Main Slides:
Intensive Course in Research Writing

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Summer 2013

Main Topics: Week 1 of 3 (June 24–28)

- Deciding when and where to submit a paper
- The structure of papers
- Instructions to authors
- Approaching a writing project
- Writing in English as a foreign language
- Writing the methods section
- Poster and oral presentations
- Citing references
- Writing the results section
- Tables and figures
- Titles and authors
- Writing the discussion

Main Topics: Week 2 of 3 (July 1–5)

- Publishing a paper
- Ethical and other issues
- Aspects of writing style
- Writing the introduction
- Preparing a curriculum vitae
- Preparing grant proposals and progress reports (Note: The material on this topic began this week and continued the next week.)

Main Topics: Week 3 of 3 (July 8–12)

- Writing review articles
- Writing a thesis or dissertation
- Other writing for journals (letters to the editor, editorials, book reviews, etc)
- Providing peer review
- Communicating specialized information to the public
- Writing book chapters and books
- Writing an abstract

Note

The syllabus for this course is available in the AuthorAID Resource Library (at http://www.authoraid.info/resource-library).

Session 1 (24 June 2013)

Today

- The participants and the course
- When and where to submit a paper
- Defining a paper's focus and contribution
- Journals' instructions to authors
- Overview: the structure of papers
- Introduction: drafting an abstract

Introductions

- The class members
  - Completion of form
  - Oral introductions
- The course staff
- The course
  - Syllabus
  - Textbook
  - Questions

The Course Staff

- *Instructor:* Dr. Barbara Gastel
- *Instructional Associate:* Dr. Roberto Tuda
- *Editorial Associate:* Dr. Colin Young
- *Faculty Associate:* Dr. Weston Porter
- *Graduate Assistants:* Michelle Yeoman, Karen Wakefield

Other Introductory Items

- AuthorAID website (www.authoraid.info)
  - Will include main text slides from this course (I'll also e-mail you the main slides)
  - Contains materials in several languages on aspects of research writing
- Requested subject line for e-mail relating to course: IC2013 . . .
  (example: IC2013—Draft of Abstract)

Preparing to Write a Paper

- Deciding when to publish
- Choosing a target journal
- Exercise: defining the focus and contribution of your paper
- Using journals' instructions to authors

Deciding What (or When) to Publish

- Some factors to consider: quality of the work, extent of the work, interest to others
- Suggestions:
  - Seek guidance in this regard from others in your field who are more experienced in publishing journal articles.
  - Present your work orally first. Doing so can help in deciding whether the work is publishable and in shaping the paper.

Identifying a Target Journal: Some Basics

- If possible, decide early (before drafting the paper). It's better not to write the paper and then look for a journal. (Why?)
- Look for journals that have published work similar to yours.
- Consider journals that have published work you cite.
- Consult the journal's website and instructions to authors.

Some Factors to Consider

- Aims and scope of journal
- Audience
- Prestige
- Access (open access; general accessibility)
- Speed of acceptance and publication
- ?Quality of reproduction of figures?
- Publication costs, if any
- Likelihood of acceptance

Some Factors to Consider (cont)

- Impact
  - Impact Factor (from Science Citation Index—Journal Citation Reports)
    - Indicates how much articles in the journal tend to be cited
    - Does not say how much a given article will be cited
    - Not valid for comparison from field to field
    - Changes over time
  - Other impact—for example, on
    - Practice
    - Policy
    - Teaching
    - Media coverage

Some Research

- Frank E. Authors' criteria for selecting journals. JAMA 1994;272:163-164.
- Presents findings from one medical school
- Interesting: criteria differed for first and later submissions of paper
  - Top factors for first submission: prestige, readership, usual content of journal
  - Top factors of later submissions: likelihood of acceptance, usual content of journal

Exercise: Defining Your Paper's Contribution and Focus

- Background: To identify a suitable target journal and to write an effective paper, you need to define the focus and contribution of your work (the "take-home message").
- Please tell the others in your group what main question your research addresses and why that question is important. Answer questions from other group members.
- Be ready to tell the full group, in 1 minute or less, this question and why it is important.

Journals' Instructions to Authors

- Usual locations: in the journal and on the journal's Web site
- A large collection of instructions to authors in the health sciences: http://mulford.meduohio.edu/instr/
- General advice: Select your first-choice journal early, and obtain its instructions immediately.

Using the Journal's Instructions

- Read the instructions to authors before starting to prepare your paper.
- Consult the instructions while preparing your paper.
- Check the instructions again before submitting your paper.

Some Questions the Instructions May Answer

- What categories of article does the journal publish?
- What is the maximum length of articles?
- What is the maximum length of abstracts?
- What sections should the article include? What are the guidelines for each?
- Does the journal have a template for articles? If so, how can it be accessed?

Some Questions (cont)

- What guidelines should be followed regarding writing style?
- How many figures and tables are allowed? What are the requirements for them?
- In what format should references appear?
- Does the journal post supplementary material online? If so, how should it be provided?

Some Questions (cont)

- In what electronic format should the paper be prepared?
- How should the paper be submitted?

Beyond the Instructions

- Look at some recent issues of the journal. Doing so can help you gear your paper to the journal.

An Assignment for Tomorrow

Please bring instructions to authors from 2 or 3 journals in your field. At least 1 set of instructions should be from a journal to which you might want to submit a paper about your research.

Formats for Journal Articles Reporting Research

- One common format: IMRAD
  - **I**ntroduction: What was the question?
  - **M**ethods: How did you try to answer it?
  - **R**esults What did you find?
  - (**A**nd)
  - **D**iscussion What does it mean?

Article Formats (cont)

- Formats differ among academic fields.
- Non-IMRAD formats in some journals:
  - IMRADC (IMRAD plus Conclusions)
  - IRDaM
  - IMRDRD . . .
  - Essay-like format, with headings chosen by author
  - Other
- Question: In your field, what is the usual structure for papers reporting research?

Note

- People read sections in various orders. Papers should be written accordingly.

Drafting an Abstract

- An abstract generally should be organized like a scientific paper (for example, in sort of a mini-IMRAD format).
- In some fields, there are structured abstracts (with standardized headings).

An Assignment for Tomorrow

Please draft an abstract of the research about which you will write a paper. The abstract should run about 250 words (1 double-spaced page). It is suggested that you use the following headings: Background, Methods, Results, and Conclusions. In addition to e-mailing the abstract, please print out and bring 5 copies.

Mechanical Items: Writing Assignments

- Please double-space and use an unjustified right margin. Margins should be at least 1 inch.
- Times New Roman 12 point is preferred.
- E-mail assignments to both Colin Young and Barbara Gastel.
- Deadline is 8:30 a.m. on the date listed. If possible, submit assignments the previous afternoon or evening.
- Thanks!

Any Questions?

Reminder: Assignments for Tomorrow

- Reading: chapters in textbook
- Writing: informal abstract
- Other: instructions to authors

Session 2 (25 June 2013)

Today

- Workshop: Instructions to authors
- Presentation: Approaching a writing project
- Discussion: Writing in English as a foreign language
- Presentation: Writing the methods section
- Presentation: Providing feedback on drafts
- Workshop: Class members' abstracts

Workshop: Instructions to Authors

- How long are the instructions that you found?
- What subjects do they address?
- What other observations do you have about them?
- What questions do you have about them?

Which of the following questions do the instructions answer?

Some Questions the Instructions May Answer

- What categories of article does the journal publish?
- What is the maximum length of articles?
- What is the maximum length of abstracts?
- What sections should the article include? What are the guidelines for each?
- Does the journal have a template for articles? If so, how can it be accessed?

Some Questions (cont)

- What guidelines should be followed regarding writing style?
- How many figures and tables are allowed? What are the requirements for them?
- In what format should references appear?
- Does the journal post supplementary material online? If so, how should it be provided?

Some Questions (cont)

- In what electronic format should the paper be prepared?
- How should the paper be submitted?

For which journal do you think you'll write your paper? Why?

Do you have its instructions to authors? If not, please obtain them.

Approaching a Writing Project

- Establishing the mindset
- Preparing to write
- Doing the writing
- Revising your work

Establishing the Mindset (Attitude)

- Remember that you are writing to communicate, not to impress.
- Realize that those reading your work want you to do well.
  - Journal editors
  - Peer reviewers
  - Professors

    The purpose of their constructive criticism is to help you succeed.

Preparing to Write

- Obtain and review instructions.
- Use published or accepted items as models.
- Perhaps get a style manual—for example:
  - The ACS (American Chemical Society) Style Guide
  - AMA (American Medical Association) Manual of Style
  - The Chicago Manual of Style
  - The MLA (Modern Language Association) Style Manual and Guide to Scholarly Publishing
  - Publication Manual of the American Psychological Association
  - Scientific Style and Format

Preparing to Write (cont)

- While you are gathering content, write down ideas that occur to you.
- Do lots of "prewriting"—for example:
  - Stack papers in the order you plan to cite them.
  - List points you want to make.
  - Perhaps make an outline.
- If you're having trouble formulating ideas, perhaps do something else for a while.

