

Itai Cohen  
Melanie Dreyer-Lude

# Finding Your Research Voice



Story Telling  
and Theatre Skills  
for Bringing  
Your Presentation  
to Life

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Story Telling and Theatre Skills  
for Bringing Your Presentation to Life

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## About the Authors



**Itai Cohen** is a Professor of Physics at Cornell University, where he works on materials in motion. His research topics have ranged from studying the behavior of shear thickening fluids like corn-starch, to the flight of insects, to microscale robots, and the behaviors of crowds. Professor Cohen has given over 250 invited public, conference, and departmental speaking engagements. He has chaired the American Physical Society Forum on Outreach and Engaging the Public and organized numerous professional development workshops on science communication.



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Cohen and Dreyer-Lude are the organizers and instructors of the popular Finding Your Scientific Voice workshop, which has been run at various venues including Cornell University, SUNY Upstate, the Howard Hughes Medical Institute, and the American Physical Society March Meeting.



# 1

## Introduction

When is the last time you heard a compelling, interesting, or memorable research talk? Conferences are notorious for providing ample opportunity to see boring presentations of what could be important research. If you are reading this book, chances are that you (or your students) need to learn how to tell a better story. Whether you have been giving lackluster presentations at professional conferences, you are on the job market and need to present your portfolio to a search committee, or you have found yourself tongue-tied in the middle of an ideal networking opportunity, learning to tell a compelling research story can have a significant impact on your career. Humans enjoy telling and listening to great stories. These stories help us make sense of the world around us.

Good stories demand attention. Bad stories put an audience to sleep. Good stories provide emotional and intellectual satisfaction. Bad stories frustrate an audience and feel like a waste of time. The components of a great story signal when we should pay close attention and where we will find important moments. By learning to tell a compelling research story, you can trigger an emotional connection to your audience, which will help them remember the important information you have just presented. It is easy to tell a research story badly. It takes time and effort to learn to tell one well. Once you have mastered the basic principles of good storytelling, you will experience the satisfaction of performing successfully in front of an audience.

You can find ample reference materials on presenting talks as stories. We invite you to read them. Afterwards you may find there is still a gap between understanding what these books are telling you and incorporating the concepts into *your own* work. This book fills that gap, presenting a range of key

research presentation techniques, followed by field-tested exercises that will help you improve *your* talk. To demonstrate, let's look at an example.

## The Elevator Pitch

A good elevator pitch provides a concise description of your research and why it matters. A compelling elevator pitch will consist of a few clear sentences that include:

1. What are you researching?
2. Why is this problem important?
3. What have others done, and why was that approach not sufficient?
4. What you are doing differently to solve the problem?
5. If you are successful, how will your work impact the field and change the conversation?

Many of us are familiar with the concept of an elevator pitch but still struggle to apply these ideas in practice. Here is an exercise that illustrates this point:

### Exercise 1.1 The Elevator Pitch

1. This exercise can be accomplished with just two participants, although a larger group provides richer feedback.
2. Have the participants write down their elevator pitches based on the outline above and then try to commit it to memory. It is helpful to agree on the audience for this pitch (the general public, a conference presentation, your advisor, etc.).
3. When all participants have created an elevator pitch, designate a leader who will control the timing of the exercise.
4. Divide into groups of two or three, preferably with people you do not know well, and determine who will speak first.
5. On the leader's signal, the first speaker will share their prepared two-to-three-sentence elevator pitch. They will have 30 s to accomplish this task.
6. When 30 s are over, the leader will call time and ask the next group member to present their elevator pitch. Continue in this way until all members of your small group have had a chance to pitch their research.
7. If there are enough participants, switch groups and find a new collection of people. Repeat the exercise under the leader's guidance. Again, take only 30 s per person.
8. Gather the entire group into a circle. The leader will select someone to identify the first person they met during the exercise and ask them to describe what that person does, providing as many details as possible.