

## Discovery Course in Science Communication

**DESCRIPTION:** Everyday, scientists communicate with many different people in a multitude of formats. Effective communication enhances research inside the lab and promotes results outside the lab. To that end, we will cover three layers of communication: (1) with other researchers in a related field, (2) non-scientists, and (3) the media. Science touches our daily lives, and experts in many fields will share how they communicate different types of research to different audiences. Students will practice the written and spoken communication skills necessary for their current and future careers.

**TARGET SKILLS:** writing (abstracts, blog posts, science stories, CVs), design (posters, slides, social media), speaking (discussions, interviews), video production

Week 1 9/15	<b>OVERVIEW AND INTRODUCTION</b>
Week 2 9/22	<b>BASIC CONCEPTS IN DESIGN</b>
Week 3 9/29	<b>CLASS CANCELED (IBS OPEN HOUSE)</b> Assignment: NY Times article on the Taiwanese banana industry
Week 4 10/6	<b>TAIWANESE BANANA INDUSTRY</b> Chih-Ping Chao (Taiwan Banana Research Institute) Assignment: NY Times or NPR article on designer babies
Week 5 10/13	<b>CRISPR AND THE FUTURE</b> Steven Lin (IBC) Assignment: BBC article on antibiotic resistance
Week 6 10/20	<b>ANTIBIOTIC-RESISTANT PATHOGENS</b> I-Ming Lee (lab of Shih-Hsiung Wu, IBC)
Week 7 10/27	Groupwork for final project Assignment: NY Times article on fitness supplements
Week 8 11/3	<b>WEIGHTLIFTING AND BODYBUILDING</b> Danny Yao (lab of Hans Chun-Hung Lin, IBC) Assignment: NY Times article on Carlo Croce
Week 9 11/10 (no midterm)	<b>RESEARCH INTEGRITY</b> Tien-Hsien Chang (Genomics Research Center) ***Proposal due for final project
Week 10 11/17	<b>ALZHEIMER'S DISEASE IN THE NEWS</b> Rita P.-Y. Chen (IBC) Assignment: Molecules that changed the world
Week 11 11/24	<b>DRUG DISCOVERY</b> Hans Chun-Hung Lin (IBC) Assignment: Bill Nye the Science Guy

Week 12 12/1	Assignment: NY Times article on biotechnology investing
Week 13 12/8	<b>THE BUSINESS OF BIOTECHNOLOGY</b> Charley Lu (WI Harper)
Week 14 12/15	
Week 15 12/22	Chi-Huey Wong (Genomics Research Center)
Final projects	
Week 16	Student projects
Week 17	Student projects
Week 18	Student projects

**FORMAT OF SESSIONS WITH GUEST SPEAKERS:**

All students submit 1 question for speaker by noon the Thursday before class

Guest lecture 20-40 minutes

Student team moderates discussion with speaker (different moderators each week)

**FORMAT OF SESSIONS WITHOUT GUEST SPEAKERS:**

Demonstrations or lectures

Peer editing

**READING ASSIGNMENTS:**

- *The Guardian*: Designer babies: an ethical horror waiting to happen?
- *The New York Times*: Taiwan Tries to Revive Its Banana Export Industry
- *BBC Future*: How we can stop antibiotic resistance
- *The New York Times*: When the Gym Isn't Enough

**TRANSFERRABLE SKILLS AND KNOWLEDGE:**

- Writing exercises and resources online (Purdue OWL)
  - Blog posts
  - Email communication
  - Showcasing transferrable skills on a resume
- Determining legitimate sources
- Design workshops online (Canva)

**GRADING SCHEME:**

30% in-class participation

10% submitting questions and attending office hours before class

10% written assignments

50% final group video project