Doing the Writing

- Schedule specific times to write.
- Start with whatever part you find easiest.
- Don't interrupt your writing to search for small details.
- Realize that often in writing there is no "one right way" but rather a series of problems with more than one solution.

Revising Your Work

- Note: Good writing is largely a matter of good revising.
- First revise your writing yourself. Then get feedback from others and revise more.
- Consider having an editor help you.
- Avoid the temptation to keep revising your writing forever.

Questions to Consider in Revising

- Does the piece of writing contain everything it should?
- Does it contain anything it shouldn't?
- Is all the information accurate?
- Is the content consistent throughout?
- Is everything logically organized?
- Is everything clearly worded?

Questions (cont)

- Does the level suit the intended readers?
- Are points stated briefly, simply, and directly? In other words, is everything concise?
- Are grammar, spelling, punctuation, and word use correct throughout?
- Are all figures and tables well designed?
- Does the manuscript comply with the instructions?

Writing in English about Your Research

The Essentials

- The essentials are **content**, **organization**, and **clarity**.
- If a paper has excellent content, is well organized, and is clear, it is likely to be accepted even if the English is so-so.
- If a paper has poor content, is badly organized, or is unclear, it is likely to be rejected even if the English is excellent.

Cultural Differences to Consider

- Level of detail?
- Directness of expression?
- Attitudes toward time?
- Attitudes toward using material taken from others' writing?

Some Common Language Challenges

- Verb tenses
- Prepositions
- Articles (the, a, an)
- Sentence structure
- Sentence length
- Spacing
- Other

Some Strategies

- Compiling lists of words and phrases commonly used in your field
- Writing simply
- Having people with a strong command of English review your drafts
- Other

Some Resources

- *The Elements of Style* (www.bartleby.com/141/)
- Lessons on Scientific English (accessible through www.authoraid.info/resource-library/china-medical-board-program-resources/cmb-lessons-in-scientific-writing/folder_contents)
- Getting the Most out of Words (www.authoraid.info/resource-library/Editing%20and%20Publication-Chapter%202.pdf/view)
- Academic Phrasebank (www.phrasebank.manchester.ac.uk)
- Grammar Girl (grammar.quickanddirtytips.com)

Scientific English (book)

Writing a Scientific Paper

Some Questions to Consider

- In what order(s) do you read the parts of a scientific paper? What does that imply?
- In what order do you like to write the parts of a scientific paper? Why?

One Common Order for Writing a Paper

- Methods
- Results
- Discussion
- Introduction

The Methods Section

(or the equivalent in papers not in IMRAD format)

Purposes of the Methods Section

- To allow others to replicate what you did
  - In order to test it
  - In order to do further research
- To allow others to evaluate what you did
  - To determine whether the conclusions seem valid
  - To determine whether the findings seem applicable to other situations

Methods: Basic Information to Include

- In most cases, overview of study design
- Identification of (if applicable)
  - Equipment, organisms, reagents, etc used (and sources thereof)
  - Approval of human or animal research by an appropriate committee
  - Statistical methods

Methods (cont)

- In some journals, may include subheads
- May include tables and figures
- Should be written in past tense
- Helpful to use papers published in the same journal as models

Methods: An Issue— How Much Detail to Provide About

- Well-known methods
- Methods previously described but not well known
- Methods that you yourself devised

Exercise

- Look at the methods section of at least one article in a journal provided in class.
- What do you notice?
- What questions do you have about how the Methods section is written?

Some Homework

- Look at some papers in the journal for which you are writing a paper.
- Choose the paper that you think would be the best model for yours. Bring the paper to class, and e-mail it to Dr. Gastel (bgastel@cvm.tamu.edu) and Dr. Young (cyoung@cvm.tamu.edu).
- Notice how the methods section of the paper is written. Be ready to share your observations in class.

More Homework

- Please draft the Methods section of your paper.
- Tomorrow, bring a copy for yourself and a copy for each other member of your small group.
- (Also, please remember to read the assigned chapters.)

Providing Feedback on Drafts

- Find out what level of feedback is being sought.
- Remember to identify strengths. Don't only focus on weaknesses.
- Consider serving a criticism sandwich: praise, criticism, praise.
- Express criticisms as perceptions, not facts.
- Criticize the work, not the person.
- Other

Workshop: Class Members' Abstracts (Suggested Procedure)

- Read your group members' abstracts quickly, to get the general meaning.
- Read each abstract more carefully, and write comments on each abstract.
- Discuss each abstract, noting strengths and then providing suggestions.
- Give the commented-on abstracts to the authors.

A Few Teaching Points

(based on abstracts received other years)

- In general, use an unjustified ("ragged") right margin. (It tends to make text more readable.)
- Use past tense to report methods and results.
- If acronyms are used, remember to define them.
- Beware of misusing semicolons.
- Use *i.e.* and *e.g.* carefully (or, perhaps better, avoid them).
- Normally, don't begin a sentence with a numeral.

Session 3 (26 June 2013)

Today

- Follow-up: workshop on draft abstracts
- Presentation/discussion: poster and oral presentations
- Sign-up: second meeting with Dr. Young
- Workshop: drafts of methods sections

Drafts of Abstracts

- What strengths did your classmates mention?
- What types of revisions did your classmates suggest?
- What other comments or questions do you have about revising your abstract?
- Does the paper you've chosen as a model have an abstract? If so, what is it like?
- Does looking at it give you any ideas for revising your abstract?

Some Strengths Observed in Multiple Abstracts

- Good organization
- Clear wording
- Information on importance of topic
- Information on implications of findings
- Inclusion of definitions of abbreviations
- Concise wording

A Few Teaching Points

(based on review of abstracts received)

- Please remember to double-space and to use an unjustified (ragged) right margin.
- In general, state parallel ideas in parallel form.
- Follow conventions regarding capitalization. (For example, disease names normally aren't capitalized.)
- Consider reviewing comma use.
- Try to avoid long sentences. (A guideline: In general, limit each sentence to one main point.)

Preparing Poster Presentations and Oral Presentations

Obtaining Chances to Present

- Unsolicited invitations
- Submission and peer review of abstracts
  - Of course, follow the instructions.
  - Write abstracts readably, especially as reviewers are busy.
- Sometimes abstracts of proposed presentations
  - may be longer than abstracts of journal articles
  - may include one or two figures or tables

Poster Presentations

Planning a Poster

- Choose a narrow enough topic.
- Plan to present only highlights.
- Obtain and carefully follow instructions.
- Select images that present key messages and attract viewers.
- Plan to include little text.
- Plan to make the poster understandable on its own.

Organizing a Poster

- Organize the poster logically (example: Introduction, Methods, Results, Conclusions).
- If the poster has a “landscape” format, place the content in about 3 to 5 vertical columns.
- Include plenty of white space.
- In general, don’t include an abstract.

Preparing a Poster: The Title

- Keep the title fairly short.
- Perhaps try to make the title attention-grabbing.
- Use large enough type (at least about 2.5 cm, or 1 inch, high).
- Normally, don’t use all capital letters. (DON’T USE ALL CAPITAL LETTERS.)

Preparing a Poster: The Images

- Use images (photographs, flow charts, graphs, etc) that both attract and inform.
- Keep the images simple, so they can be quickly understood.
- In general, use graphs, not tables.
- Make the images large enough.
- Remember to label each image.
- Use color effectively.

Preparing a Poster: The Text

- Keep the text brief.
- Make the type large enough to read easily.
- Where feasible, use bulleted or numbered lists rather than paragraphs.
- If paragraphs are used, keep them short.
- Include your contact information.
- Proofread the text carefully.

Examples of Posters

Posters from Class Members

Presenting a Poster

- Don't be shy.
- Think ahead about questions you might be asked.
- Maybe prepare talks of various lengths.
- Perhaps ask some questions.
- Take advantage of the chance for feedback.
- Take advantage of the chance to network.

Presenting a Poster (cont)

- Have business cards available.
- Consider having handouts.
- Consider having people sign up for further information.
- If you'll write a paper about the work presented, keep in mind comments and questions from the poster session.

Some Newer Aspects

- Projection of posters
- Flash poster presentations (see http://www.authoraid.info/news/flash-poster-presentations-tell-me-more)

Some Resources

- "Designing Scientific Posters" by Colin Purrington (posted at http://colinpurrington.com/tips/academic/posterdesign)
- "Better Posters: A Resource for Improving Poster Presentations" (blog at http://betterposters.blogspot.com/)

Oral Presentations

Preparing an Oral Presentation

- Obtain and carefully follow instructions.
- Include much less detail than in a paper to publish.
- Stick to the main idea.
- Give the presentation a beginning, a middle, and an end.
- If feasible, structure the presentation largely as a story.

Preparing a Presentation (cont)

- Remember: People must be able to understand what you say as you say it. Therefore, for example:
  - Pace the presentation carefully.
  - Repeat important points.
- Minimize use of abbreviations/acronyms.
- In general, prepare notes, not a full text.

Preparing Slides: Some Guidelines

- At most one slide per minute, on average
- One theme or idea per slide
- Simple and uncrowded
- Thus, usually no published graphs/tables
- Bullet points (not paragraphs) for most text
- Large enough lettering to read

Compare this slide and the previous one.

