, independence, and leadership are usually not overhyped and mentioned specifically in letters of the very best candidates.

—Suzanne Pfeffer, Stanford University School of Medicine

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and commitment in her or his work? Often these descriptions are what distinguish a good letter of recommendation from a great one.

Make it memorable. Put something in the letter that the reader will remember, such as an unusual anecdote, or use an unusual term to describe the candidate. This will help the application stand out from all the others.

Beware of what you leave out. Remember that what is *not* said in a reference letter can be just as important as what *is* said. If you don't mention a candidate's leadership skills or his or her ability to work well with others, for example, the letter reader will wonder why.

TIP: A final statement summarizing your enthusiasm for the candidate is often very useful in focusing the reader's attention on your conclusions and your excitement for candidate.

Express Your Willingness to Help Further

Conclude the letter by offering to be contacted should the reader need more information or have questions. Make sure to provide your phone number and perhaps the best times to reach you.

WRITING A “NOT-SO-ENTHUSIASTIC” LETTER

If you write a letter for someone about whom you have some concerns—for example, the person lacks strong leadership skills or isn't highly motivated—you can still write a generally positive letter, leaving out a mention of these qualities. This omission will send a signal to readers who will be looking for these details. A short letter will also signal that you are not overly enthusiastic about the person for this particular position. If the reviewers are interested in the candidate, they may call you for more details and you will then have the opportunity to explain your reservations.

You can also mention negative things by putting a positive spin on them. For example, if someone has not published much you can say “candidate x has taken a long time to get experiments going but now has several papers in press and I think they will make an important contribution to the field.”

TIP: If the candidate is a good scientist but better suited, say, for a faculty position at some schools and not others, some researchers handwrite that perception on top of the standard letter to those “other” schools. This way they still help the candidate obtain a faculty job without harming their reputation for good judgment.

Yet another way to make a criticism sound less damaging is to say something like “when candidate x came to the lab his writing skills were poorly developed, but he has worked hard to improve them and has made great strides in that direction.”

Terms like “room for improvement,” “has worked hard to,” and “made great progress in” are useful and help turn a negative into a positive.

WHAT THE LETTER SHOULD NOT SAY

Avoid Irrelevant Information

Letters should not mention anything that is irrelevant to doing the job, such as ethnicity, age, hobbies, marital status, and so on. A writer might want to say things like “candidate x understands how important it is to have a lab team that functions well and has organized several social events for the lab that have helped make it both productive and happy” to show that the person is social and easy to get along with. That is something that might be important to the job. In some cases, personal information may illustrate the ability to persevere and overcome adversity, qualities that are helpful in research.

But statements like “candidate x is very religious and has demonstrated religious fervor uncommon for someone his age” has no bearing on whether someone will do well in graduate school or in a job.

Personal information may be revealed if it helps explain a weakness in someone’s application. For example, sometimes there are acceptable circumstances for a gap in someone’s publication record—perhaps a medical condition or a family situation kept that person out of the lab for a period of time. It is okay to explain that in the letter of recommendation but only after discussing it with the candidate.

Another example of a personal situation that might warrant discussion would be a case in which a postdoc is not able to ask his or her advisor for a letter of recommendation because of a bad relationship. If you, as the letter writer, know about this situation, you might want to mention in the letter that “there was a personality conflict but it does not reflect on the ability of the candidate to do the job.”

Don’t Say Anything That Is Not True

Obviously, all information in a letter of recommendation should be, to the best of your knowledge, accurate. But sometimes letter writers stretch the truth to make a candidate sound better than he or she really is, thinking it is helpful.

This strategy can backfire. According to a member of a recent search committee, the head of one lab wrote letters for three applicants from his lab, and in each letter he stated that the applicant was “the best postdoc ever in my lab.” Most researchers say that the most effective letters they receive include some weakness to balance the strengths.

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You don't help the candidate by overhyping them. You should write strongly and specifically about someone who is really excellent (say how and why they are special). But it's okay to write a balanced letter, even for the top folks.

