

## **NBIO 850 - Communicating Scientific Results (a.k.a. PClass)**

### **Fall 2013**

#### Principal course objective

Learn to effectively prepare and present scientific talks

#### Course director

Spencer Smith  
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#### Time and location

Wednesdays, 1:00 PM - 2:30 PM  
3118 NRB

#### Course website

<https://www.unc.edu/sakai/>

Contact Denise Kenney (denise\_kenney@med.unc.edu) if you have any problems.

#### Requirements

1. Attend all class sessions and attend all rehearsal sessions (small groups, out of class)
2. Present a talk in the RIPS (Research In Progress Seminar) series
3. Introduce a fellow speaker for their talks
4. Participate in all discussions (in class and small groups)

#### Considerations for High Pass

- Unusually meticulous preparation resulting in a highly polished talk
- Thoughtful and extensive feedback for classmates
- Extensive revisions in response to feedback from others

#### Course description

PClass is a mature and innovative course on scientific speaking and writing. Ann Stuart started the class over 10 years ago, drawing upon her experiences with Stephen Kuffler and others at Harvard (Stuart, 2013).

The class teaches the principles for giving effective talks. The course also covers how to introduce speakers, prepare slides, and speak with the public about science.

Spencer Smith currently directs the course, with additional faculty participating in each class. The class is limited to Neurobiology Curriculum students. The fall semester is focused on speaking. Students prepare talks, refine them in small groups (3-4 students), and then present them in class. The in-class talk is videotaped, and these tapes are reviewed by the students in a session with their peers. After another round of refining with their small group, the students give their polished talks to the department in a formal setting. Writing is critiqued in class, with peers and guest faculty all offering input. The videotaped reviews and peer critiquing help tremendously to teach

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effective speaking and writing methods, and this prepares students for the next stage in their scientific careers.

Stuart A (2013) Engaging the audience: developing presentation skills in science students. *J Undergrad Neurosci Ed* 11(2):1-10.

### Outline of course

The first few weeks will be lecture-based, but then we will immediately start presenting talks.

The class is divided into two groups of 4 people with whom you will rehearse. Those that will go first need to immediately begin preparing their talks and scheduling practices.

Step 1. Prepare your 10-minute talk on your own time.

*Start with an outline, and then flesh it out. Use the advice you get the first few weeks.*

Step 2. Meet with your small group and give your talk. Feedback is exchanged.

*This must happen at least 2 days before Step 4 (in class presentation).*

Step 3. Refine your talk based on small group feedback.

*Expect this refinement to be EXTENSIVE! It will take a lot of out of class time.*

Step 4. Present your talk in class and receive feedback from the full class.

*This is a full "dress rehearsal", no time-outs. Take notes on the feedback.*

Step 5. Meet with your small group and view your video. Feedback is exchanged.

*Viewing these videos is often painful, but very illuminating.*

Step 6. Refine your talk based on both in-class and small group feedback.

*Again, this should be extensive and thoughtful. Really re-tool the talk. Don't simply put band-aids over the rough spots.*

Step 7. Present your talk in the RIPS series.

*This is showtime. This should be the best talk you've ever given in your life.*

All of these steps will be carried out in about 1 or 2 months. If the cycle were any longer, then the actual content of the talk would likely have to be revamped as you progress in your research.

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### Groups

Groups will organize among themselves to hold their meetings. Book a room and a projector.

#### *Group A*

<i>Student</i>	<i>Introduced by</i>	<i>RIPS date</i>
Logan Brown	Kelly	Oct 9
Kelly Carstens	Anel	Oct 9
Anel Jaramillo	Shaili	Nov 6
Shaili Jha	Logan	Nov 6

#### *Group B*

<i>Student</i>	<i>Introduced by</i>	<i>RIPS date</i>
Colleen Lonergan	Suzanne	Oct 9
Suzanne Nobles	Reid	Oct 9
Reid Olsen	Sarah	Nov 6
Sarah Schoenrock	Colleen	Nov 6

### Schedule

This is subject to change. Stay up to date with the web site and I will email notices if/when there are changes.

--AUG--

Wed, Aug 21: Lecture – Introduction

Wed, Aug 28: Guest lecture – J. Jennings, figure preparation

--SEPT--

Wed, Sept 4: Lecture – Refining talks, figures

Wed. Sept 11: No class. Prep week

Wed, Sept 18: Talks, Group A, set 1: Logan Brown, Kelly Carstens

Wed, Sept 25: Talks, Group B, set 1: Colleen Lonergan, Suzanne Nobles

--OCT--

Wed, Oct 2: No class. Prep week

**Wed, Oct 9, 4:00pm, G202 MBRB:**

**NB TALKS: Logan Brown, Kelly Carstens, Colleen Lonergan, Suzanne Nobles**

Wed, Oct 16: Talks, Group A, set 2: Anel Jaramillo, Shaili Jha

Wed, Oct 23: Talks, Group B, set 2: Reid Olsen, Sarah Schoenrock

Wed, Oct 30: No class. Prep week

--NOV--

**Wed, Nov 6, 4:00pm, G202 MBRB:**

**NB TALKS: Anel Jaramillo, Shaili Jha, Reid Olsen, Sarah Schoenrock**

Wed, Nov 13: No class. SfN meeting

Wed, Nov 20: Recap SfN meeting

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### The talk

This will be a 10 minute talk on your research, delivered to a general neuroscience audience, followed by a 5 minute Q&A session.

- Aim for roughly 1 slide/minute, but this can be flexible.
- Memorize at least the first sentence of your talk to ensure a smooth start.
- Make your acknowledgments brief, because the talk is already short.
- Have 1-3 take home messages. No more than 3.

You'll be speaking in G202, MBRB. This is a big room, and a formal setting. Dress professionally, to the conventional scientific standard for a formal talk, e.g., similar to how you see people dress in the Thursday seminar series.

### Introductions

You will also introduce a classmate for their talk. Practice this in small groups as well—you'll be doing this in class and at a RIPS session. Briefly summarize the speaker's background, and end with some sort of anecdote or interesting fact about the speaker, or a creative introduction for the talk itself (explaining why we should all be excited to hear the talk—without scooping the presenter, of course!).

### Required reading

This paper gives background on the course itself:

Stuart A (2013) Engaging the audience: developing presentation skills in science students. *J Undergrad Neurosci Ed* 11(2):1-10.

### Suggested reference materials

None of these are required for the course. But students are encouraged to seek out solid advice on scientific presentations, and this list isn't a bad start.

Basic, general tips for public speaking on technical topics

"Even a Geek Can Speak" by Joey Asher

Tips on how to speak to the media or broad audiences about science

"Am I Making Myself Clear?" by Cornelia Dean

Gopen and Swan (1980): The Science of Scientific Writing. *American Scientist* 78:550-558.

### Web pages:

Susan McConnell (Stanford, Biology)

[http://www.ibioseminars.org/index.php?option=com\\_content&view=article&id=731&Itemid=722](http://www.ibioseminars.org/index.php?option=com_content&view=article&id=731&Itemid=722)

Matt Might (Utah, Com Sci)

<http://matt.might.net/articles/academic-presentation-tips/>

Mark Schoeberl and Brian Toon (Atmospheric Science)

[http://www.cgd.ucar.edu/cms/agu/scientific\\_talk.html](http://www.cgd.ucar.edu/cms/agu/scientific_talk.html)

Jonathan Shewchuk (UC Berkeley, Com Sci)

<http://www.cs.berkeley.edu/~jrs/speaking.html>