In general, do not average more than one slide per minute. Limit each slide to one theme or idea. Keep slides simple and uncrowded. Thus, beware of using published graphs and tables. In general, use bullet points (not paragraphs) for text. Make sure all lettering is large enough to read.

Rehearsing the Presentation

- Time the presentation carefully.
- Try to make the presentation slightly shorter than the allotted time.
- Perhaps rehearse for others.
- Perhaps have others ask you questions.

Coping with Stage Fright

- Note that a little nervousness can help you perform well.
- Realize that people will attend to hear the content, not to judge your speaking style.
- Prepare well, but don't over-prepare.
- Exercise a little.
- Beware of too much food, water, or caffeine.

Coping with Stage Fright (cont)

- Hide physical signs of anxiety.
- Realize that a presentation need not be perfect to be excellent.

Giving the Presentation

- Arrive early.
- Make sure audiovisuals are working.
- Speak slowly enough.
- Speak clearly.
- Look at the audience.
- Show enthusiasm.
- Avoid distracting habits.

Answering Questions

- Lay the groundwork for relevant questions (for example, by stating in your talk some items that people can ask about).
- Perhaps have the moderator or a colleague to ask the first question.
- Briefly repeat each question.
- Keep answers brief.

Answering Questions (cont)

- If you don't know an answer, say so. Perhaps
  - offer to find out,
  - suggest how to find out, or
  - see if someone present has the answer.
- If a question seems irrelevant, offer to answer it later, or move to a related item.
- If a question is hostile, answer politely and briefly; perhaps offer to talk later.

Answering Questions (cont)

- Make note of questions. Use them to help shape future presentations and publications about the work.

Looking Ahead

- Tomorrow: Presentation by Dr. Porter on giving a 15-minute talk
- Friday: An example of a 15-minute talk (speaker: Dr. Porter)
- Next Tuesday (July 2) through the following Thursday (July 11): 15-minute talks by class members

  (Further information will follow.)

Homework for Tomorrow

- Read the chapters listed.
- Bring in some figures, tables, or both from papers reporting research similar to yours. (One copy of each is enough.)
- Start revising the draft of your methods section. (The revised draft is due Friday.)
- (Note: Michelle Yeoman will be in lab from about to 2 p.m. to 4 p.m. today.)

Looking Ahead

- Tomorrow: brief presentation by Dr. Tuda on EndNote
- Availability of Dr. Tuda to help with EndNote

Comments: Methods Sections Looked At

- What are some things you noticed about the methods section of the paper you are using as a model?
- What questions do you have?

Workshop: Drafts of Methods Sections

- Read your group members' methods sections fairly quickly, to get the general meaning.
- Read each methods section more carefully, and write comments on it.
- Discuss each methods section, noting strengths and then providing suggestions.
- Give the commented-on methods sections to the authors.

Discussion: Workshop on Methods

- What are some comments you received?
- What are some revisions that you're thinking of making?

Intensive Course in Research Writing

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Session 4 (27 June 2013)

Today

- Presentation: Giving a 15-minute talk (Dr. Porter)
- Presentation/discussion: citing references—some basics
- Presentation: Overview of EndNote (Dr. Tuda)
- Presentation/discussion: Writing the results section
- Mini-workshop: Examples of results sections

Giving a 15-Minute Talk

(presentation by Dr. Weston Porter; slides are not included in this set)

Citing References

Functions of References

- To give credit to others for their work
- To add credibility to your work by showing that you used valid information sources
- To help show how your work is related to previous work
- To help readers find further information

References: Importance of Accuracy

- Studies show that many references are inaccurate.
- For references to fulfill their functions, they must be accurate. Therefore
  - Make sure that you accurately state what the cited material says.
  - Make sure that all information in the citation (for example, author list, article title, journal title, volume, year, pages) is accurate.

Another Reason Your References Should Be Accurate

Often, authors whose work you cite will be your peer reviewers. Inaccurate references to their work will not impress them favorably.

Formats

- Various formats exist for citation in text—for example:
  - Accuracy of references is important (Day and Gastel, 2011).
  - Accuracy of references is important.[3]
- Various formats exist for items in reference lists—for example:
  - Pineda D. 2003. Communication of science in Colombia. Sci. Ed. 26:91-92.
  - Pineda D. Communication of science in Colombia. Sci Ed 2003;26:91-2.

A Reminder

Be sure to use the format that your target journal requests.

- For the citations in the text
- For the reference list

Citation Management Software

- Examples: EndNote, Reference Manager, RefWorks, Zotero
- Allows you to keep a database of references
- In many cases, provides the citations and references in the proper format for your target journal

Placement of Citations

- Ambiguous:
  - This compound has been found in humans, dogs, rabbits, and squirrels (Tuda and Gastel, 1997; Xie and Lozano, 2008; Flores, 2002).
  - This compound has been found in humans, dogs, rabbits, and squirrels.[1,4,7]
- Clear:
  - This compound has been found in humans (Tuda and Gastel, 1997), dogs (Xie and Lozano, 2008), and rabbits and squirrels (Flores, 2002).
  - This compound has been found in humans,[1] dogs,[4] rabbits,[7] and squirrels.[7]

Other Advice on References

- If you haven't read an item, don't cite it.
  - Discussion question: If an article isn't freely accessible online, how might you obtain it?
- Check each reference against the original source.
- Carefully follow the journal's instructions to authors.
- Use other articles in the same journal as models.

Looking Slightly Ahead

- After break: brief presentation by Dr. Tuda—An overview of EndNote
- Availability of Dr. Tuda to help with EndNote
- Note: The Texas A&M libraries give sessions on reference management software.

Homework for Tomorrow

- Reading: chapters listed on syllabus
- Writing: revised draft of methods section (In revising your draft, please consider the feedback from Dr. Young and from your small group.)

An Overview of EndNote

(presentation by Dr. Roberto Tuda; consisted mainly of a demonstration of EndNote; no slides)

The Results Section

The Results Section

- The core of the paper
- Often includes tables, figures, or both
- Should summarize findings rather than providing data in great detail
- Should present results but not comment on them
- (Note: Some journals, however, combine the Results and the Discussion.)

Verb Tense for the Results Section: Past Tense

Examples from "Family Cluster of Middle East Respiratory Syndrome Coronavirus Infections" (published today in *New England Journal of Medicine*):

- "Routine clinical laboratory tests for ___ **were** negative in all four patients."
- "Testing **was** positive for MERS-CoV . . . "
- "The duration of the prehospital illness **varied** for each patient . . ."
- "A total of 124 health care workers who had contact with the patients **remained** healthy as of January 2013."

Results Sections of Papers with Tables or Figures

- How much should the information in the text overlap that in the tables and figures?
  - Not extensive overlap
  - In general, text should present only the main points from the tables and figures
  - Perhaps also include a few of the most important data
- Remember to mention each table or figure. Do so as soon as readers might want to see it.

Mentioning Tables and Figures: Some Writing Advice

- In citing tables and figures, emphasize the finding, not the table or figure.
  - *Not so good*: Table 3 shows that researchers who took this course published twice as many papers per year.
  - *Better*: Researchers who took this course published twice as many papers per year (Table 3).

Mini-Workshop: Results Sections

- Look at the instructions to authors from your target journal. What, if anything, does it say about the results section?
- Look at the results section of your model paper. Notice items such as the following:
  - Length
  - Organization
  - Inclusion of subheads (or not)
  - Number of tables and figures
- Be ready to discuss your observations.

Session 5 (28 June 2013)

Today

- An example of a 15-minute talk (Dr. Porter)
- Presentation/discussion: tables and figures
- Mini-workshop: examples of tables and figures
- Presentation/discussion: titles and authors
- Presentation/discussion: writing the discussion
- Workshop
  - Revised drafts of methods sections
  - Plans for the results and discussion sections

Example of a 15-Minute Talk: Dr. Weston Porter

(The slides are not included in this set.)

Presentations in This Class

- 15 minutes (10–12 minutes of presentation, plus 3–5 minutes of questions and answers)
- On a professionally related topic (your research or something in your field)
- For an educated general audience (the members of this class)
- Can rehearse in the classroom in the afternoons
- Can get feedback beforehand from Dr. Young, Michelle Yeoman, me, others

Tables and Figures: Some Basics

Tables: A Few Suggestions

- Use tables only if text will not suffice.
- Design tables to be understandable without the text.
- Organize each table in a logical way.
- If a paper includes a series of tables, use the same format for each.
- Be sure to follow the instructions to authors.

Figures: A Few Suggestions

- Use figures (graphs, diagrams, maps, photographs, etc) only if they will help convey your information.
- Avoid including too much information in one figure.
- Make sure any lettering will be large enough once published.
- Follow the journal's instructions.

Discussion Question

- If you have data that could be presented in either a table or a figure, how do you decide which one to use?

A General Suggestion

- Look at tables and figures in journal articles presenting research similar to yours
  - In your target journal
  - In other good journals
- Use these tables and figures as models when designing your own tables and figures.

