

Giving a Great Job Talk

This is one in an occasional series of articles of special interest to postdocs.

Giving an effective job talk is an essential component of getting a job offer. The purpose of a job talk is different from that of lab meetings or conference presentations; therefore, job talks should never be tailored and given in the same fashion. Provided that the science is good and that a candidate has just been asked for an interview, here are seven rules on how to give a job talk effectively.

1. Know the Audience

In research-intensive institutions, scientists from all backgrounds may be present, and therefore the introduction must be broad enough to accommodate their level of knowledge. It is imperative to appeal to both the search committee members and the general audience because candidate selection may be affected by the “buzz” generated among the attendees. In contrast, a job talk given at a teaching university emphasizes teaching skills and the ability to engage the students. Finally, the audience in industry settings may include businesspeople and laypersons, so extra effort must be made to provide enough explanatory and background materials. Because both experts and outsiders may be present, it is important to tailor a talk that speaks appropriately to the audience.

2. Know the Rules

Depending on whether a candidate has been asked to give a formal science or teaching talk and/or a more informal chalk talk, each preparation is different. Although most understand the requirements for a science talk, fewer people are familiar with teaching and chalk talks. For a teaching job talk, a topic is often preselected and it is imperative to ask what types of people the audience will consist of: entering undergraduates, seniors, or graduate students. In contrast, a chalk talk is typically a Q&A session with a smaller group of people. Here, it is important to outline immediately the research proposal to channel the types of questions asked.

In general, know the length of time allotted for a talk and ensure that adequate time is allowed for questions at the end. This provides a good opportunity to impress the audience on how knowledgeable a candidate is. Make no assumptions on the availability of appropriate audiovisual equipment and have a back-up plan for equipment malfunction or a late start. Asking the administrators beforehand to clarify the talk’s format, scope, and audience is perfectly appropriate as well.

3. Understand What Is Being Evaluated

Although good science is being evaluated at all times, the most important evaluation to be made is of the candidate. The audience would judge him or her on ability to be a team player, “fit” in the new environment, teaching abilities, and leadership and management potential. Highlight these attributes by giving credit to students, colleagues, and collaborators who contributed. In addition to evaluating these attributes, the search committee further evaluates a candidate’s research proposal, grantsmanship, fundability, and the repertoire of skills and techniques during a chalk talk. In contrast, teaching institutions may place a higher priority on a candidate’s ability to connect with students. Industry might emphasize the versatility and adaptation skills of a candidate because new hires typically follow new lines of research.

Throughout the talk, hit the high points and exclude small, insignificant experimental details that digress.

4. Tell a Story

Reconstruct the experimental history so that it is more conducive to a flowing storyline. Although memorization should be kept to a minimum, memorize the transition points and the first few slides to jump-start the talk. Begin with an introduction that would captivate the audience within the first two minutes of a talk. Provide enough background and say why the research is important.

Throughout the talk, hit the high points and exclude small, insignificant experimental details that digress. Rather than delving into too much detail regarding how the research was conducted, explain why a model, experiment,



Practice in front of those who are outside your field to ensure that the presentation is clear and understandable.

and a particular line of research were followed to illustrate critical thinking abilities.

Repeat key points to ensure that the audience gets the message before moving on. Last, tailor the end of the talk to the institution or company; for example, highlight skills and techniques rather than discussing future research plans as one might for an industry job talk.

5. Have Clean Data Slides

Slides should be readable from a distance. Have a declarative title for each slide to refocus the audience who just tuned in. Curtail use of colors and animation that distract. If possible, minimize extra words or substitute words with pictures so that the audience listens rather than reads the slides. Avoid including extraneous information; however, if doing so is unavoidable, use arrows and other tools to highlight the parts where attention is needed.

6. Be Engaging and Personable

Make a good first impression by dressing appropriately and using good body language and movement. Minimize habits that distract. Step away from the podium and face the audience at all times. Make eye contact frequently with the

audience. Finally, genuinely welcome questions at the end of the talk.

