
Elevator Pitches for Scientists: What, When, Where and How

School of Medicine, Vanderbilt University

Contributed by Uyen / August 2013

Introduction

If you have attended scientific seminars and conferences, I bet you sat through seminars where the science was so interesting and relevant to your work but the presentation was so awful that instead of focusing on the research results you wondered how the speaker has made it this far in his career. Additionally, you may have read journal articles where you could understand the figures but could not wade through the writing. I believe it is a misconception to think that having a PhD means one has strong communication skills. In my opinion, the current graduate education system emphasizes heavily on some aspects of communication leaving others underdeveloped (e.g. non-verbal). Fortunately, as academic postdocs, it's not too late to hone in on some of these skills because we have numerous opportunities and resources to explore and develop them.

I decided to use this blog entry as a platform to better understand the communication skills deemed important by the National Postdoctoral Association (NPA) which may be lacking under the current system of postdoctoral training. In an effort to map out the various routes of communication, I developed a communication diagram to help focus the blog.

What is the purpose of an elevator pitch?

We all know the scientific value of our own research. **However, to verbally communicate the relevance of our work in the context of benefits to society and human health is incredibly difficult.** Can you remember the last time someone asked

you what you do for a living? What was your response and what did you say about your research? Did any of these answers sound familiar? “I am a scientist and I study the interaction between protein A and protein B?” Or “my research focuses on the effects of drug X on ion channel kinetics?” Or “I am examining the consequences of a single nucleotide polymorphism (SNP) of gene Y on the global protein expression of said gene?” So What? Who Cares? It is easy to forget that scientists make up less than 0.1% of the total human population (according to the American Association for the Advancement of Science there are about 5.8 million science and engineer researchers in the world). **Therefore, it is safe to assume that everyone you meet will have no clue what your work is all about.** Thus, there is significant value in having a prepared and well-practiced “**elevator pitch.**”

When and where should you use an elevator pitch?

If you google “**elevator pitch**” or “**science pitch**” you will find that most ‘how to’ articles preparing an elevator pitch are written for use at career fairs. However, I think elevator pitches should be used everywhere: at conferences, networking events, the bar, church and even on the bus. Basically whenever you hear “what do you do for a living?” or “what is your research on?” it is time to use your elevator pitch.

Here is one clever place an elevator pitch may be used to advertise your research and yourself. The next time you have a chance to attend seminars given by prominent scientists in your field either at your own institution or at national meetings, gather some courage to stand up and ask the speaker a question during the Q&A session. **When it is your time at the microphone (assuming there is one), state your name, what you do or your 15 second elevator pitch, and then follow with an insightful question.** And voila! You have broadcasted your research and yourself to a roomful of scientists, some of whom may be representatives of pharmaceutical and biotech companies.

How to prepare an elevator pitch?

Elevator pitches come in many different flavors. For example, at seminars similar to those mentioned above, a simple 15 seconds introduction is more appropriate. However, the method outlined below is for preparing an elevator pitch with the intention of delivering to a smaller audience (one or two people). This method is inspired by Mr. Mark Magnacca’s “Grab Your Audience’s Attention: First Impressions Set the Presentation On – or Off – Course.”

Keep in mind that most elevator rides are less than one minute. Therefore, the pitches should be between 30-60 seconds. You may think that scientific research is too abstract to explain in one minute and you would be absolutely correct! It is

important to remember the purpose of an elevator pitch is to get your listeners interested in learning more about your work by agreeing to schedule a second meeting with you.

My suggestions

Here are my suggestions for preparing an elevator pitch for scientists. For biologists, it is best to express the relevance of your scientific research in the context of disease states. If you are studying the function of a protein that has a connection to a health condition – deliberately state this in your elevator pitch. Start by asking your listeners a simple question “have you heard of disease X?” The answer will allow you to gauge the listeners’ level of understanding of your research area. This is critical to delivering a message your audience will remember. How to proceed with your elevator pitch depends on the response you receive. If the answer is “YES” then follow by explaining your research. However, if the response is a “NO” it is an opportunity for you to concisely describe the disease state, the statistics on people affected by the condition, and whether a cause or cure is known. Proceed by describing how your research will bring us closer to an understanding of either the cause or cure for the disease.

I will use my own research as an example. Below is a modified abstract for a research paper I submitted for peer-review.

“Statins are potent inhibitors of cholesterol biosynthesis and are clinically beneficial in preventing cardiovascular diseases. Independent of their lipid-lowering effects, these compounds have been shown to improve endothelial function and inhibit the thrombogenic response. Accumulating evidence suggests an important role of the mitogen-activated protein kinase ERK5 in eliciting the beneficial effects of statins in the endothelium. However, despite the therapeutic values of these drugs, muscle-related toxicity limits their use in some patients. Here, we explored the mechanism of statin-mediated transactivation of ERK5 in the human endothelium with the goal of identifying compounds that activate the ERK5 pathway but are non-toxic to C2C12 skeletal myofibers, a cellular surrogate model to study muscle myopathy. We demonstrate that statin activation of ERK5 is dependent on the cellular reduction of geranylgeranyl pyrophosphates which are isoprenoid precursors critical for the post-translational modifications and trafficking of GTPases. Furthermore, we found that the combination of drug A and drug B mimicked the statin-mediated transactivation of ERK5. Drug A and B together recapitulated the beneficial effects of statins by transcriptionally upregulating anti-inflammatory mediators such as genes X, Y, and Z. Finally, C2C12 skeletal myotubes treated with both Drug A and B failed to cause the morphological and cellular changes that have been recognized as biomarkers of statin-associated myopathy. Hence, the combinatorial Drug A and B drug regimen provides a promising alternative avenue for activating the ERK5 pathway for the enhancement of endothelial function.”

I follow three simple steps to prepare my elevator pitch: **(1) eliminate jargon terminology; (2) draft the elevator pitch on paper; (3) practice the elevator pitch out loud with friends and family members.**

Below is a version of a one minute elevator pitch I used in the past for a technical audience (other scientists).

Do you know that 32 million Americans are taking statins for their high cholesterol? While statins have been shown to improve the heart function by reducing blood cholesterol levels, one of the major side effects associated with long-term use of statin is the development of muscle pain. My research focuses separating the cellular pathways leading to the beneficial effects and muscle toxicity mediated by statins in order to identify new drug molecule(s) that only activate the pathway good for the heart. Using various cell-based assays, we have identified a drug combination that mimics the good effects of statins but are devoid of the muscle toxicity associated with their used.

Although it is simple, this short pitch actually took me three hours to prepare. Initially it will sound scripted, but with practice your elevator pitch will naturally slide off your tongue. I recommend having multiple versions of your pitch. Start by creating a one minute version for a technical audience. Then, modify it for the lay audience and trim it down to get a 15 second introduction.

In an effort to take this advice and put it into practice, the contributors of the ThePostdocWay have created and recorded their own one minute elevator pitches. These videos will be up shortly for the readers to view. We encourage you to develop your science pitch and use it the next time you are at a public gathering.

Additional resources on elevator pitches:

Jeffrey Aguirre Lab's [The Elevator Pitch for Scientists](#) has examples of a 15-second introduction and a 30-second poster pitch.

Forbe's ["The Perfect Elevator Pitch to Land a Job"](#) by Nancy Collamer outlined 9 basic tips to keep in mind when preparing an elevator pitch.