Discoveries in the Making: Guidelines for Speakers

Preparing your Talk

Audience: Unlike when you present to other scholars at a research conference, for Discoveries, you will be talking to members of the general public, who are not experts in your academic field. So, be sure that you:

- Engage them with a “hook” (anecdote, statistic, quote, etc.) that gets their attention in the beginning. Don’t open with a joke, as humor is iffy, and avoid salty language.
- Define and/or explain any technical terms. It is also wise to limit technical terms to a few main concepts essential to their understanding of your science. Don’t use jargon.
- Respect their sensitivities and omit details of experimental processes that they might find objectionable. Explain methods concisely and conceptually, unless they are innovative and interesting. Don’t go into details people can’t understand or appreciate.

Purpose: Unlike when you present findings at a research conference, you are not trying to position your research for publication or funding. For Discoveries, you want to tell the story of your research in a way that communicates its value (and UAB’s) to the public. Focus on 3 important “take-home messages” and package them in a way that is “instructive, interesting and maybe even fun,” as actor and scientific communicator Alan Alda would advise.

Structure & Length: Time your talk to be no more than 18 minutes (the typical length of a TED Talk). That leaves 10+ minutes for questions from the audience (who may ask questions at any time in the talk). To organize your thoughts, you might try a simple 4-part structure. First, focus on a Situation (current negative or unexplained effects on people, populations, places, systems, etc.). Then explain the underlying Problem that may cause, be linked to, or predict the current Situation. Third, suggest a potential Solution that you have identified in your research question/hypothesis and method. End on an Evaluation of your research that shows implications, i.e. how your findings can improve the situation and lives.

Style: Use more pictures, video, and concept images than science charts and graphs, which are not always accessible to the general public. Do not use photos or video of animals in distress, which could offend or disturb your audience. Rule of thumb: Use one main image/idea per slide. Important: Make text a consistent and readable font and size throughout the slide show (minimum of 24 point for readability). Don’t use bells, whistles, sound effects, irrelevant clip art, etc. Include acknowledgements and sources where applicable.

Model & Practice: Watch a few TED Talks to see how leading scientists communicate with the general public. Here is a link to a talk by UAB Professor Dr. Sarah Parcak, who just won TED’s 2016 Prize Winner [http://www.ted.com/talks/sarah_parcak_archeology_from_space](http://www.ted.com/talks/sarah_parcak_archeology_from_space). Practice both with your slides and without. You never know what technical problems could arise, and you should be able to give your presentation regardless. Practice your talk in front of the mirror, in front of friendly fans, and on video. Get feedback. Revise and practice some more.
Approval: Before your scheduled talk, you must submit the final version of your slides and any additional media (websites, video, photos, animations, handouts, etc.) that you will use during your presentation to juliemck@uab.edu, jlgreer1@uab.edu and kcarter@uab.edu. You may not make any changes to your slides or other materials after submitting them for approval.

Delivering your Talk

- Discoveries talks feature 2 speakers (approx. 30 minutes each) and run from 5:30-6:30 p.m.
- Arrive 30 minutes early, test the equipment, run through your presentation.
- Bring a thumb drive and notes; email a copy of your presentation to yourself in case of technical difficulties, etc.
- Conduct an audience check by looking for familiar faces, presence of children, etc.
- Pace yourself. Speak up and speak clearly. No rushing, but stick to your time limit.
- Avoid jargon and slang.
- Use a laser pointer and other auxiliary technology only if confident with them—and then only sparingly.
- Make eye contact and smile. Keep your tone conversational.
- Relax and have fun!

Answering Questions During and After Your Talk

- Anticipate questions and prepare possible answers.
- Pause before taking questions at the end of your talk. (Remember that audience members may ask questions during your talk too.)
- Direct your responses to the entire audience.
- If no one asks a question, prompt them with, “Has anyone had experience with...?”
- Keep answers brief—no unnecessary details. Offer to continue dialogue after the talk.
- If someone disagrees, don’t appear to be defensive.
- If you don’t understand the question, ask for clarification.
- It’s OK to say I don’t know the answer to that question.

Resources for Viewing Great Science Talks

- http://billnye.com/
- https://www.youtube.com/user/thebrainscoop
- http://www.askascientist.co/news.html
- http://threeminutethesis.org/
- http://www.sciencefriday.com/
- http://www.radiolab.org/
- https://www.ted.com/
- http://www.ignitetalks.io/