7. Start Early and Practice, Practice, Practice

Polish the talk by practicing in front of colleagues who can give constructive criticisms for every aspect of your talk. Practice in front of those who are outside your field to ensure that the presentation is clear and understandable. Talk with mentors who have served on search committees. Discuss job talk strategies with mentors and career counselors.

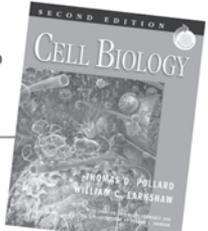
Finally, the best way to understand how to give a job talk effectively is by watching others. So attend as many job talks as possible to learn more. By observing others, and armed with the rules set forth here, a candidate is sure to impress and engage both the audience and the search committee. ■

—Jennifer Chua, Subcommittee on Postdoctoral Training

Adapted from a workshop seminar given by Sharon Milgram, Director of the Office of Intramural Training and Education, National Institutes of Health, Bethesda, MD

A concise yet comprehensive resource

Cell Biology 2nd Edition



by Thomas D. Pollard, MD,
William C. Earnshaw, PhD, FRSE
with Jennifer Lippincott-Schwartz, PhD

What's New in the 2nd Edition of Cell Biology?

The latest version of this masterful introduction to the field now includes:

- ▶ Spectacular new artwork by gifted artist Graham Johnson of the Scripps Research Institute, giving students realistic drawings that show the correct relative sizes and the shapes of all of the molecules for the first 'life-like' views of virtual cells at the molecular level.
- ▶ New chapters and sections on the most dynamic areas of cell biology, including organelles and membrane traffic, RNA processing (including RNAi), and updates on stem cells and DNA Repair.
- ▶ New easy access guide enables students to find figures featuring popular model organisms and specialized cells throughout the book.
- ▶ New keystone chapter on the origin and evolution of life on earth.
- ▶ Improved organization and an accessible new design increase the focus on understanding concepts and mechanisms with a 'bottom-up' approach, allowing students to learn and retain general principles.

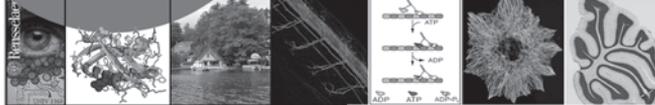
To request a desk copy: www.elsevierhealth.com or 1-800-222-9570

928 pages, 1,500 illustrations
©2007, \$94.00, Hardcover, With FREE Student Consult Online Access
A Saunders Title
ISBN-13: 9781416022558

Graduate Program in Biology



Rensselaer



Why Biology at Rensselaer?

Program Features:

- ✓ Immediate immersion in laboratory research
- ✓ Specialized curriculum focused on emerging fields and technologies
- ✓ Low student-faculty ratio with faculty mentors across departments
- ✓ Development of independent scientific thinking and creativity
- ✓ Integrated career mentoring for professional development
- ✓ Vibrant geographical region with academia:industry connections
- ✓ Interdisciplinary training in:
 - neuroscience
 - cellular, molecular, and developmental biology
 - computational biology and bioinformatics
 - cancer and stem cell biology
 - nanobiology, nanotechnology, and biotechnology
 - synthetic biology
 - biochemistry and bioenergetics
 - structural biology and biophysics
 - model organisms including *Drosophila*, *C. elegans*, mouse, zebrafish
 - ecology and environment of the Adirondack Lakes and Hudson River

Application Process

Applications for graduate study must be submitted online (<http://admissions.rpi.edu/graduate>). Review of applications will begin on January 1, 2009. Early applications are encouraged.

For more information visit <http://biology.rpi.edu> or contact gradbio@rpi.edu

Department of Biology
11W14 Jonsson-Rowland Science Center
Rensselaer Polytechnic Institute
110 8th Street
Troy, NY 12180-3590
518-276-2808

why not change the world?