—Suzanne Pfeffer, Stanford University School of Medicine

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BE AWARE OF GENDER BIAS

Choose Your Words Wisely

Two studies have shown that there may be some differences in the choice of words used in letters for male and female scientists. Both Trix and Psenka (2003) and Schmader, Whitehead, and Wysocki (2007) found that letters for women did not contain as many “standout” adjectives—words like “superb,” “outstanding,” and “excellent”—as did letters for men. In addition, Trix and Psenka found that letters for women had more doubt-raising statements, including negative or unexplained comments.

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If you say that Chris works well in a team—that might be interpreted differently depending on whether Chris is male or female. Exactly the same language can convey different messages because of people's antecedent beliefs about gender differences. The reader might infer that Chris the man is a good team leader or someone who can work well with a team even when he isn't a leader of it. Chris the woman, in contrast, may look as if she can't or doesn't lead. For both men and women, then, it is good to be explicit that the person is both a good team leader and can work collaboratively.”

—Virginia Valian, Hunter College

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Test for Possible Bias

Although it is not clear what the effect of the choice of words is, it seems plausible that the words you use will affect the reader's perception of the candidate—the stronger the words, the stronger the candidate. In an exercise conducted at

the 2005 BWF-HHMI Course in Laboratory Management, course participants were asked to read two letters written by the same professor for two postdocs in his lab, one male and one female (see appendix), with similar qualifications and achievements. The professor used more specific and descriptive language, as well as more standout adjectives, for the male candidate than for the female candidate (see summary document, appendix). As a result, course participants overwhelmingly gave the male postdoc a higher ranking than the female postdoc.

TIP: Write a letter of recommendation for any candidate, male or female, and then switch all the pronouns to the opposite gender. Read the letter over and ask yourself: Does it sound odd? If it does, you should probably change the terms used.

ASKING SOMEONE TO WRITE A LETTER FOR YOU

Many letter writers also need letters written on their behalf at some point in their careers. If you are asking someone to write a letter of recommendation for you, make sure you follow these guidelines:

- ◆ Plan way ahead. If you want good letters of recommendation, you need to plan several years in advance. It is important to have established personal relationships with potential writers early on in your career. The best letters are the ones that come from people who say “I have known this person for x years.”
Try to establish strong relationships with at least half a dozen people, some of whom should be well known in your field. People who read the recommendation letter are more likely to care about the opinion of someone who has a good reputation in the field.
- ◆ Be specific. When you ask someone for a recommendation letter, be very specific about what you want.
- ◆ Prepare the writers. Once your reference has agreed to write a recommendation letter for you, a good strategy is to give the person a memo that describes the job or jobs to which you are applying and the key skills or attributes and other aspects of your background that make you well suited for the job.

Other documents you should provide, depending on how well the person writing the letter knows you, are a CV, any papers published and in press, and copies of academic transcripts. You should also provide parts of the application that you have had to write yourself, such as a personal essay of your career goals or a statement of your teaching philosophy. The letter writer can speak to these items if he or she has the complete application.

TIP: It is usually a good idea to ask people you would like as references if they feel that they can write a “positive letter” of support for you. If they say no, it is better to know it now rather than after you don’t get the job.

You may be asked to write a draft of the letter. As mentioned on page 1, many heads of laboratories say this is not a good idea. However, if you are asked to do it, do it!

Make sure you provide the writers with the instructions for submitting the letter and the deadline. If letters are to be mailed, give them postage-paid addressed

envelopes. Also provide any forms that are supposed to be submitted with the letter. (Make sure to complete as much information as possible on those forms so that the letter writer does not have to do it.)

- ◆ Meet with the writers. If possible, meet with the letter writer and go through all the information you are providing. If the writer is in a different location you can talk to him or her by phone.
- ◆ Don’t miss the deadline. Give references plenty of time to accomplish their tasks. Ideally, approach them with the request at least three weeks before the letter is due. Once you have provided all the information, remind them of the deadline and check back periodically. Reminders will not be resented.
- ◆ Don’t argue. If someone says that they do not know you well enough or don’t have the time, don’t try to convince them otherwise.

TIP: If you get the position, make sure that the reference writer knows it and then thank the person formally with a note. Who knows, there may come a time when you will want to ask this person for a recommendation letter again!

