The 21st Annual Undergraduate STEM Research Showcase

November 3, 2023

**Oral Presentation Guidelines**

**Panopto Software**

Panopto is a web-browser-based tool for recording and sharing video and audio files. It has been thoroughly interfaced with D2L, our online learning management system. DePaul students have free access to Panopto. A detailed guide on downloading and using the program can be found here: <https://resources.depaul.edu/teaching-commons/teaching-guides/technology/desire2learn/tools/panopto/Pages/students.aspx>

**PowerPoint Slide and Presentation Design**

PowerPoint slides for a scientific presentation should be designed to clearly show data and demonstrate ideas.

* Text should be minimal; the slides should not read as a “script” for the presentation. Instead, the presentation should be built around images such as figures from the data analysis or cited figures from other sources.
* Images should be formatted to fill as much available space as possible, to give the clearest look to the audience.
* When sizing images, be careful that the source image has sufficient resolution so that it does not become pixelated in the presented slide. Also be careful not to distort text when resizing an image. This can happen when the figure is expanded differently in the horizontal and vertical dimensions.
* Images should not appear blurry or distorted, and any text (such as an axis label) should be clearly readable. In addition to images created by the presenters, it is acceptable to use images from textbooks, journal articles, or web resources, so long as those sources are properly cited on the slide.
* Students can also build their own digital artwork using PowerPoint tools (Insert Shapes is often helpful).

**Image to Text Ratio**

An effective presentation allows the audience to look at images while listening to the presenter explain them, rather than relying on the audience to read text from the slides. Unfortunately, people tend to read any text you put in front of them immediately, and in doing so they stop paying attention to the presenter. For this reason, paragraph-form text should never appear with the intention that the audience will read the paragraph. Professional scientists do sometimes show an image of text from a paper so that they can highlight a direct quotation. Text summarizing the main ideas of a slide can be presented in bullet point form. More text equals more distraction from the presenter, so minimal text is highly desirable.

**Pacing**

As a general guideline, the pace of the presentation should average one or two minutes per slide. If it takes more than two minutes to explain the content of a slide, that slide can be better displayed on multiple slides. If several slides can be explained in less than a minute each, that information can be condensed into a smaller number of slides. Exceptions do exist, so use your best judgement.

**Formatting**

To give the presentation a professional feel, slide formatting should be consistent throughout. Typical format includes a consistent background color, usually white or some other pale color so that black text or lines will show well on the slide. Dark-background slides with pale text are rarely used. Images or artwork reinforcing the research group or institution are often included as part of this consistent slide background, and when used effectively can give a very polished feel to a presentation. However, this is not required for this exercise, simple slide titles are sufficient. Consistent font formatting and size are especially important. Have a consistent style used throughout the presentation for slide titles, for main text, for emphasized text, and for citations. When the font, size, and style of text changes frequently during a presentation, it is distracting to the audience and gives an amateur feel to the presentation. Animation tools and video should be used only when there is a clear purpose in communicating science. Overuse of these tools is another marker of sub-professional quality in a presentation. For this reason, transitions between slides should not be animated.

**Examples of top scientists using PowerPoint to present research**

* Quantum Biology, Greg Engel, U Chicago: <https://www.youtube.com/watch?v=zSmdpi-qpqY>
* Molecular Sensors, Tim Swager, MIT: <https://www.youtube.com/watch?v=HMoPAHb9WlM>
* Bioelectricity, Adam Cohen, Harvard: <https://www.youtube.com/watch?v=a_OWOZJv3xs>

If you have questions about the STEM Research Showcase, you can:

1. Contact your Faculty Advisor
2. Reach out to Mary Ann Quinn [mquinn22@depaul.edu](mailto:mquinn22@depaul.edu)
3. Find your departmental representative on the Showcase page: [Undergraduate STEM Research Showcase | STEM Center | Centers & Institutes | About | College of Science and Health | DePaul University, Chicago](https://csh.depaul.edu/about/centers-and-institutes/stem/undergraduate-research-showcase/Pages/default.aspx)