Sources of Further Information

- "*Almost* Everything You Wanted to Know About Making Tables and Figures," Department of Biology, Bates College (http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWtablefigs.html)
- Writing and Publishing Scientific Papers, Part 2 (from China Medical Board course), accessible at http://www.authoraid.info/resource-library?type=all&subject=preparing_tables_and_figures&lang=all
- Style manuals used in your field

Mini-Workshop: Tables and Figures

- Look at the instructions to authors from your target journal. What, if anything, do they say about tables and figures?
- Look at the tables and figures in your model paper and any other tables and figures you brought.
  - What are some strengths of these tables and figures?
  - What do you think could have been improved?
  - What other observations or questions do you have?
- Be ready to present your thoughts.

Homework for Monday

- Required reading (chapters listed)
- Optional reading (chapters listed)
- Writing: draft of results section
  - Please bring copies for small-group discussion.
- (Reminder: Optional assignment for Tuesday—rewrite of informal abstract. Submit with graded original. Will raise grade on assignment 2 points.)

Looking Ahead: Monday

- Main part of session: presentation/discussion on publishing a paper
- Last hour of session: each class member can either
  - Meet in workshop to discuss drafts of results.
  - Attend "My Philosophy of Anatomy Instruction: Enhancing Student Anatomy Learning" by Josep Rutllant, DVM, PhD. If doing so, then:
    - Give feedback to fellow group members at another time.
    - Report on the crafting and delivery of the presentation.

Title

- The fewest possible words that adequately indicate the contents of the paper
- Important in literature searching
- Should not include extra words, such as "A Study of" or "Observations on"
- Should be specific enough
- Generally should not include abbreviations
- (Running title: short version of title—appears at tops of pages)

Mini Exercise

- Look at the title of an article that you brought. Consider
  - What's good about the title?
  - What about the title might be improved?
- Compare your findings with those of some people near you.
- Be ready to report some observations to the full group.

Authors

- Those with important intellectual contributions to the work
- Often listed largely from greatest contributions to least
- Head of research group often is listed last
- In some fields, listed alphabetically
- Useful to list one's name in a consistent way on every paper

Something Fairly New: ORCID

- Stands for Open Researcher and Contributor ID
- "ORCID provides a persistent digital identifier that distinguishes you from every other researcher"
- ORCID identifiers can aid in tracking authors of papers, grants, etc
- See http://orcid.org/

Acknowledgments

- Often optional
- A place to thank people who helped with the work but did not make contributions deserving authorship
- Permission should be obtained from people you wish to list
- Sometimes the place where sources of financial support are stated

Mini-Exercise on Acknowledgments

- Look at a set of instructions to authors.
  - What, if anything, does it say about acknowledgments?
- Look at the paper you are using as a model.
  - Does it contain acknowledgments?
  - If so, what is the content?
  - Also if so, what is some wording therein that you might be able to use?

The Discussion

Overall Structure of a Paper: Like an Hourglass

Discussion

- One of the more difficult parts to write, because have more choice of what to say
- Often should begin with a brief summary of the main findings
- Should answer the question(s) stated in the introduction (or address the hypothesis or hypotheses stated in the introduction)

The Discussion: Some Possible Content

- Strengths of the study
  - For example, superior methods, extensive data
- Limitations of the study
  - For example: small sample size, short follow-up, incomplete data, possible sources of bias, problems with experimental procedures
  - Better to mention limitations than for peer reviewers and readers to think that you're unaware of them
  - If the limitations seem unlikely to affect the conclusions, can explain why

The Discussion: Possible Content (cont)

- Relationship to findings of other research—for example:
  - Similarities to previous findings (your own, others', or both)
  - Differences from previous findings
  - Possible reasons for similarities and differences

The Discussion: Possible Content (cont)

- Applications and implications—for example:
  - Possible uses of the findings (in health care, public policy, industry, agriculture, etc)
  - Relationship of the findings to theories or models:
    - Do the findings support them?
    - Do they refute them?
    - Do they suggest modifications?

The Discussion: Possible Content (cont)

- Other research needed—for example:
  - To address questions still unanswered
  - To address new questions raised by the findings
- Other

Discussion (cont)

- Typically should move from specific to general, rather like an inverted funnel (opposite of introduction)
- In some journals, may be followed by a conclusions section
- In some short papers, is called "Comment" rather than "Discussion"

The Discussion: A Suggestion and Mini-Exercise

- Look at the discussion sections of some papers in your target journal.
- Notice items such as the following:
  - Length
  - Types of content
  - Organization
  - Phrases commonly used
  - Citation of references
- Use these discussion sections as models.

Workshop

- Revised drafts of methods sections
  - Show your group members your revised methods section. Identify changes made. Obtain additional feedback.
- Plans for the results and discussion sections
  - Describe the planned content and structure of your results and discussion section(s). Obtain feedback.

Weekend

Session 6 (1 July 2013)

Today

- Follow-up: observations on discussion sections of model papers
- Presentation/discussion: publishing a paper
- Workshop: drafts of results section

Follow-Up: Discussion Sections of Model Papers

- What did you notice about the following?
  - Length
  - Types of content
  - Organization
  - Phrases commonly used
  - Citation of references
- What else did you notice?
- What questions do you have?
- (Reminder: Draft of discussion is due Friday.)

Publishing a Paper

Note: A managing editor's presentation on this topic is now available in the AuthorAID Resource Library.

Submitting the Paper

- Traditional submission (by mail)—now rare
- Electronic submission
  - Commonly via online submission system
  - Sometimes as e-mail attachment
- Inclusion of a cover letter (conventional or electronic)
- Completion of required forms, if any

Some Resources: Cover Letters

- Content list from Taylor & Francis publishers
- Advice from Springer publishers
- Guide from Edanz editing service
- Sample cover letter from American Journal Experts editing service
- Video from American Chemical Society (also discusses choosing a journal)

Some Categories of Editors at Journals

- Helpful to know because you might interact with each
- Main categories:
  - Editor-in-chief (and sometimes associate editors etc)—concerned mainly with content
  - Managing editor(s)—concerned mainly with administration of the journal
  - Manuscript editor(s)—improve the writing and maintain a consistent style

Initial Screening by the Journal

- For appropriateness of subject matter
- For completeness
- For compliance with instructions
- For overall quality (sometimes)
- For importance and breadth of appeal (sometimes)

Peer Review

- Evaluation by experts in the field
- Purposes:
  - To help the editor decide whether to publish the paper
  - To help the authors improve the paper, whether or not the journal accepts it
- Discussion questions
  - What are some benefits of peer review?
  - What can be some drawbacks of peer review?

A Newly Published Article

What reviewers want: how to make your article more appealing to peer reviewers, by Martin S. Hagger. Health Psychology Review, 7:sup1, S1-S7. Published online 28 May 2013.

The Editor's Decision

- Based on the peer reviewers' advice, the editor's own evaluation, the amount of space in the journal, other factors
- Options:
  - Accept as is (rare)
  - Accept if suitably revised
  - Reconsider if revised
  - Reject

Revising a Paper

- Revise and resubmit promptly.
- Indicate what revisions were made.
  - Include a letter saying what revisions were made. If you received a list of requested revisions, address each in the letter.
  - If requested, show revisions in Track Changes.
- If you disagree with a requested revision, politely explain why in your letter. Try to find a different way to solve the problem that the editor or reviewer identified.

Answering Queries

- Queries: questions from the manuscript editor
- Some topics of queries:
  - Inconsistencies
  - Missing information
  - Ambiguities
  - Other
- Advice: Respond promptly, politely, and completely yet concisely.

Reviewing Proofs

- Proofs: typeset material to check
- Review the proofs promptly.
- Some things to check:
  - Completeness (presence of all components)
  - Accuracy (absence of typographical errors in text and references)
  - Placement of figures and tables
  - Quality of reproduction of figures
- Note: This is not the time to rewrite the paper.

A Final Step: Celebrate Publication of Your Paper!

Speaking of fireworks . . .

- July 4—Independence Day—free events at George Bush Presidential Library Center
- Also a tradition: barbecue (and some vegetarian side dishes) for interested intensive-course attendees and their guests

Homework for Tomorrow

- Reading (chapters listed)
- Optional assignment (as noted)—rewrite of informal abstract. Submit with graded original. Will raise grade on assignment 2 points.
- Also, please be working on revising your results section (or equivalent). Revised draft is due Wednesday.

Workshop: Drafts of Results Sections (or Review-Article Parts)

- Read your group members' writing fairly quickly, to get the general meaning.
- Read the writing more carefully, and write comments on it.
- Discuss each group members' piece of writing, noting strengths and then providing suggestions.
- Give each commented-on piece of writing to the author.

Session 7 (2 July 2013)

Today

- Follow-up: workshop and alternative activity yesterday
- Presentation/discussion: some ethical and other issues
- Presentation/discussion: some aspects of writing style

No-Lose Quiz

Follow-Up: Workshop and Alternative Activity

- If you took part in the workshop:
  - What strengths did you notice in others' results sections?
  - What suggestions did you give or receive?
- If you attended the presentation:
  - What observations do you have about the crafting of the presentation?
  - What observations do you have about the delivery?

