Tips for Developing a Successful QM Talk

Your mission: Create a fabulous, jaw-dropping, 3-minute talk for a family audience explaining a key concept related to your research in quantum science or technology and how it might matter to us in the future. Challenge: Quantum behavior and applications are difficult to explain!

What the Judges will consider:
- How well the speaker explains to a family audience one or more key concepts related to their research in quantum science or technology and how it might matter to us in the future.
- Quality of audience engagement.
- Originality.

Who is your audience?
- Families visiting the Museum during our special Saturday event “NanoDays with a Quantum Leap.” These families tend to be fun-loving and science-interested, but few have ever taken a physics or electrical engineering course. It’s generally safe to aim for a middle-school level of understanding, but try to engage the little ones too.
- Grad students and post-doc volunteers leading NanoDays activities, and working to improve their own communication skills with broader audiences. They will be looking to you for inspiration in bridging the gap.
- The judges: a couple of experts in quantum science and technology and a couple of experts in science communication and engagement. They will be looking for novel ways of communicating difficult concepts without straying too far from the truth, and at how well you capture the audience’s attention and enthusiasm.
- Worldwide YouTube viewers of the videos of the talks.

What you may use:
- The power of story.
- The power of analogy.
- The power of dramatic delivery.
- The power of personal experience.
- Props.
- Slides, art, animation, video clips.
**Topic choice and approach:**
- It should be “One or more key concepts related to your research in quantum science or technology and how it might matter to us in the future.”
- Concentrate on the big ideas. Three minutes is too short a time to go into the technical details. Allow time for ideas to sink in.
- Choose a topic that excites you; one that may have helped motivate you to work in this area; one that you can still remember being blown away by (or are still blown away by to this very day).
- How can you motivate the audience to care about it?
- What analogies can you use that will connect well to the experience and broad range of knowledge of the people in the room? How can you dramatize these analogies?
- Channel your inner Bill Nye, Neil deGrasse Tyson, Physics Girl, or Ada Lovelace.

**Cautions about visual materials:**
- Many scientists use slides as crib notes for their talk. They cram a lot of details into each one. The audience is forced to split their attention between listening and reading. For this talk, you are the star. Use visuals only when they enhance and support your narrative and do not compete with it. Use as few words on screen as possible. Consider allowing just one idea and one large visualization per slide, building a sequence that syncs tightly with your narrative. Everything put on the screen (including labels) should be large enough for all to see in a large performance space.
- Brief animations and/or movie clips are permitted, as long as you have created them, or have permission to use them for worldwide internet posting, or your usage meets Fair Use standards. Additional guidance for image use can be found [here](#).

**Coaching and inspiration:**
- Practice aloud. Choreograph.
- Try out drafts with friends and family.
- Watch last year’s finalists: [www.mos.org/qmc2018](http://www.mos.org/qmc2018)
- If you make it to the Finals, we’ll provide advice and coaching to help you take it to the top.
- Have fun. Just by participating, you are sharpening your communication skills.