Tips and Tricks for a way cool “Way Cool” Presentation

Thank you for your interest in doing a Way Cool Presentation for the Beaty Biodiversity Museum! Since January 2011, this monthly series allows visitors to delve deeper into specific biodiversity topics that they might not be able to find out about otherwise. Our aim is for these lectures to be accessible to anyone who is interested in learning, even if they have no background in science or biology.

This document will give you some ideas and tips to make your presentation as fun, engaging, and accessible as possible. Don’t hesitate to contact us if you have questions or need some advice.

Logistics:

- **Time:** First Sunday of every month at 1:00p.m.
- **Target length:** 35-45 minutes, plus 15-30 minutes for questions from the audience and/or encouraging hands-on with specimens
- **Location:** Allan Yap Theatre, Beaty Biodiversity Museum
- **Typical audience size:** 20-40 people
- **Typical audience demographic:** Museum visitors and members
  - The museum has a very diverse visitorship; including families with children, adults, seniors, total beginners, novice naturalists, and professional biologists.
  - Knowledge level of audiences tends to be slightly higher than layperson on average. Most are highly interested in nature, but have no formal background in biology.
  - There will be children and youth in the audience, usually between the ages of 6-12 or older, making up 10-20% of the audience. Usually, these kids have a higher knowledge of, and interest in, biology than their ages would suggest.

- **A/V and other requirements:**
  - **You will need to bring:** your presentation materials on a USB stick (PowerPoint and PDF are ideal), any specimens or other materials you might want to share, and any accessories you will want to use (laptop, pointers, remotes, etc).
  - **The Beaty will supply:** museum staff to give you an introduction and help with set up; a microphone, computer, internet, projection equipment and media players; tables if needed; and your audience! If you need anything else, just let us know and we will do our best.
  - **Be aware that:** your presentation may be filmed. This may impact your choice of presentation materials. We would also like a copy of your presentation to stitch together with the recordings to use for museum archives. You may also be asked to do a quick lead-up or follow-up interview for use on our website, blog, and/or social media.

- **What is in it for me?**
  - You will receive a presenter package that includes: a one-year, individual adult membership for you; four guest passes to the museum; and an optional parking pass.
  - Experience presenting scientific concepts to a general audience in an informal presentation.
  - Your information will be archived on our website, allowing you to link through on a digital CV.
  - If your talk is filmed, it will be archived on our YouTube channel.
The Blurb:

- **Timing**: We would like your blurb at least 6 weeks before your talk. We try to send it out in our monthly newsletter twice before your talk, and post on the website as soon as possible.
- **Title**: Your topic needs to be in the “_______is/are way cool because…” format. Think of descriptive adjectives, fun words, and alliterations to make your title snappy! Keep it short and sweet.
  - Metal-munching plants are way cool because...
  - Jumping spiders are way cool because...
- **Text**: The text is 3-5 sentences (100-115 words or so) that will hook the reader into coming for the talk. Touch on topics that you are excited about. Say a little bit about yourself as well. We will edit for consistency in language and help as needed. Don’t give away all your secrets!
  - Did you know that some plants like to eat metal? Over 1000 species of plants are known to gobble up and store heavy metals, including a host of toxic elements such as nickel, cadmium, zinc, arsenic, and selenium. There are even some plants that store gold. Some of these plants store enough metals to make them toxic to animals like cattle, and a few of them are even mined for the metals they contain. Post-doctoral researcher Dylan Burge will take you on a tour of the world’s metal-munching plants, and explain how his research is helping to unravel how metal-storing plants evolved, and why they engage in this strange and way cool behaviour.
  - For past blurbs and videos, check out: www.youtube.com/user/beatymuseum

Tips and Tricks:

Communicating to a general audience can be intimidating at first, but it is a very valuable skill. Telling people about why science is relevant to them will come up again and again! While you prepare for your talk, keep this quote in mind: *Everything should be made as simple as possible, but not simpler – Albert Einstein*

Check out this TEDtalk for a helpful summary: www.ted.com/talks/melissa_marshall_talk_nerdy_to_me

1. **Use Appropriate Language: Watch the Jargon**
   - Jargon can be a barrier between you and your audience.
     - Use language your audience knows, for example, use words like *start* instead of *commence*, or *time* instead of *temporal*.
   - There will be words that you cannot simplify. Introduce scientific terms and words if they are critical to telling your story.
     - Define new terms immediately.
     - Limit the number of new words you teach the audience.
     - You can always ask the audience if they are familiar with a term if you are unsure.
     - Be careful about scientific names – choose the ones you highlight very carefully. They may be common and familiar to you, but for many people they are hard to process and can be a barrier to listening and understanding.
   - A good way to try out your language is to talk to a friend or relative who is not a scientist. Do they understand your take-away message?
   - Practice!
2. **Be Relatable: Use Analogies & Comparisons**
   - Analogies help the audience understand numbers, sizes, and concepts. By relating to what is familiar, your message will be more memorable.
     - Phrases like “as heavy as ## cars” or “as tiny as the width of one hair” are very helpful.
   - Make connections to the audience through news, film, music, personal stories, anecdotes, and relatable human experiences (growing up, skinning knees, families, dinners, travelling).

3. **Be Organized: Plan and focus on one “way cool” thing at a time**
   - Plan your talk before you put it together
     - What do you want each person to take away from your talk?
     - How will you lead them on that journey?
   - Planning your talk will give you categories and sub topics to work through. Clearly state and stick to the main message you want to get across at each point. This will help people follow along and not get overwhelmed with too much new information.

4. **Tell Stories: Focus on the Story**
   - Accurate information, including numbers and facts, are critically important, but they don’t have to be the focus of your talk. Choose the data you present very carefully.
   - What story do they tell? What bigger picture do they support?
   - The facts should support your story telling, rather than be the entire story.

5. **Engage With Your Audience:**
   - Ask questions to get the audience thinking, or encourage them to ask questions at certain points in your talk. Participation of this sort increases audience engagement and understanding of your topic. It also allows you to take stock of the information they have learned, and explain further if needed.
   - Talk about your experiences! Do you have any cool stories, videos, or photos from your fieldwork that illustrate particular points you’re trying to get across? If so, share them!
   - Enthusiasm is expressed very differently for different people - don’t force it. Talk about things that you are passionate about and genuinely believe are cool, it’ll come through!
   - Use photos and videos instead of text whenever possible. This will make your talk more memorable and meaningful.
   - Use specimens and props to allow hands-on participation, if possible. The more senses you can engage (e.g. touch and smell), the greater the opportunity you will have to evoke emotions and make the information and experience more memorable.
     - You can pass things around the room, or show before and after the talk.
     - Ask us for advice if you want to bring food items.
   - Get help from others who have presented. A great resource written by a previous lecturer, Bridgette Clarkston, can be found at frizzyb.blogspot.ca/2013/01/way-cool-presentations.html
   - Invite your friends, family, and share with your networks. Remember that you receive 4 guest passes to use at the museum.
   - Above all, remember to have fun and enjoy yourself!!

Thanks again for volunteering your time. Without you, there would be no Way Cool Series!