BATS

Bioengineering and Toxicology Seminars

graduate student presentations from the MIT Department of Biological Engineering

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SPEAKERS' GUIDELINES

Each BE graduate student is expected to make at least one BATS presentation during each of the third and fourth years (may be extended under some circumstances into the fifth year). This is usually a progress report but it may also focus on research rationale and plans or on a summary of an important new technique that might be of interest to the group. The third-year presentation is often an introduction to the thesis project and the fourth-year then a summary of the subsequent results or the best set of results that make a good 15-minute story.

TIMING. Many people have other classes or obligations after the seminars, so BATS should end on time just before 1:00 PM. Unless you are the only speaker, the presentation should take no more than 15 minutes. This is enough time to give some background, make one or two strong points, and give a summary along with a projection of future plans. The talk, therefore, must be well organized and concise. This time constraint is important; when there are two speakers in the hour, both should have enough time for their presentations, and there should be ample time for questions from the audience. It is also realistic, since most oral presentations at scientific meetings are limited to twenty minutes or less, including time for questions. If you are inexperienced, be sure to run through your presentation once or twice - or more! - for a few friends or your research group. The BE Writing Lab (http://bewritinglab.mit.edu/) is available to help with slide design and listen to a rehearsal. Also, see: https://pubs.acs.org/cen/employment/87/8717employment.html.

INTRODUCTION. Remember that this is an extremely diverse group and that many people in your audience may not understand the subtle aspects of your area very well (and in fact may not have any idea at first what you're talking about). Spend a few minutes on a careful, clear and well-thought-out introduction to explain exactly what you've been doing or are planning to do, why you're doing it (e.g., a question that's arisen from previous work), and why it's important. With that being said, however, be careful not to spend too much time on the introduction; 2 or 3 minutes should be enough. You might find some inspiration from the Scientist article on scientific elevator pitches: http://www.the-scientist.com//?articles.view/articleNo/40702/title/Scientific-Elevator-Pitches/. You can also check out '3MT presentations' on YouTube.

MAIN POINT. Two-part presentations rarely work out well, so tell only one story! If you have more than one to tell, choose the best. Then make sure you have a clear and explicit idea of what it is you want to say. In general, the introduction will have raised a question and suggested some experiments that should answer the question. You should explain the experiments that you have done or plan to do. Point out what results were obtained or might be expected and point out as explicitly and concisely as possible what conclusions can be drawn from these results. Don't spend too much time on experimental details unless these are novel or crucial to getting the point. Summary flow sheets are usually sufficient for outlining your experimental approach.

SUMMARY. This needn't take long, but it should be very good. It should leave the audience with (1) a fresh overall impression of the points you've just developed, (2) a good idea of what you plan to do next and why, and (3) two or three good questions.

ACKNOWLEDGEMENTS should be brief and general.

VISUALS.

Projection. Room 56-114 has a ceiling-mounted LCD projector with connections for two laptops, so initial setup is relatively painless. It's still a good idea, though, to come a bit early with your laptop in case there are glitches.

Once connected, the laptops can be kept on; the second speaker, while being introduced, can simply go to the control panel and select PC2 (or PC1, depending on the connections). If you're using a Macintosh or an iPad,, make sure you have an adapter for the video connection (or alert Aran Parillo, or Alexis Runstadler).

Powerpoints or Keynotes. Each slide should have as little information as possible (not a misprint!), in large type. Avoid clutter and too many colors. Avoid red lettering on dark backgrounds and yellow lettering on light backgrounds. For a 15-minute presentation, there should probably be no more than 15 slides.

If you have very large tables of data, divide them up into smaller units or make smaller tables with extracted key or representative data. Actual data is important and informative, but it is not usually necessary to show all the data from every experiment that you've carried out. If you find yourself apologizing for your slides, or saying things like 'You can ignore most of this slide and focus only on this row', then you should redo the slides. (There are some good/bad examples at http://web.mit.edu/toxms/www/dbe/slide_examples.pdf)

Since you will have your presentation ready in PowerPoint or Keynote, I'd also recommend saving it on a CD or a USB memory stick so it can be quickly transferred into a communicating laptop if desperate measures are needed.

THE QUESTION PERIOD. This is a very uncomfortable time for many people, since it's easy to misunderstand a question or - under the pressure of the moment - to forget something you know perfectly well. Don't be afraid, however, to at least try to answer every question. Controversial seminars are the most fun (at least for the audience). It might be a little threatening to have Bill Thilly or Jacquin Niles hitting you with complex, pointed questions, but don’t be afraid to hold your own. Stay as cool as possible, listen carefully to the questions, give your best answer, and that will be good enough. Try to anticipate some of the questions that might be raised; encourage the audience at your practice sessions to ask difficult questions. Finally, remember that everyone is on your side.