PPT Practice Times

“Drop-in” – Foege N130A

August 5 (today!): 1:30 to 3:30 pm
August 6 (Friday): 9 am to noon
August 16 (Monday): 9 am to noon
Week 8

The Science of Science Writing
Write for a scientist in another field. Don't underestimate your readers' intelligence, but don't overestimate their knowledge of a particular field. When writing about science, don't simplify the science; simplify the writing.

Julie Ann Miller, Editor of Science News

One way to find out if you have succeeded (in writing clearly) is to show your draft to colleagues in other specialties. If they do not understand, neither, very probably, will The Lancet's staff.

The Lancet
Objectives

1. Disseminate knowledge

2. Communicate finding

3. Provide record of work
Significance

- Establish expertise
- Build reputation
Types of Articles

- Research - original findings
- Review - summarize field
- Brief communication - “hot method”
Reminders

- Publish original work
- Don’t falsify data
- Don’t plagiarize
Thursday, 6-28

To do: T. E. question on all mosses
- review question + T. E. discuss
- find out whose mosses are
- base on Defto's work w/mosses
- base on new mosses
- set up new live moss - dehydrate & cut small taps
- set up new moss
- cut down
- set up moss

- set up
- all eyes
- organ 100 psi
- make sure all photos in dates
- write down proceed
- call M. F. and

6-11

In lesson #2 discussed (this is the one held in field - collected from field - in hold) - it had to move

Section #1
- 75 units long, width 20, 21, 21, 21, 206, 3.15 mm long 3.15 mm, volume 5.78 mm x 5.78 mm

Section #2
- 32, 32, 135, 35, 21, 20, 22, 21, 31, 5.15 mm long, 1.65 mm wide, 4.43 mm², 28.1 mm²

Section #3
- 62, 20, 19, 19, 19, width 113 units 3.1 mm, 0.96 mm wide, 2.25 mm², 170.8 mm²

hatching out immediate value.
Writing Suggestions

- Use active voice (avoid passive when at all possible)
- Use past tense
- Balance substance and structure
Tips for Logical Prose

1. Determine main message(s)
2. Topic - emphasis
3. Old - new
4. Find the action
5. Clarify!
Strategies for Writing

- Determine key ideas
- Think in sections
- Flesh out details
- Add transitions
Article Structure

1. Title
2. Abstract
3. Introduction
4. Materials and Methods
5. Results
6. Discussion (conclusion)
7. Acknowledgments
Structural Details

Beginning:
objectives and hypotheses

Middle:
methods and data

End:
conclusions and implications
Title

- Succinct and catchy
- Attract attention
- Describe message

A reversible wet/dry adhesive inspired by mussels and geckos

A structure for Deoxyribose Nucleic Acid

Imaging the biogenesis of individual HIV-1 virions in live cells
Abstract

- Summarize paper (150-300 words)
- Acts as gatekeeper to paper
- 1-2 sentences per section
- Give away take-home message
Introduction

- Background
  - Survey field
  - Review status
  - Construct motivation

- Objective
  - How you fit in
  - Hypothesis
  - What’s novel
Materials and Methods

- Enough detail for peers to reproduce
- Describe and cite (general reader)
- Supplemental information (expert)
Results

- ‘Big picture’ description of experiments

- Present the **Data**
Results

- Support objectives and hypotheses
- Present in logical order
- Present analyzed data
- Integrate text and data
Discussion

- Place results in context
- Examine and explain results
- Discuss implications (theoretical & practical)
- Summarize evidence for conclusions

*Discuss - do not repeat - Results*
Acknowledgments

- Significant assistance
  - discussions
  - physical and technical
  - reagents or supplies

- Facilities

- Funding
5 Practical Tips

1. Create figures and results
2. Outline each section
3. Provide context and impress
4. Connect dots for readers
5. Have peers review paper