

Summer Experience

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The Elevator Speech for Research

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The Elevator Speech is a very brief (~90 sec) talk introducing yourself and explaining quickly what you do and why you do it. Having a prepared elevator speech will help you to present yourself credibly and effectively in many situations. Even in situations where a full elevator speech isn't necessary or desirable, just knowing the separate elements of your elevator speech will help you to answer sudden and unexpected questions.

When to use elevator speeches or parts of them:

- To prepare for important structured meetings, such as job and informational interviews.
- To prepare for social and work events (like conferences and lab visits) in which you may need to talk about yourself.
- To organize your thinking for a project.
- To outline a research paper or grant, or to give an overview of a presentation you're doing.
- To be able to communicate with non-scientific audiences about the work you do.

Part 1: Who are you? (The obvious.)

- 1. Name
- 2. Type of job
- 3. Place of work [X's lab > Dept > Institution > (City)]
- 4. Project or subject area of work

Part 2: Structuring your speech: What are you doing and why are you doing it?

5. **Context and Gap in Knowledge**: General background about your work (1 or 2 sentences), with a 1 or 2 sentence "gap" statement.

- What is the current state of knowledge in your field? Start your context or background at the most specific place possible given your audience's level of knowledge. Do not elaborate for more than 3 sentences.
- What is <u>not known</u> or <u>still a problem</u> in this area? *If you don't know what the gap in knowledge is, you don't know what problem you're trying to solve, and that itself is a problem!*
- 6. **Purpose statement (and hypothesis if you have one)**: What are you trying to accomplish with your work? (1 sentence). *Your purpose should squarely address your gap in knowledge*. You may not have a hypothesis yet, if your work is purpose-driven. If you do have a hypothesis, you can state it.
- 7. **Approach or Methods:** How are you trying to accomplish your purpose? (1-3 sentences). *Be sure to be concise, and to be able to say what some of the results of these methods are or will be.*
- 8. **Recent findings and/or conclusions:** What's happened so far? (max 3-4 sentences) These should clearly correlate with your methods, and you should also be clear that the findings you have are relevant to the research question/gap in knowledge and purpose that you already stated.

A 'finding' is just the result of a method you tried, but a 'conclusion' is the truth you are able to state based on the findings. If you've gotten far enough in your project and have enough findings to justify it, you might be able to state a conclusion about what you've done. Otherwise, you can simply state your findings. If you have no findings yet, you can use this section to state where you are in your investigations and what you expect to learn.

Part 3: What will be the outcome of what you're doing?

- 9. **Significance and implications**: What will be better for people or science if you accomplish this? (1 or 2 sentences) *Recheck your gap and purpose to make sure your statement of significance is in sync with them. Significance is different than purpose.* **Purpose** is what your investigations themselves will accomplish, such as understanding a pathway or mechanism; **significance** is what your findings mean for your field, and **implications** are what you can eventually do with that information to improve people's lives or advance science, such as moving closer to personalized cancer care.
- 10. **Next steps**: What happens after you finish this project? Where will you go next with this line of research? (1 or 2 sentences). *This should show a progression in achieving your goals; should be related to everything you've just said.* (There are some occasions when there isn't a next step.) NB: Getting a degree or a publication is not a next

step—the 'next steps' we mean here are next steps in the research program.

What to avoid:

- Rambling: Spending too much time on the background information because you think the listener won't understand what you're talking about if you don't review the entire field. If you prepare thoughtfully, you can get almost anyone on your wavelength in less than 3 sentences. Often a really good **metaphor or analogy** can help you get to the point faster.
- **Lack of cohesion.** Elements that don't correspond to each other, such as results that don't solve the gap in knowledge or problem.
- **Vagueness**. Avoid statements such as "I'm interested in..." Say what you're doing and why you're doing it, and say it decisively.
- **JARGON**!!! NOT your friend. Sometimes people feel that they need to use technical language to prove that they're a part of their professional "club." But in fact, scientists who can explain their work in plain language are the ones most in control of their concepts. To achieve more transparent explanations, you should devise some kind of synonym or brief explanation for technical terms. Example: "I will be using several cell lines, some with "knocked down," or artificially limited, expression of 15-lox..."

What to strive for:

- **Proportion and completeness**. Each element of the elevator speech should play a different role in your story. Have 1-3 sentences for each element; don't omit elements. Even if you don't end up giving your whole elevator speech, it's very helpful to plan out the whole speech and memorize the elements.
- <u>Mastery of the individual elements</u>. For example, you should be able to easily answer the question, "What's the goal of what you're doing?" without reciting the whole speech. And you should be able to state that answer in several different ways, not just by emitting a memorized sentence.
- **Enthusiasm!!!!** It's impossible to overstate the importance of expressing enthusiasm. You don't have to sound like a cheerleader or a salesperson. The audience just has to be able to see that you're really into what you're doing and that you think it matters.

