#### **Guidelines for Gruber Award Candidates**

The following are guidelines and recommendations for student presenters competing for the Samuel H. Gruber Award for best oral presentation. The judging panel scores candidates in seven equally weighted categories: *delivery*, *visuals*, *background/methods*, *results*, *conclusions*, *significance*, and quality of answers to *questions*. Because poor delivery and visuals often detract from the other categories, effective delivery and visuals are especially emphasized below.

## **Delivery**

Speak freely, clearly, and audibly. Your speaking tone, pace, and volume should be natural, conversational, and dynamic. This does not come naturally to everyone and thus requires practice. Consider testing the microphone in your presentation room before you present to gauge the level of amplification and modulate the volume of your voice accordingly. Do not read from the slide or speak to the screen. Make frequent eye contact with the audience (find some friendly, nodding faces). You might consider recording a practice presentation with your cell phone and watch yourself. You may notice things about your presentation that you may want to correct. Remember that during your talk, you must speak into the microphone so everyone can hear, and, if available in the room, captions can be generated for hearing-impaired people in the audience.

*Use humor cautiously*. Dry humor, sarcasm, and amusing anecdotes can be effective and engaging, but potentially distracting and unprofessional. Remember that you are presenting first and foremost to inform, not to entertain.

Aim to finish on time. Your presentation is allotted 15 minutes total: 12 minutes for your presentation (including acknowledgements) and 3 minutes for questions. With adequate practice, you should be able to finish within 30 seconds of the 12-minute mark. Practice using a stopwatch (available on most computers, cell phones, and online).

Know your lines and cues. This cannot be overstated. For most people, your presentation is no time to improvise. Consider writing a script, complete with cues for deliberate pauses, voice inflections, changes in stance, gestures, and using the laser pointer. Good actors do not sound over-rehearsed, and neither will you with adequate practice. This technique will also eliminate the use of "umm," "like," and "ahh." Know which slide comes next in your presentation so you can make seamless transitions.

Practice makes perfect. This is cliché but true. A musician would not perform at a recital, nor would an athlete compete in a championship race or game, without adequate practice and training. Your presentation is a performance of sorts, and you are indeed competing for a prestigious award. Like a recital or championship race, this is your annual or biannual opportunity to showcase your hard work to your professional colleagues. Take it seriously and start practicing well before you arrive at the conference.

Use the laser pointer sparingly. The laser pointer can be effective, but also distracting if it is shaky and all over the screen. Instead of the laser pointer, consider using animations, arrows, and boxes to provide emphasis and draw attention in PowerPoint slides (see below). If you must use

the laser pointer, consider using both hands with your arms braced against the podium or your torso for stability. If you rely on a laser pointer and have a good one with which you are comfortable using, consider bringing and using it during your presentation.

#### Visuals

Make your title slide a masterpiece. The audience's early impressions of your presentation will be your title slide, which should be a work of art. Find a beautiful picture of your study species, study location, or a stylized version of a key result to which you will return later. You want to pique the interest of the audience.

Synchronize the visuals with the audio. The content of your slides should complement what you say. Consider a television news package or documentary, where quick edits allow screen content to match the narration almost perfectly. There is a reason we take this for granted: because good synchronization makes for natural flow and reception of information. Minimize discordance between visuals and audio by carefully choosing slide content and timing slide transitions and animations.

Use text sparingly. Text should be minimal and match or paraphrase what you are saying. Any text that is used (whether in bullet form, axis labels, graph titles, tables, etc.) should be large enough to be legible from a distance. Use basic sans serif fonts (e.g., Arial, Helvetica, etc.), which are easy to read and unlikely to suffer formatting problems when transferring PowerPoint files between Macs and PCs. Lastly, be cognizant of contrast between text color and background (color or pictures). Use very light font on very dark background or very dark font on very light background. Change the font color or use *italics*, **bold**, or underline to add emphasis. DO NOT USE CAPS FOR EMPHASIS BECAUSE IT IS HARDER TO READ.

Use animations to provide emphasis and control the flow of information. As an alternative to using a laser pointer, consider using block arrows and rectangles (either just an outline or semi-transparent solid) to draw attention and emphasize specific content on your slides. To control the flow of information, use simple animations (e.g., appear, fade, wipe, etc.) to introduce elements on your slides progressively (e.g., bulleted text, figures, images, etc.), synchronizing the appearance of those elements with what you are saying. Also effective is removing or dimming (graying out) elements that are no longer being discussed. You should not throw up a busy slide all at once, which could overwhelm your audience and trigger them to start scanning elements (e.g., reading text) instead of listening to what you have to say. You must control the flow of information such that the audience sees and hears only what and when you want them to. Conversely, just because something could be animated does not mean it should. Superfluous and overly complicated animations distract your audience, detract from your message, and may not even execute properly if the conference computer is slower or has a different operating platform (e.g., PC vs. Mac) or version of PowerPoint than your personal computer.

Avoid overreliance on video footage. Video clips can be effective at presenting certain methods and results, but overuse detracts from your performance as a presenter. Moreover, problems with video playback in PowerPoint presentations are notoriously common, so prepare accordingly, ensuring videos are fully embedded in your PowerPoint file so they will play on any computer.

Be consistent. Use the same color schemes and fonts throughout your PowerPoint presentation.

Polish your slides. Take the time to make your slides visually appealing. Avoid sloppy-looking slides by properly distributing (equal spacing), cropping, and aligning (vertically and horizontally, or centrally) the edges of figures, images, and text boxes. This can be done manually or by using the alignment and distribute tools in PowerPoint. Also avoid "jumping" text and images. This occurs when you have a header, image, or figure that is consistent in several slides but not in the exact same position. Always credit your images, even your own (do not make the audience guess whether the photos are yours or whether you have accidentally or deliberately omitted the credit). Lastly, never place a vitally important element in the bottom third of the slide (much of your audience may not be able to see it depending on the presentation room) or use any element in your slide for which you must apologize (e.g., "I'm sorry, I know you can't see this, but...").

# **Background & Methods**

Hook the audience. Try to pique the audience's interest in the first minute. Identify a gap in knowledge (that you plan to fill or partly fill) or pose an interesting question (that you plan to answer or partly answer). Remember, your enthusiasm is contagious. The audience will be excited about your study if you are (appropriately) excited.

Be concise and relevant. Unless your presentation is on method or equipment development, this section should be brief and to the point. For example, you should consider prioritizing the natural history characteristics of your study species (range, size, gestation period, conservation status, size at maturity, etc.) that are directly related to your study. Do not waste time explaining an outline consisting of "background, methods, hypotheses, results, conclusions, etc." An outline can be very effective, but only if it is specific to your study. Alternatively, a subtle "timeline" along the bottom of your slides can consist of "background," "methods," etc. with each word becoming bold or changing color as you arrive to that section. But do not draw attention to it. It should be obvious to your audience and will allow them to keep track of where you are in the presentation.

Be clear why you conducted this study. It should be obvious to the audience the reasons for conducting this study within the first few minutes of the presentation. If your study is hypothesis-based, be sure to explicitly state your hypotheses. If your study is descriptive, be sure to explicitly state your objectives. Alternatively, you may pose several (not many) questions, which you plan to answer. This is a place where text is almost always beneficial; you must be clear why you conducted this study.

#### **Results**

Orient the audience to graphs, figures, and tables. Take the time to carefully explain graphs, figures, and tables. You should identify and explain the axes of a graph, even if they seem self-explanatory to you. Make it easy for the audience and walk them through it. You can use animations to make certain elements (e.g., data points, lines, etc.) appear and/or disappear when you want them to. Do not include data that you do not plan to address or refer to, even if the data

are cool. It is distracting. Consider making the title of your results slides or graphs, figures, and tables the actual finding or "take-home message" (the main point you want the audience to remember) of that slide, graph, figure, or table. For example, it is completely uninformative to entitle the results slide "Results." Properly explained, every graph, table, or figure will take more time to present than you expect, but properly explained data make all the difference in convincing the audience of your conclusions. Large tables should generally be avoided.

Ensure the results you present directly address hypotheses, objectives, and questions posed earlier and directly support the conclusions you will draw later.

*Be complete.* Be sure your data are analyzed appropriately and completely. Include the results of statistical tests and error bars. All else being equal, the judges will favor a complete or nearly complete study more than one that presents preliminary data only.

