## TIPS FOR EFFECTIVE SLIDE PRESENTATIONS

These tips are a collaborative effort of Dr. Shaun D. Black and Mr. Pete Walker III who desire to help you achieve an excellent slide presentation. Scientists both give and attend such lecture/seminar formats frequently, and we hope that the suggestions below will help make the lives of both presenters and attenders just that much easier...

- Fill Space on the Slide Effectively: Bring the top, bottom, left, and right edges of your image near to the respective borders of the slide.
- Choose Font Sizes Carefully: People in the back of the lecture/seminar room should be able to read the
  text; when in doubt, use a bigger font.
- Beware of the "Portrait" Orientation: Many times the bottom of a "portrait" slide will be projected below eye-level; if you must use these, be sure that you preview them to adjust the size and height to maximize visibility.
- Avoid "Mega Data" Slides: If you put too much on a slide, you will lose your audience no matter
  how good a job you do explaining the contents; "mega data" slides also tend to include small font
  sizes making it difficult for audiences to read.
- Use No More Than Two Graphs on a Slide: This is a specific case of #4, above; if you must use more than two graphs, make the lessons in each simple and obvious.
- Use Colors that Contrast: Color choice is a key feature to the effective communication process.
   Optimal color choices should complement the physiology of human vision and perception rather than just being your own "favorites". It is best to stick with contrasting combinations of Red, Green, Blue, Yellow, Black, and White whenever possible; but, beware of certain combinations like red letters on a blue background (causes "stereopsis") or red/green combinations (many people are red/green colorblind). When in doubt, ask for the opinions of a few friends/colleagues.
- Ideas for Emphasis: The best way to provide emphasis of ideas, points, bullets, words, phrases, paragraphs, and the like is with bold fonts, italic fonts, or different colors (don't forget Point 6, above!). A surprisingly ineffective way to emphasize is with underlining. (Contributed by Danny Aleman)
- Multicolor / Gradient Backgrounds: These look very nice, but can cause perceptibility problems when
  text and graphics contain colors that contrast with part, but not all, of the gradient. Again, choose
  colors carefully, and ask for an opinion if you are in doubt. Finally, vertical gradients are generally
  better than horizontal gradients.
- Slide Contents Should be Self Evident: Give the slide a title, label all graph axes, lines, bars, and insets. Use colors to help discriminate key portions of complex schemes. But, even though your slides are self evident, be sure to explain what the slide shows and how it shows it. Also, avoid the presence of data that you are not going to talk about; remake the slides if necessary!
- Avoid Simply Reading the Slide to the Audience: Though your slides may be self evident, you
  can best keep the interest of most audiences by explaining the content using related wording to what is
  depicted; variety is the spice of life!
- Use Laser Pointers Sparingly: Highlight only what your talk is focused on and be sure to move the pointer slowly. Once you have drawn the attention to the given point, turn the pointer off. Not only will this remove distraction, but it will also conserve the (rapidly draining) batteries in the laser pointer. It also helps to say things like, "as you see in the lower panel of the slide..." when you use the laser pointer.
- Avoid "Laser Light Shows": This is a point added in emphasis of #10 above. Have you ever noticed seminar speakers who wave the laser pointer wildly all over their slide, the walls, ceilings, etc.? Need we say more?!
- Prepare Your Slides Well in Advance: What you envisioned during slide creation may not be what
  is actually seen upon projection! Computers and/or cameras don't always accurately map/record
  colors. WYSIWYG can be WYSINWYG! A little extra time will allow you to edit your slides and
  recreate them.

- Allow No More Than 1-2 Slides per Minute of Presentation: More usually causes you to rush through your presentation, thereby increasing the chance of losing your audience or skipping pertinent information. When in doubt, use fewer slides. A little "extra" time at the end of a talk may allow/spark lively discussion.
- Speak Comfortably and Clearly: In fact, it is even a good idea to speak a bit more slowly than your normal pace. This really helps the comprehension of your listeners! A corrolary is "Never rush!".
- Enjoy Your Presentation: Remember "infectious laughter"? A good attitude will rub off on your listeners and they will enjoy the talk more as well.