Sample Elevator Speech 1: "15-lox in EMT"

NOTE: This speech has a great structure, but is a bit heavy on jargon.

Part One: Who are you?

Hello. My name is SF, and I'm a summer research intern in the Department of X at MD Anderson, working with Dr AB. My current project concerns the role of the enzyme 15-lox in the EMT process and subsequent metastases.

Part Two: What are you doing and why are you doing it?

BACKGROUND: Recent studies have shown that EMT, or epithelial-mesenchymal transition, plays an important role in tumor metastasis, the main cause of death in patients with cancer. EMT results in cells which migrate easily and are not differentiated, meaning that they have not developed into a specific cell type. We believe that the enzyme 15-Lox may play an important role in EMT because it has been shown to promote cell differentiation. GAP IN KNOWLEDGE: But it has not yet been demonstrated that the downregulation, or decreased expression, of 15-lox will directly result in EMT].] PURPOSE: Thus, our goal is to verify the connection between the downregulation of 15-lox and the EMT process in order to justify the eventual development of 15-lox-focused treatments to prevent metastasis. METHODOLOGICAL APPROACH: To accomplish this, I will be using several cell lines, some with "knocked down," or limited, expression of 15-lox, and analyzing gene and protein expression to determine the extent of EMT in each cell line. RESULTS: ["Recent findings suggest"..."So far, I have found that..."] (This writer did not yet have results.)

Part Three: What will be the outcome of what you're doing?

SIGNIFICANCE: This connection between 15-lox and EMT is especially important right now due to the establishment of EMT as a major player in the development of deadly metastases. This procedure could eventually lead to targeted treatments which deliver metastasis-preventing 15-lox specifically to cancer cells. NEXT STEPS: As this project progresses, we will look more deeply into how 15-lox affects differentiation and prevents EMT with a special focus on the role of the break-up of connections between cells, especially the adherens junctions. Eventual goals include the further development of treatments which involve targeting 15-lox to cancer cells in order to prevent EMT and metastasis.

Sample Elevator Speech 2: Diet and Breast Cancer Disparities Among African-American Women

Part One: Who are you?

Hi, I'm KC, a summer research intern in the Department of Health Disparities Research, working with Dr. JN.

Part Two: What are you doing and why are you doing it?

[Background] Differences in breast cancer outcomes of minorities compared to whites has been noted in the literature for decades. In particular, African Americans have lower breast cancer incidence but higher mortality rates compared to their white counterparts. [Gap] However we do not fully understand why these differences exist, and how to prevent them. [Purpose] Our goal was to understand how diet influences breast cancer development in premenopausal African American women in order to lower the high mortality rate associated with the disease.

[Methods] Seventy-six pre-menopausal African American women were involved in the study. The experimental cohort was enrolled in a dietary intervention and placed on a cholesterol reducing diet. We then took anthropometric measurements and blood samples at baseline, 6 month, and 12 months intervals for analysis. [Results] We hope to find that the experimental cohort was able to reduce biological markers indicative of cancer development compared to the controls.

Part Three: What will be the outcome of what you're doing?

[Conclusion] If our hypothesis is correct, these findings would indicate that a change to a healthy diet can in fact lower the chances of pre-menopausal African American women developing breast cancer. [Significance] Consequently, these findings would suggest that if we improve the diet of pre-menopausal African American women, we can lower their chances of developing breast cancer and reverse the high mortality rate associated with the disease in the population. [Next Steps] In the future we plan to analyze other high risk populations plagued with breast cancer health disparities to see if they achieve similar results.

NOTE: If you do not yet have any conclusions, focus on stating what you hope/anticipate will happen, and what next steps you will take if those conclusions come to fruition. For example: "We hope the data obtained in this study will point to a potential genetic connection between high cholesterol and cardiovascular disease. Once we have established what genes might be involved, we will follow up with additional studies to confirm our findings."

WORKSHEET FOR ELEVATOR SPEECH

Part One: Who are you?
Part Two: What are you doing and why are you doing it? BACKGROUND:
GAP IN KNOWLEDGE:
PURPOSE (OR HYPOTHESIS):
METHODOLOGY:
RESULTS:
Part Three: What will be the outcome of what you're doing?
CONCLUSIONS (if applicable):
SIGNIFICANCE:
NEXT STEPS: