

**PA 040a Storytelling for Scientists**  
**Wednesday nights 7:00-8:30**  
**Final Performance Friday December 1**  
**Ramo Auditorium**  
**Instructor: Brian Brophy and Guest Professors/Artists**

To be effective leaders and communicators, scientists need to explain/performance their science. Through a series of writing exercises, improvisation, and performance/vocal techniques with new media, students will explore/discover/write new narratives for the ever-changing 21<sup>st</sup> century global landscape. The final class culminates in 2 (5-7 minute) talks recorded in front of a live audience December 1, 2017.

**Goals:**

- To cultivate a community of creativity and expand a unique social network.
- To strengthen writing skills and practice public speaking.
- To enhance your personality and engage your audience with your science storytelling.

**Class Schedule**

September 27 Introduction. **#1 Credo: What do you believe?**  
October 4 Vocal techniques/body language. **#2 Write transformation story**  
October 11 Perform/read/share stories with co-pilots  
October 18 Performance workshop with stories. **#3 Write science story**  
October 25 Incorporate new media and perform your first draft of science story  
November 1 Guest lecturer Dr. Cassandra Horii CTLO  
November 8 Rewrite/Practice/Rehearse stories I  
November 15 Rewrite/Practice/Rehearse stories II  
November 29 Rewrite/Practice/Rehearse stories III with AMT's Leslie Maxfield  
December 1 **Friday Final Performance Live Ramo Auditorium 700-830pm**

Suggested Reading: *Talk Like Ted* by Carmine Gallo; *Insights of Genius* by A.I. Miller; *The Voice and the Actor* by Cicely Berry; "What is Public Narrative" by Marshall Ganz; *This I Believe* edited by Jay Allison and Dan Gediman

**Writing Assignment:**

- 1) Credo 350-500 words
  - 2) Personal story 1000-1200 words
  - 3) Scientific story: What makes you passionate about science up to 1500 words
- Total Words: 3000+

**ASSIGNMENT # 1 CREDO**

What do you believe? What are the core principles that guide your life? Convictions that motivate your everyday behavior and shape your personal credo: Some titles from the book *This I Believe The Personal Philosophies of remarkable Men and Women*, **include:** "The Virtues of the Quiet Hero." "Disrupting my Comfort Zone." "I Agree with a Pagan." "Science Nourishes the Mind and the Soul." "Talking with the Sun." "Be Cool to the Pizza Dude." What is the title of your credo!?

## ASSIGNMENT #2 PERSONAL STORY

This story comes out of a personal transformative moment from your life; it might still resonate in your everyday actions or unsettles you or keeps you (un)focused. Look at your credos and the subconscious clues in those credos to drive your #2 story. "How do you become what you are supposed to be?"

## ASSIGNMENT #3 SCIENCE PASSION STORY

Below are two successful outlines for creating your science passion story.

- 1) The first outline is synthesized from the mind of Steve Jobs** about presentation. Selling and getting to the point: **Headline. Passionate Statement. 3 Three Key Points.** Make your audience remember what you said and inspire you to tell your story with power.

According to Jobs, the following prompts will help you to carefully support your *One Big Idea* with specific facts, examples and illustrations gathered through research: *How does it make my life better? Make meaningful change. Make a compelling story. Common Enemy. Mesmerizing vision. Metaphor/Analogy. Demonstration. Customers. Partners. Props. Videos.*

- 2) The second outline is from Caltech Distinguished Alum Sandra Tsing Loh** for her radio science stories heard on NPR--for her, it follows: **A laugh. A gasp. A tear.**

1. **A Laugh** (personal anecdote, wry news item, inside story about the quirky nature of scientists). 2. **A Gasp** (Here is a totally unique new methodology that blows the lid off of anything we could do before, we've discovered something surprising about our physical world). 3. **A Tear.** Humanity. Bigger vision, connected to other people--our world).

**1) Title** Think of clever : *Is Einstein Wrong--provocative. Godel, Escher and Bach--intriguing. Got Toxo--simple playful.*

**2) Opening Question/Puzzle/Mystery:** Add a vivid opener with colour, depth and resonance. Thinking outside the box.

### **3) The Middle: Break down the problem into three parts:**

- Technical background/history/problems
- The new/the wow.
- A soupcon of the nitty-gritty. Here is how we have to shift the spectrum. Here is what the output looks like. Here is a promising new material we have been testing.

**4) Pre-Conclusion:** Here is where you start emerging from the specifics. "We are about two years away from..."

**5) Big Finish:** This is a call back to your opening question, which then expands its universe or future even farther. "Someday theoretical chemistry could be used for medicine and space travel..."