Ethical and Other Issues in Journal Publication

Authenticity and Accuracy

- Authenticity (not fabrication)
  - Have you heard of any cases of fabrication?
- Accuracy
  - Providing complete data (not only those supporting one's hypothesis)
  - Avoiding inappropriate manipulation of images
  - Using appropriate statistical procedures

Originality

- Not republishing the same findings (except under special circumstances, with permission and the original source cited)
- Not submitting the same manuscript to two or more journals at once
- Not dividing one small research project into many tiny papers ("salami science" or "cucumber science")

Credit

- Citing sources of information and ideas (also aids credibility, helps in finding out more)
- Avoiding excessive use of others' words
  - Recording sources when copying items or taking notes
  - Placing in quotation marks, or indenting, items used verbatim
  - Perhaps drafting some items while not looking at the source materials
  - Observing copyright and obtaining needed permissions

Ethical Treatment of Humans and Animals

- Treatment must conform to accepted international standards.
- Manuscript must document that the study was approved by an ethical review board before it was done.
- Note: Research on humans tends to be broadly defined, for example to include survey research.

Conflicts of Interest

- Can involve authors, peer reviewers, or editors
- Can be financial, ideological, or other
- May be required to report to the journal
- May be noted in the journal

A Resource on Ethics

- *On Being a Scientist: Responsible Conduct in Research,* 3rd ed (2009)
- From the US National Academies
- Largely for graduate students
- Available online at www.nap.edu/catalog.php?record_id=12192
- Video available at site

Another Resource on Ethics

- *CSE's White Paper on Promoting Integrity in Scientific Journal Publications,* 2012 update
- From the Council of Science Editors
- Available at http://www.councilscieneeditors.org/i4a/pages/index.cfm?pageid=3313

Some Other Resources

- Committee on Publication Ethics (COPE): http://publicationethics.org
- World Association of Medical Editors (WAME): http://www.wame.org

Announcements and Reminders

- Homework for tomorrow
  - Reading (two chapters)
  - Revised draft of results section or alternative
- Reminders
  - First presentations tomorrow
  - Signup sheet: meetings today and tomorrow with Dr. Young
  - Signup sheet: barbecue dinner (5 p.m. Thursday, July 4, at CVM)

Some Aspects of Writing Style

Small-Group Discussion: Chapters 30–33

- For this discussion, please meet with some people other than your usual small group.
- Questions
  - What are the most important things you learned from these chapters? (Please be specific.)
  - What questions do you have about these chapters?

Exercise: Using Simpler Words

- attempt→
- currently→
- demonstrate→
- fundamental→
- numerous→
- subsequently→
- utilize→

Exercise: Deleting Needless Words

- in the field of physics
- green in color
- is a very rare event
- to show whether or not it works
- of an efficient nature
- count the number of cells
- completely destroy

Exercise: Condensing Wordy Phrases

- at high speed→
- at some future time→
- for this reason→
- in most instances→
- in the event that→
- the majority of→
- is able to→

Exercise: Using Verbs, Not Nouns Made from Them

- have effects on→
- make contributions→
- produce relief of→
- provide help to→
- delivered a lecture→
- There is a wide variation in mortality.→
- It is my belief that→

Some Aspects of Comma Use

Avoiding Some Common Comma Errors

- In general:
  - Use a comma between the main parts (independent clauses) of a compound sentence.
  - Do not use a comma between parts of a two-part compound predicate.
- Examples:
  - We went to a lecture at the Memorial Student Center, and then we saw an exhibit at the Forsyth Galleries.
  - We went to a lecture at the Memorial Student Center and then saw an exhibit at the Forsyth Galleries.

Avoiding Some Other Common Comma Errors

- "Restrictive" and "nonrestrictive" elements (Note: You needn't remember these terms, but it can be helpful to remember the concept.)
  - If a word, phrase, or clause after a noun makes the noun more specific, don't put commas around it.
  - If a word, phrase, or clause after a noun just adds information about the noun, without making it more specific, place a comma before and a comma after it. Don't forget the second comma. Perhaps envision the commas as handles that you can use to lift out the supplementary information.

Some Examples

- My friend Kathy is a lawyer.
- My oldest cousin, Dean, is a lawyer.
- A colleague who lives in Mexico helps with the course.
- Dr. Roberto Tuda, who lives in Mexico, helps with the course.
- Which of the following is correct?
  - My husband Tom enjoys singing.
  - My husband, Tom, enjoys singing.

Aspects of Semicolon Use

Only Two Main Uses of Semicolons

- To separate closely related independent clauses:
  - We live in Bryan; they live in College Station.
- To separate lists within a list:
  - This striped T-shirt is available in red, white, and blue; purple, orange, and green; and black, gray, and white.
- Beware: The grammar checker in Word sometimes says to use a semicolon when you shouldn't do so.

A Good Resource: Grammar Girl (grammar.quickanddirtytips.com)

Another Good Resource: *AMA Manual of Style*

- Available online through the Texas A&M library
- Has good chapters on grammar, punctuation, usage, etc
- Chapters contain medical examples
- Includes quizzes and detailed answer keys

Questions and Answers

Grammar, Punctuation, Usage, and More

Session 8 (3 July 2013)

Today

- Presentations by some class members
- Presentation/discussion: writing the introduction
- Presentation/discussion: preparing a curriculum vitae
- Workshop: revised drafts of results sections

Announcements etc

- Tomorrow—4th of July holiday—no class
  - Barbecue available at 5:00 p.m. at CVM
- Friday
  - Reading due: Chapter 37 (on grant proposals)
  - Browsing due: annotated grant proposal
  - Writing due: draft of discussion
- Looking ahead
  - Monday: draft of introduction due

Writing the Introduction

Purposes of the Introduction

- To provide background
  - In order to help readers understand the paper
  - In order to help readers appreciate the importance of the research
- To identify the question(s) the research addressed
  - Sometimes stated as a hypothesis or hypotheses

Length of Introduction

- Articles in biomedical journals: tend to have short introductions (a few paragraphs or less)
- Articles in some other journals: tend to have long introductions
- How about introductions to articles in your research area?

Gearing the Introduction to the Audience

- Papers in relatively general journals: Introduction must provide basic background information.
- Papers in specialized journals: Introduction can assume that readers have more knowledge about the research topic.

Structure of the Introduction

- Introduction typically should be funnel-shaped, moving from general to specific
- A common structure:
  - Information on importance of topic
  - Highlights of relevant previous research
  - Identification of unanswered question(s)
  - Approach you used to seek the answer(s)
  - (In some cases, the main findings)

Overall Structure of a Paper: Like an Hourglass

Mini-Workshop

- Look at the introduction to the model paper you brought.
- Notice items such as the following:
  - Length
  - Types of content
  - Organization
  - Citation of references
- What are some of your observations?

When to Write the Introduction

- Sometimes wise to write the introduction last
  - "Until you know what you're introducing, you can't introduce it."
- Sometimes useful to write it first, to help provide focus
- After writing all the sections of the paper, revise the paper as a whole (typically several times).

Preparing a Curriculum Vitae (CV)

The Curriculum Vitae: Some Basics

- Curriculum vitae: the academic equivalent of a resume
- Commonly called a CV
- Lists your education, experience, publications, honors, etc
- Often required in proposals to help show that you are qualified for what you are proposing
- Also used when applying for fellowships, jobs, promotions, honors, etc

A Resource

- From the Columbia University Center for Career Education
- Includes advice and a sample CV
- URL: http://www.careereducation.columbia.edu/resources/tipsheets/resumes-and-cvs-curriculum-vitae

Standardized CVs

- Required by some granting agencies
- Have specific instructions to follow—for example, regarding
  - Types of information to include
  - Organization of information
  - Length
- A brief look at an example

Something Related: A Biosketch

- A paragraph or few paragraphs about your professional history
- Typically less than a page
- Helpful to give people who will introduce you as a speaker
- Also useful in other contexts
- An example

Preparing a CV to Use in a Proposal

- Follow instructions carefully.
- In general, use reverse chronological order.
- Emphasize items that help show you're well qualified for what you're proposing.
  - What might be some examples?
  - Therefore you may have different versions of your CV for different proposals.

Preparing a CV: More Tips

- If an item may be unclear to readers, include a brief explanation.
- When listing papers you have written for publication:
  - If a paper has been accepted but not yet published, list it under Publications as "In press" or "Forthcoming".
  - If a paper has been submitted but not yet accepted, do not list it (or list it under Research rather than Publications).

Preparing a CV: More Tips

- Whatever opportunity is being sought, tailor the CV to the specific opportunity.
- Don't include items that aren't very relevant (examples: height, weight, marital status, high school attended, hobbies).

An Idea

- For appropriate examples, look on the Web for CVs of people in your field.

Workshop: Revised Drafts of Results Sections

July 4—University Closed for US Independence Day

Intensive Course:

- Independent study
- Barbecue and fireworks

Session 9 (5 July 2013)

Today

- Presentations by some class members
- Presentation/discussion: preparing grant proposals

  (Note: The first part of the material on this topic will be given today, and the rest will be given next week.)

Preparing Grant Proposals

Key Points

- Seek a funding source well matched with your goals.
- Start preparing your proposal early.
- Gather plenty of information.
- Follow the instructions carefully.
- Prepare a detailed, realistic budget.
- Write readably.
- Revise, revise, revise.