Like many other tasks new faculty have to perform, writing letters of recommendation becomes easier with practice. But regardless of how many letters you write, each letter requires time and effort. Take the job seriously. Although a poorly written letter is not going to sink a career, a well-written one can make an application stand out from all the others.

RESOURCES

The Survival Skills and Ethics Program at the University of Pittsburgh provides several useful resources for graduate students, postdocs, and new faculty, including a sample letter of recommendation.

See <http://www.skillsandethics.org>.

Cynthia Verba, director of fellowships for the Graduate School of Arts and Sciences at Harvard University, has written a useful article with several sample letters for teaching fellows (or tutors) writing letters of recommendation for their students at

<http://isites.harvard.edu/fs/html/icb.topic58474/Verba-recs.html>.

Michel Ernst at the Massachusetts Institute of Technology has written several tips as well as a book for writing letters of recommendation at

<http://people.csail.mit.edu/mernst/advice/write-recommendation.html>.

Ira Mellman, former cell biology department head at Yale University and currently a scientist at Genentech, wrote two articles for the *American Society of Cell Biology Newsletter*:

“How to write an effective letter of recommendation”

<http://www.ascb.org/files/0505wicb.pdf>

and

“How to read a letter of recommendation”

<http://www.ascb.org/files/0507wicb.pdf>.

The Social Psychology Network provides suggestions and pointers for students on how to go about obtaining a letter of recommendation at

<http://www.socialpsychology.org/rectips.htm>.

For information about how gender affects science careers, including reference letters, see Virginia Valian’s website at <http://www.hunter.cuny.edu/gendertutorial/> and <http://www.hunter.cuny.edu/genderequity/>.

Two studies have looked at how gender bias affects how letters of recommendation are written:

Trix, Frances, and Carolyn Psenka. “Exploring the Color of Glass: Letters of Recommendation for Female and Male Medical Faculty.” *Discourse & Society* 14(2):191–220 (2003).

Schmader, Toni, Jessica Whitehead, and Vicki H. Wysocki. A Linguistic Comparison of Letters of Recommendation for Male and Female Chemistry and Biochemistry Job Applicants. *Sex Roles* 57:509–514 (2007).

Two articles in the *Chronicle of Higher Education* observe that letters of recommendation are often overhyped and discuss some reasons why that might be:

Schneider, Alison. Why You Can't Trust Letters of Recommendation. *Chronicle of Higher Education* 46(43): (June 30, 2000).

McCloskey, Deidre. The Random Insanity of Letters of Recommendation. *Chronicle of Higher Education* 48(25): (March 1, 2002).

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APPENDIX

Recommendation Letters for Dr. Stephen Hoffmann and Dr. Susan Hoffmann

This appendix contains two sample letters of recommendation written for two fictitious postdoctoral fellows from the same lab—the first one for a male postdoc, Dr. Stephen Hoffman, and the second one for a female postdoc, Dr. Susan Hoffman. Both letters were written by the same person, a “Distinguished Professor Corvallis,” who used different language to describe the two candidates. The appendix also contains a side-by-side comparison of the terms used to describe the two candidates.

The letters were used in an exercise at the 2005 Course in Scientific Management organized by the Burroughs Wellcome Fund and Howard Hughes Medical Institute conducted by Jo Handelsman, Christine Pfund, Sarah Miller Lauffer, and Christine Pribbenow from the Wisconsin Program for Scientific Teaching. The exercise was meant to illustrate how the language used in a reference letter can give different impressions of two candidates with very similar qualifications. As shown by a number of studies, letter writers tend to use stronger terms for male candidates than for female candidates.

Letter for Stephen Hoffmann

Search and Screen Committee
 Department of Bacteriology
 University of Cambridge
 Boston, MA 01237

Dear Members of the Search Committee,

It is my pleasure to recommend Dr. Stephen Hoffmann for the position of Assistant Professor in your department. Stephen completed his Ph.D. in my lab and is one of the most outstanding researchers to emerge from my lab. I recommend him to you highly.