Avoid default colors and fonts in excel graphs. Take time to change the colors and fonts of your graphs made in Excel to match the decor of your PowerPoint presentation. Do not make it obvious that a graph was made in Excel. In general, be very careful about using green and red in graphs, figures, and tables because individuals with color vision deficiencies (CVDs) cannot distinguish these. Consider using different shapes and shading patterns instead.

#### **Conclusions**

Be sure your conclusions are well founded and appropriate for the results you presented. If you posed questions, objectives, or hypotheses in the beginning, consider revising those here and provide explicit answers.

*Include a take-home message.* You need not explicitly call it that but leave the audience with one or a few key points (in non-technical terms) to remember from your presentation (that they will "take home" with them), especially if they might have gotten lost earlier. Bring everyone back together now.

### **Significance**

How is your study important, original, innovative, and contribute significantly to its field?

Why should the audience care about your study? What do your results mean and how does their significance relate to the larger picture, beyond your study?

## **Questions**

Finish on time to allow questions. Again, you should finish your presentation within 30 seconds of the 12-minute mark to allow approximately 3 minutes for audience questions and discussion. If you do not allow time for questions, you will not be a top contender. It is helpful to think about potential questions you could be asked and practice your answers ahead of time. You might consider having extra slides that would be helpful in answering certain anticipated questions.

Be polite. Be patient and listen attentively to the entire question and wait for the audience member to finish before you respond. It can come across as rude to begin nodding your head, saying "yes" and "uh-huh," and scrolling back to a particular slide before the questioner has finished, as if you know exactly what the rest of the question will be. The worst thing would be to answer a question that was not being asked and have to be corrected by the questioner. There is obviously a balance, however, and you may need to nudge the questioner if they are going on and on and not getting to the point, and thus eating up your time for questions.

#### **Additional Recommendations:**

Practice and do not wait until the last minute! Making a beautiful PowerPoint presentation takes time, sometimes weeks, but is worth it. Your efforts will be noticed and appreciated by the audience. Developing the oral component of your presentation also takes time. You are strongly encouraged to practice your presentation for your advisor and lab group and ask for feedback.

Finish your PowerPoint and script before you arrive at the conference. Consider setting goals for yourself during the weeks and even months before the conference: to have data analyzed, to have the PowerPoint made, to have the script rehearsed, etc. Once you arrive at the conference, you may obviously make minor changes, but you should not be sweating. Also, be responsible and rest well the night before your presentation, even if you present later in the afternoon. There is no shame in calling it an early night or not going out at all if it means you being in top shape the following day. Your colleagues will respect your decision and may follow your example.

Empower the audience. No matter how technically complicated your study may be, there is no reason your audience (likely conversant but not experts in your field) cannot fully understand and appreciate your study. The audience is smart and if they understand your study they will like your presentation. Provide thorough explanations but distill the message as necessary. Your audience does not need to know everything. Never say anything like "this is really complicated, so I am going to break it down for you." That is condescending. Also, do not cater to or alienate any part of your audience by saying anything like, "for the geneticists out there, ..." because you are basically giving the (majority of the) audience permission to temporarily tune out and you risk not getting them back.

Warn the audience of sensitive, unpublished results that should not be shared. Talks at conferences often have unpublished results. If you do not want the content of a slide shared on social media or elsewhere, for whatever reason, make that clear with a small warning on the slide, either in text or icon format (e.g., a camera with an X over it).

Note the operating platform and software versions of the conference computers. Information about the operating platform (usually PC) and version of PowerPoint installed on conference computers are often made available on the conference website. Note any differences between the conference computer and your personal computer. Certain images, fonts, animations, and videos that look and work one way on your personal computer may look and work differently (if at all) on the conference computer. Fortunately, these issues are less serious than they were a decade ago, but it is worth running through your slides in the practice room, which will be the same model of computer as the presentation rooms. Lastly, the conference computers may have less

processing power than your personal computer. Thus, complicated animations, videos, or large images may delay slide transitions. Always take time to reduce the size of image files embedded in PowerPoint and delete cropped areas (use the 'compress pictures' option in PowerPoint). There is generally no need for 4000 x 3000 pixel images in PowerPoint because projector resolutions are usually much lower than that. Lastly, only save your file as a PDF if you have no animations or videos—these will not work with a PDF. If you have animations or videos, you must save the file as a standard PowerPoint (.pptx) file.