Identifying Potential Funding Sources

Potential Sites of Funding: Some Sources of Ideas

- Colleagues, mentors, and administrators
- Grant offices at some institutions
- Acknowledgments etc in journal articles
- Published or posted announcements (calls for proposals)
- E-mail lists in your field or at your institution
- Published or posted guides
- Internet searching

Seeking a Possible Match: Two Approaches

- Identifying something you wish to do and then seeking a suitable funding source
- Looking for a *request for proposals* in your field and then developing a proposal that meets the criteria
- (Note: Sometimes a request for proposals has another name, such as *call for proposals* or *program announcement.*)

Looking for a Good Match

Seek funding from entities

- With goals that are consistent with what you want to do
- That tend to give grants of the size you are seeking
- If possible, with programs that match your intended work

* * * Note * * *

Consulting a program officer at the potential funding source can be very helpful.

Preparing to Write a Proposal

Starting Early

- Even a short proposal can take a long time. Therefore start early.
- For large grant proposals, it can be advisable to begin at least 6 months before the deadline.

Analyzing Instructions, Examples, etc

- Carefully review materials from the funding source. Read instructions thoroughly.
- Consult the program officer, if appropriate.
- If possible, look at examples of successful proposals to the funding source.
  - From colleagues
  - From the program officer
  - Published or posted

Doing the Groundwork

- Review the literature on work related to yours. Be prepared to cite it.
- Start developing a persuasive explanation of why the proposed project is valuable.
- If your proposal will be for research, formulate one or more well-defined, potentially productive hypotheses or research questions. Beware of proposing a project that is unrealistically large.

Assembling Collaborators

- If you want others to join the project team, invite them. Ask them for needed items, such as information and CVs.
- If you want outside participants, such as consultants, invite them. If appropriate, obtain CVs and letters of support.
- Consider including a writer or editor on the grant-preparation team.

Establishing Timelines

- Especially if you're preparing a large proposal, draft a schedule for doing so. Include time for institutional approvals, if needed.
- Consider preparing a timeline (such as a Gantt chart) for the proposed project. Indicate dates on which you plan to start and finish each main part of the project.

Gathering Budgetary Information

- Start identifying items that you'll ask the funding source to pay for.
- Start determining the cost of each.
- If your institution will contribute resources, identify them, and determine how much they are worth.

Doing Other Items

- If advisable, do preliminary studies.
- If appropriate, consider sustainability.
- If required, submit a letter of intent or a letter of inquiry ("pre-proposal").
- Other?

(to be continued next week)

Homework for Monday

- Writing: draft of introduction
- Reading: chapters listed in syllabus
- Browsing: 3 review articles in your field

Workshop: Drafts of Discussions

(You know the procedure now.)

Weekend

Session 10 (8 July 2013)

Today

- Presentations by class members and a guest
- Presentation/discussion: preparing grant proposals and progress reports (continued)
- Presentation/discussion: writing a thesis or dissertation
- Workshop: drafts of introductions

Announcements etc

- Reading for tomorrow: two chapters
- Writing due this week
  - Tomorrow: revised draft of discussion
  - Wednesday: revised draft of introduction
  - Thursday: two items
    - Draft of "real" abstract of your paper
    - Draft of CV, article for the public, book review, mini-proposal, article commentary, or other brief piece
  - Friday: draft of entire paper

    Graduate students will have until July 26 to submit the version to be graded but must submit a version Friday.

Preparing Grant Proposals (continued)

Key Points (A Review)

- Seek a funding source well matched with your goals.
- Start preparing your proposal early.
- Gather plenty of information.
- Follow the instructions carefully.
- Prepare a detailed, realistic budget.
- Write readably.
- Revise, revise, revise.

Writing the Grant Proposal

Grant Proposals as Persuasive Writing

Proposals must persuade potential funders that

- the goal of the proposed work is worthwhile
- the goal is relevant to the funder's mission
- the proposed approach is sound
- the staff is capable of doing the work
- adequate facilities will be available
- the requested amount of funding is reasonable
- other?

Some Items That Help Make a Proposal Persuasive

- Inclusion of reasons for choices (for example, of techniques, sample sizes, durations, consultants, venues)
- Inclusion of supporting evidence (for example, published findings, preliminary data, calculations, CVs, letters of agreement)
- Competent writing (helps show capability)

Some Common Sections of Proposals

- Background information
- Statement of goals
- Research plan or program plan
- Budget
- Information on qualifications of staff (for example, resumes, CVs, or biosketches)

(Note: Depending on the requirements, proposals can range from one page to many pages. Some funding sources provide templates or forms.)

Some Other Items Sometimes Included

- Letter of transmittal (cover letter)
- Title page
- Abstract
- Table of contents
- Lists of tables and figures
- Description of predicted impact
- Evaluation plan
- Plan for disseminating results
- Information on facilities
- Reference list

Appendixes

- Optional to include
- Examples
  - Papers accepted but not yet published or posted
  - Letters of support from potential collaborators
  - Additional details about activities planned
- Remember: Reviewers typically are not obligated to look at appendixes.

Titles and Abstracts

- Short but important
- Provide the first impression
- Sometimes used in choosing peer reviewers
- Help administrators and reviewers grasp the essence and importance of the work
- Also remind reviewers about what they have read in the proposal
- Should be clear and concise
- Give them the time they deserve!

Writing the Proposal

- As noted, start early—sometimes at least 6 months in advance.
- **Follow the instructions exactly.**
- Match the technical level of the proposal to the background of the reviewers.
- Remember to include the 5 Ws and an H: who, what, where, when, why, and how. *(This advice also applies to other writing.)*

Writing the Proposal (cont)

- Include reasons for your choices.
- Write the proposal readably. For example
  - Organize the writing carefully.
  - Present overviews before details.
  - Use simple, common wording where possible.
  - Avoid wordy phrases.
  - Make effective (but not excessive) use of such devices as headings, boldface, and italics.

Writing the Proposal (cont)

- **Include a carefully prepared budget.**
- If relevant, include a timeline.
- If relevant, include tables and figures.
- If the proposal will include an abstract, devote special care to it.
- Also write a clear, concise title.
- If the potential funder has forms to use, complete them carefully.

Writing the Proposal (cont)

- If part or all of the proposal will consist of freestanding text, format it readably
  - Standard typeface
  - Large enough type and margins
  - Unjustified (ragged) right margin unless otherwise requested
- Have others review drafts of your proposal.
- Double-check that instructions were followed.
- Carefully follow instructions for submitting the proposal (usually done electronically).

Mini-Workshop: Examples

- Discuss the annotated proposal that you were to look at.
  - What are some strengths of this proposal?
  - What did you notice that you can apply to writing your own proposals?
- Discuss the sample abstract shown in class. What are some of its strengths?

Awaiting the Decision

- Typically, committees evaluate proposals.
- These committees generally contain experts in the field. Sometimes they include others.
- Often, these committees both
  - Determine which proposals are acceptable
  - Determine which proposals are best (because not enough money is available to fund all acceptable proposals)
- If you've written your proposal well, reviewers are likely to find it readable and convincing.

Following Up

- If your proposal is funded, do and report on the work.
- If you are invited to revise and resubmit the proposal, proceed accordingly.
- Otherwise, decide how to proceed.

  (Note: Even if your proposal is not funded, you may receive feedback that can help in preparing future proposals.)

Revising and Resubmitting a Proposal

- Note: For some funding sources, revising and resubmitting proposals is common.
- In revising the proposal, use the advice from the reviewers.
- Consider consulting the program officer.
- In general, accompany the revised proposal with a list showing, point by point, how the reviewers' advice was followed.
- If appropriate, indicate the revisions typographically (for example, using Track Changes).

Preparing Progress Reports

Progress Reports: Some Functions

- For the funding source or supervisor: help see how the work is progressing and thus whether the plans or funding level should be adjusted
- For those doing the work:
  - Provide incentive to keep up
  - Aid in assessing one's own progress and adjusting one's approach
  - Provide material to use in presentations and publications

Preparing to Write a Progress Report

- Obtain any instructions or forms.
- If feasible, obtain relevant examples to use as models.
- Review your proposal or project plan.

Progress Reports: A Common Structure

- Background information
  - Summary of project plan
- Description of present status
  - Achievements thus far
  - Comparison of progress with that expected
  - Significant problems encountered, if any
- Conclusions
  - Overall assessment
  - Proposed modifications, if any

Writing a Progress Report

- In general, structure the progress report like the project plan.
- Be specific. Include numbers, names, and dates.
- If appropriate, include tables and figures.
- Consider using headings etc to guide readers.

Writing a Progress Report (cont)

- Strive to sound positive, competent, and confident.
- Do not hide problems. Say how they are being addressed.
- If you write a series of progress reports on a project, put each in the same format.
- Edit the progress report carefully.