In my lab Dr. Hoffmann cloned and characterized the *gliD* gene from *Cytophaga johnsoniae*. He made the intriguing discovery that the GliD protein is required for gliding behavior in *Cytophaga* and its human homologue is associated with a highly metastatic form of breast cancer. This observation suggests that there may be common features in bacterial gliding motility and mobility of human tumor cells. Dr. Hoffmann initiated a highly productive collaboration with Professor David Whitely that led to the crystallization and high resolution structure of the GliD protein. Dr. Hoffmann brought that work to fruition in a *PNAS* paper, on which he is the senior author. In addition to the *PNAS* paper, Dr. Hoffmann published three other papers from his thesis, which attest to his hard work, biological insight, and outstanding writing skills. Dr. Hoffmann proved himself an outstanding researcher and valued colleague.

Dr. Hoffmann continued to produce original research as a postdoc in Jim Wooley's lab working on *Bacillus subtilis* development. Once again, Dr. Hoffmann discovered a gene that is found in both prokaryotes and eukaryotes, this time in a search for sporulation genes in *B. subtilis*. He identified a new sporulation gene, designated *spoW*, which has a mammalian homologue that appears to be associated with lymphocyte differentiation and maturation. Although that work is not yet published, it has a bright future. The project was technically challenging, but Dr. Hoffmann has surmounted all of the obstacles and a genetic and biochemical analysis of the *spoW* allele and its product will be ready for publication soon. Given Dr. Hoffmann's past record in publishing research, I have no doubt that this work will be published in a top-tier journal.

Dr. Hoffmann proved himself to be a capable mentor and teacher. He has supervised three undergraduate researchers. He is clearly able to transmit his passion and talent for research to young scientists. Similarly, his classroom teaching was met with rave reviews. Dr. Hoffmann is one of my few colleagues to whom I will entrust my class when I travel. Dr. Hoffmann was also a terrific citizen and a leader in my lab. He handled responsibility well, was resourceful, and took initiative to maintain equipment and ensure that safety standards were met. He took on many of the responsibilities of a faculty member and excelled in everything he did.

In short, I give Stephen my highest recommendation. He is one of my finest colleagues—an outstanding researcher and talented teacher. He has demonstrated an uncanny ability to unmask genes that play parallel roles in bacteria and mammals, and I expect him to be one of the leading researchers in his field. He would be a good catch for any department and I urge you to consider his candidacy seriously.

Sincerely,

Theodore Corvallis
 Distinguished University Professor

Rating

- 1 = not interested in this one
- 2 = keep this one in the pool, but I expect better candidates in the pool
- 3 = very strong candidate, but have a few concerns
- 4 = outstanding candidate; definitely move to next stage
- 5 = superlative candidate; better snatch this one before Stanford does!

Letter for Susan Hoffmann

Search and Screen Committee
 Department of Bacteriology
 University of Cambridge
 Boston, MA 01237

Dear Members of the Search Committee,

It is my pleasure to recommend Dr. Susan Hoffmann for the position of Assistant Professor in your department. Susan was my graduate student and ranks among my very best students. I recommend her to you highly.

As a student, Susan cloned and characterized the *gliD* gene from *Cytophaga johnsoniae*. She made the intriguing discovery that the GliD protein is required for gliding behavior in *Cytophaga* and its human homologue is associated with a highly metastatic form of breast cancer. This observation suggests that there may be features in common between bacterial gliding motility and mobility of human tumor cells. A highly productive collaboration with Professor David Whitely led to the crystallization and high resolution structure of the GliD protein. That work was published in a *PNAS* paper, on which Susan is a coauthor. In addition to the *PNAS* paper, Susan published three other papers from her thesis, which attest to her hard work, biological insight, and outstanding writing skills. Her high productivity as a graduate student is particularly remarkable because she had two children while in graduate school and her husband is a resident in emergency room medicine.

Susan continued her record of excellent work as a postdoctoral student in Jim Wooley's lab working on *Bacillus subtilis* development. Once again, Susan discovered a gene that is found in both prokaryotes and eukaryotes, this time in a search for sporulation genes in *B. subtilis*. She identified a new sporulation gene, designated *spoW*, which has a mammalian homologue that appears to be associated with lymphocyte differentiation and maturation. Susan has been slow to publish this work and therefore has no publications from her three-year postdoctoral study. No doubt her family responsibilities have contributed to this delay.

Susan proved herself an able mentor and a sterling classroom teacher. She has three undergraduate researchers who have all coauthored publications, which is indicative of the excellent mentorship they received from Susan. Similarly, her classroom teaching was met with rave reviews. Of all of my students, I felt the most comfortable asking Susan to cover my classes for me when I was out of town because I knew she would do a great job. Susan was also a cooperative and reliable lab citizen. She handled responsibility well and conscientiously followed through on all that was asked of her to maintain equipment and ensure that safety standards were met.

In short, I give Susan my highest recommendation. She is one of the best students I have seen and is a talented teacher and mentor. She has an uncanny ability to unmask genes that play parallel roles in bacteria and mammals, and I expect her to continue to be as productive and creative as she was as a student in my lab. She would be a good catch for any department and I urge you to consider her candidacy seriously.

Sincerely,

Theodore Corvallis
 Distinguished University Professor

Rating

- 1 = not interested in this one
- 2 = keep this one in the pool, but I expect better candidates in the pool
- 3 = very strong candidate, but have a few concerns
- 4 = outstanding candidate; definitely move to next stage
- 5 = superlative candidate; better snatch this one before Stanford does!

Side-by-Side Comparison of the Letters

Here is a side-by-side comparison of the terms used in each letter (in each case, the first bullet is how Corvallis describes Stephen Hoffman and the second bullet, in italics, is how he describes Susan Hoffmann):

First paragraph:

- ◆ Stephen completed his Ph.D. in my lab and is one of the most outstanding researchers to emerge from my lab.
- ◆ *Susan was my graduate student and ranks among my very best students.*

Second paragraph:

- ◆ In my lab, Dr. Hoffman
- ◆ *As a student, Susan*

- ◆ Dr. Hoffman initiated
- ◆ ...

- ◆ Dr. Hoffman brought that work to fruition
- ◆ ...

- ◆ senior author
- ◆ *coauthor*

- ◆ Dr. Hoffman proved himself an outstanding researcher and valued colleague.
- ◆ *Her high productivity as a graduate student is particularly remarkable because she had two children while in graduate school and her husband is a resident in emergency room medicine.*

Third paragraph:

- ◆ Dr. Hoffman continued to produce original research as a postdoc.
- ◆ *Susan continued her record of excellent work as a postdoctoral student.*

- ◆ Although that work is not yet published, it has a bright future. The project was technically challenging, but Dr. Hoffman has surmounted all of the obstacles and a genetic and biochemical analysis of the *spoW* allele and its product will be ready for publication soon. Given Dr. Hoffman's past record in publishing research, I have no doubt that his work will be published in a top-tier journal.
- ◆ *Susan has been slow to publish this work and therefore has no publications from her three-year postdoctoral study. No doubt her family responsibilities have contributed to this delay.*

Fourth paragraph:

- ◆ a capable mentor and teacher
- ◆ *an able mentor and a sterling classroom teacher*
- ◆ He has supervised three undergraduate researchers. He is clearly able to transmit his passion and talent for research to young scientists.
- ◆ *She has three undergraduate researchers who have all coauthored publications, which is indicative of the excellent mentorship they received from Susan.*
- ◆ Dr. Hoffman is one of my few colleagues to whom I will entrust my class when I travel.
- ◆ *Of all of my students, I felt the most comfortable asking Susan to cover my classes for me when I was out of town because I knew she would do a great job*
- ◆ Dr. Hoffman was also a terrific citizen and a leader in my lab.
- ◆ *Susan was also a cooperative and reliable lab citizen.*
- ◆ He ... was resourceful, and took initiative to maintain equipment and ensure that safety standards were met. He took on many of the responsibilities of a faculty member and excelled in everything he did.
- ◆ *She ... conscientiously followed through on all that was asked of her to maintain equipment and ensure that all safety standards were met.*

Fifth paragraph:

- ◆ He is one of my finest colleagues—an outstanding researcher and talented teacher.
- ◆ *She is one of the best students I have seen and is a talented teacher and mentor.*
- ◆ He has demonstrated an uncanny ability ...
- ◆ *She has an uncanny ability ...*
- ◆ I expect him to be one of the leading researchers in his field.
- ◆ *I expect her to continue to be as productive and creative as she was as a student in my lab.*