Some Resources

- Proposal Writing Short Course (from the Foundation Center; available in 6 languages): http://foundationcenter.org/getstarted/tutorials/shortcourse
- Writing Your [Grant] Application: http://grants.nih.gov/grants/writing_application.htm
- Grand Challenges Canada Proposal Development Resource (http://www.grandchallenges.ca/proposaldevelopment/)
- AuthorAID: http://www.authoraid.info

Doing a Thesis or Dissertation

Some Pointers to Use or Share

(with an emphasis on writing and publishing)

Pointers: Doing a Thesis or Dissertation

- Be alert for potential topics long before you need to choose one.
- Choose a topic you're very interested in.
- Choose a topic that's big enough to be meaningful but small enough to be doable. (Initial ideas tend to be too ambitious.)
- Pay careful attention to study design.
- Keep publication in mind from the beginning.

Pointers (cont)

- Try to include committee members who can guide you in various aspects of your thesis, including writing.
- Make sure all members of your committee agree up front about the scope of your thesis.
- Write a good proposal, and use it as a foundation for later writing.
- Set a timetable. Realize, however, that items are likely to take longer than expected.

Pointers (cont)

- Realize that you'll need to rewrite and rewrite.
- Be aware that you don't "publish a thesis." Rather, you prepare publications based on your thesis research.
  - A thesis tends to include lots of detail, in part to help you master your field and show your committee that you've done so.
  - The resulting publications should focus on what readers would find new, interesting, and useful.

Workshop: Drafts of Introductions

(You know the procedure now.)

Session 11 (9 July 2013)

Today

- Presentations by two class members
- Presentation/discussion: other writing for journals
- Presentations by two more class members
- Presentation/discussion: writing review articles
- Workshop: revised drafts of discussions

Two Presentations by Class Members

Announcements etc

- Reading for tomorrow
- Writing due the rest of this week
  - Wednesday: revised draft of introduction
  - Thursday: two items
    - Draft of "real" abstract of your paper
    - Draft of CV, article for the public, book review, mini-proposal, article commentary, or other brief piece
  - Friday: draft of entire paper

Some Other Types of Writing for Journals

"Opinion Pieces" for Journals

- Some types:
  - Letters to the editor
  - Editorials
  - Book reviews
  - Other
- Should present well-informed opinion

Letters to the Editor

- Used mainly to comment on recently published articles ("post-publication peer review")
- In some journals, used to report briefly on research
- Sometimes used for other purposes—for example, to make an announcement or share a humorous observation

Tips—Letters to the Editor

- If a letter is commenting on an article, submit it soon after the article appeared.
- Follow the journal's instructions about length, number of authors, number of references, allowance of a figure or table, etc.
- Be focused and concise.
- Maintain a polite, professional tone. Avoid sarcasm.

Editorials

- Generally written or invited by one or more of the editors at the journal
- "Perspective editorials"—provide context for an article in the same issue
- "Persuasive editorials"—argue for a specific point of view
- "Sounding boards"—similar to editorials but initiated by readers

Tips—Editorials

- Keep focused.
- Consider the audience, and organize the editorial to be persuasive.

Book Reviews

- Book review—an article describing and evaluating a book (or some books)
- Some functions of book reviews
  - Helping individuals and libraries to identify suitable books
  - Acquainting readers with highlights of books that they might not read
  - Providing feedback to authors and publishers

Tips—Preparing to Write a Book Review

- If you have a conflict of interest, do not review the book.
- In general, read the book thoroughly.
- If the book isn't suitable to read cover to cover (for example, if it's an encyclopedia), sample it in a thoughtful way.
- Take notes as you read.

Examples of Questions to Consider Addressing in a Book Review

- What is the goal of the book?
- Of what does the book consist?
- What is the background of the author(s)?
- What are the strengths of the book?
- What are the limitations?
- How does the book compare with related books?
- Who would find the book useful?

Some Additional Types of Articles for Some Journals

- Case reports or case studies
- Methods articles
- Essays
- What else?

Two More Presentations by Class Members

Writing Review Articles

Review Articles

- Review article—an article summarizing the literature on a topic
- Popularity of review articles with
  - Graduate students
  - Practitioners
  - People changing research areas
  - Others
- High citation rates of some review articles and review journals

Mini-Workshop

- Do the instructions for authors for your target journal say anything about writing review articles? If so, what do they say?
- Have you ever written a review article? If so, what was the experience like?
- What did you notice about some of the review articles you looked at?

Tips: Preparing to Write a Review Article

- Check beforehand whether an editor might be interested.
- Carefully define the scope of the article.
- Search the literature thoroughly and methodically. Keep a record of your search strategy.
- Perhaps obtain help from a librarian.
- Perhaps have criteria for including articles.
- Consider recording information on standardized forms or in a chart or spreadsheet.

Two Structures for Review Articles

- Subtopic-by-Subtopic (with a subheading for each)
- Modified IMRAD—for example, for a systematic review article
  - Introduction
  - Methods used to search and analyze the literature
  - Results (findings of the search)
  - Discussion

Browsing:
Examples of Review Articles with the Two Structures

Tips: Writing a Review Article

- Organize the article carefully.
- Stay focused.
- Integrate what you found; do not merely catalogue it.
- Because the audience may be broad, write especially clearly.
- Double-check the text and references for accuracy.

Discussion Questions

- If you were to write a review article now, what would the topic be?
- Where would you want to publish the article? Why?

Some Resources

- Tips for writing your first scientific literature review article, by Emily Crawford, *ASBMB Today,* December 2011
- I want to do a systematic review, *Liblog: Newsletter of the Mayo Clinic Libraries,*1 May 2013
- The PRISMA Statement, by David Moher et al, 2009 (PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses)

Workshop: Revised Drafts of Discussions

Session 12 (10 July 2013)

Today

- Presentations by class members
- Review/discussion: writing an abstract
- Presentation/discussion: communicating specialized information to the public
- First part of presentation/discussion: providing peer review
- Workshop: revised drafts of introductions

Announcements etc

- Follow-up: letters as origin of journals
- Reading for tomorrow
- Writing due the rest of this week
  - Tomorrow: two items
    - Draft of "real" abstract of your paper
    - Draft of CV, article for the public, book review, mini-proposal, article commentary, or other brief piece
  - Friday: draft of entire paper

Writing an Abstract

(and providing keywords)

The Abstract

First to Be Read
but Last to Be Revised

The Abstract

- As noted, briefly summarizes the paper
- Gives editors and peer reviewers their first impression of the paper
- Tends to be widely read
- Should be organized like the paper (for example, in sort of a mini-IMRAD format)
- Some journals have structured abstracts (with standardized headings)

The Abstract (cont)

- Depending on the kind of paper and the journal, can be informative (summarizing the content of the paper) or just indicative (stating the topics included)
- Should be carefully revised before the paper is submitted
- Be sure the content is consistent with that in the body of the paper.

A Resource:
"Writing the Scientific Abstract"

Presentation by Susan Aiello, DVM

Keywords

- Requested by some journals
- Indicate the main topics of the article
- Appear below the abstract
- Can aid in indexing and searching
- Generally should come from standardized vocabulary lists in your field
- Commonly shouldn't be terms in the title

Mini-Workshop on Keywords

- What, if anything, does your instructions to authors say about keywords?
- Does your model paper contain keywords? If so, what do you notice about them?

Communicating Specialized Information to the Public

Discussion Question

- Why communicate specialized information (for example, in your fields) to the public?

Some Reasons to Communicate Specialized Information to the Public

- Interest to public
- Usefulness to public
- Chance to foster support of your field
- Chance to attract people to your field
- Obligation if work is publicly funded
- Other

Discussion Question

- What advice do you have for presenting specialized information (for example, in your field) in a way that members of the public will find clear and interesting?

A Few Suggestions: Presenting Specialized Information to the Public

- Analyze the audience.
- Use mainly simple, familiar language.
- Define unfamiliar terms.
- Relate unfamiliar items to familiar ones.
- Include people.
- Include narrative. (Tell stories.)
- Consider the visual aspect.
- Check with the audience.

Working with the Popular Media

Discussion Questions

- Have you ever been interviewed by a reporter (for example, for a newspaper article)? If so, what was your experience?
- What suggestions do have for communicating effectively in such interviews?

A Few Suggestions: Working with the Media

- Find out the reporter's
  - Background
  - Task
  - Deadline
- If possible, provide some written information.
- Present information in a way directly understandable by the public.

Suggestions (cont)

- Consider the visual aspect.
- Perhaps check the reporter's understanding.
- If there's a main point you want to make, find a way to make it.
- Offer to review a draft for accuracy.
- Perhaps provide feedback after the item is published, posted, or broadcast.

Workshop: Explaining Your Research to a General Audience

- Prepare a brief statement (about 2 or 3 sentences) explaining to the public what your research is and why it is important.
- Present it to your fellow group members. Then, based on their feedback, refine it.
- Present it to the entire class.
- (If time is short, we might save this workshop for tomorrow.)

A Resource

- Presentation on Writing Accessibly about Science

Workshop: Some Specialized Writing for the Public

- In your group, read at least part of "The Secret in the Marrow" by Daniel C. Weaver.
- Identify aspects of the writing that make it clear and interesting to general readers.
- Be ready to discuss your observations.

Being an Effective Peer Reviewer

Overview

- Functions of peer review
- Deciding whether to review a submission
- Reviewing papers: general suggestions
- Reviewing papers: section-by-section advice
- Reviewing proposals
- Providing informal peer review

Functions of Peer Review

- To aid in deciding whether to accept an item
  - Scientific paper
  - Grant proposal
  - Book proposal or book manuscript
  - Other
- To help the author(s) improve the item

Discussion Question

- How can peer reviewing benefit the peer reviewer?

Some Benefits for the Peer Reviewer

- Staying current in the field
- Maintaining critical skills
- Enhancing one's curriculum vitae
- Potentially becoming an editorial board member or editor
- In some cases, receiving an honorarium or other compensation
- Having a sense of service

Deciding Whether to Review an Item

- Do you have time to complete the review adequately by the deadline?
- Do you have sufficient expertise in the subject matter?
- Are you free of conflicts of interest?

Typical Parts of a Peer Review of a Journal Submission

- Confidential comments for the editor(s)
- Comments to share with the author(s)

A Reminder

An item being peer reviewed is confidential. Do not discuss it with anyone. Do not show it to anyone without the editor's permission.

Reviewing Scientific Papers: General Advice

- Don't tell the authors whether you consider the paper publishable.
- Begin the comments for the authors by noting general strengths and limitations. Then provide section-by-section comments.
- Specify by page, paragraph, and line the items that you comment on.

Reviewing Scientific Papers: General Advice (cont)

- Don't bother correcting the writing in detail.
- Remember: The authors are human beings, and they probably have worked hard on the paper. Be tactful. Remember to note strengths.
- Use the review as a chance to educate the authors.

Some General Questions to Consider

- Is the research question important?
- Is the research original?
- Were appropriate methods used?
- Are the results credible?
- Are the conclusions consistent with the findings?
- Is the paper clearly written?
- Does all the content seem logical?

(to be continued tomorrow)

Workshop: Revised Drafts of Introductions

Session 13 (11 July 2013)

Today

- Presentations by two class members
- Presentation/discussion: providing peer review (continued)
- Presentations by two more class members
- Presentation/discussion: writing book chapters and books (to be continued tomorrow)
- If time permits: workshop

Presentations by Two Class Members

Being an Effective Peer Reviewer

(continued)

Some General Questions to Consider

- Is the research question important?
- Is the research original?
- Were appropriate methods used?
- Are the results credible?
- Are the conclusions consistent with the findings?
- Is the paper clearly written?
- Does all the content seem logical?

Reviewing a Scientific Paper: Some Section-by-Section Questions

The Title

- Does the title accurately reflect the content of the paper?
- Is the title clear and concise?

The Abstract

- Is the abstract informative enough?
- Is the content of the abstract consistent with that of the paper?

The Introduction

- Does the introduction provide sufficient background?
- Does the introduction clearly identify the research question or hypothesis?

The Methods

- Are the methods appropriate to the question?
- Are methods described in sufficient detail? If not, what is missing?

The Results

- Are the results described in appropriate detail?
- Do the results seem credible?
- Is the text consistent with any tables and figures?
- Are all tables and figures needed?
- Could the tables and figures be improved? If so, how?

The Discussion

- Is the discussion clear and focused?
- Are the conclusions consistent with the findings?
- Does the discussion adequately address items such as the following?
  - Limitations of the study
  - Anomalies in the findings
  - Relationships to previous research
  - Theoretical implications
  - Practical applications

The References

- Do all the references seem appropriate to include?
- Should any additional items be cited?
- Do the references appear to be accurate?

Discussion Question

- In reviewing a grant proposal, what are some items to consider?

Reviewing Grant Proposals: Some Items to Consider

- Importance of the proposed work
- Consistency of the proposed work with the granting agency's goals
- Suitability of the methods
- Qualifications of the staff
- Adequacy of the facilities
- Appropriateness of the budget

Reviewing Book Proposals: Some Items to Consider

- Importance or interest of the topic
- Adequacy of coverage of the topic
- Accuracy of content
- Organization
- Writing quality
- Qualifications of the author
- Competition from other books

Discussion Question

- What advice do you have for providing informal peer review (for example, as has been done in this course)?

Providing Informal Peer Review: A Recap

- Find out what level of review is being sought.
- Consider serving a "criticism sandwich": praise, then criticism, then praise.
- Express criticisms as perceptions, not facts.
- Criticize the work, not the person.
- Suggest improvements.

Presentations by Two More Class Members

Announcements etc

- Writing due tomorrow: draft of entire paper (will just be pass/fail, but must be submitted)
- Graded introductions and discussions will be returned next week (can be e-mailed)
- Individual conferences next week and week after (optional)
  - With Dr. Young: Please e-mail him to set up times.
  - With me: List(s) of potential meeting times will be provided in class or by e-mail.
  - With others: Please e-mail them.

Announcements (cont)

- Tomorrow class will formally end at 11:30 a.m.
- At that point you may do any of the following:
  - Just leave. (You've been working hard.)
  - Have a workshop. (Admire the completed drafts.)
  - Attend the July postdoctoral association meeting.
    - 11:45–1:00 in the Mark Francis Room
    - Lunch will be available.
    - I'll give a presentation/discussion titled "Writing in English as a Foreign Language: Tips for Non-Native Speakers and Those Working with Them." (You've heard me say these things before, but you're welcome to attend.)

Writing Book Chapters and Books

Writing Book Chapters

Discussion Questions

- Have you written (or helped to write) a book chapter?
- If so, what was your experience?

Note

- Writing a book chapter can be much like writing a review article.
- Thus, much of the same advice applies.

Tips on Writing a Book Chapter

- Obtain thorough instructions, and follow them carefully.
- Plan the chapter carefully. (Doing so can save time in writing.)
- If you will be delayed, tell the editor immediately.
- After submitting the chapter, be ready to respond to queries and review proofs.

Writing and Publishing a Book

Notes

- Largely a US perspective, but much of it probably is applicable elsewhere
- May interest not only prospective book authors but also book users
- Draws on my experience writing books and chapters, peer reviewing book proposals and book manuscripts, and serving on a university press advisory committee

Some Reasons to Publish Books

- Specialized monographs: aid fellow scholars
- Handbooks: assist specialists and those applying specialized knowledge
- Textbooks: help students
- Popular nonfiction: interest and enlighten general readers

Converting a Dissertation to a Book Manuscript

- A point to remember:
  - A dissertation is intended in part to prove that you have mastered knowledge in your field.
  - A book, however, is intended to serve your readers.
  - Therefore, converting a dissertation to a book is likely to include streamlining the content, gearing the content to the readers' knowledge and interests, and making the style more engaging.

Dissertation versus Book

(Source: *From Dissertation to Book,* by William Germano)

Dissertation	Book
Fulfills an academic requirement	Fulfills a desire to speak broadly
Audience: one's dissertation committee	Audience: thousands of people you don't know
Rehearses scholarship in the field	Has absorbed scholarship in the field, and builds on it
Length: unlimited	Length: strategically controlled for marketability
Dependent on quotations, often in blocks	Quotes others judiciously
Hides the authorial voice	Creates and sustains an authorial voice
Structure demonstrates analytic skills	Structure demonstrates the throughline

Dissertation versus Book (cont)

(Source: *From Dissertation to Book,* by William Germano)

Dissertation	Book
Examples are numerous, repetitive	Examples are well chosen and move story forward
Few, long chapters	Several chapters of readable length
Stops	Concludes

Discussion Question

- How might you identify potentially suitable publishers for your book?

Finding a Publisher

- Look for publishers with books on topics related to yours.
- In general, seek university presses or commercial scholarly publishers.
- Assess the quality of books from the publisher.
- If feasible, consult authors of books from the publisher.

Some Types of Book Editors

- Acquisitions editor
  - Seeks authors
  - Oversees evaluation of book proposals (both invited and unsolicited)
  - Oversees evaluation of manuscripts
- Production editor
- Manuscript editor (copyeditor)

(Analogous to types of editors at journals)

Workshop

(if time permits)

Session 14 (12 July 2013)

Today

- Presentation/discussion: writing books (cont)
- Presentation/discussion: resources for continuing to develop your skills
- Workshop: wrap-up exercise
- Course evaluation
- Open discussion
- Closing items

Writing and Publishing a Book (continued)

Book Proposal

- Common components:
  - Annotated table of contents
  - Description of market
  - Sample chapter
  - Resume or curriculum vitae
- The publisher may send the proposal for peer review.
- If a proposal seems promising, the publisher will do a financial analysis.

What are some advantages of submitting a proposal rather than an entire book manuscript?

Advance Contract— Some Items Often Specified

- Length of manuscript
- Maximum number of tables and figures
- Deadline
- Royalties paid to the author
- Electronic rights

Preparing a Book Manuscript

- Break the project into manageable chunks.
- Follow the author guidelines from the publisher. (Suggestion: Prepare a sheet listing the main points to remember.)
- Set aside times to write.
- Before resuming writing, reread or edit a section you've already written, to help maintain a consistent voice and style.

Obtaining Permissions

- If you'd like your book to include material for which you don't hold copyright, you'll need to obtain written permission.
- You may also need to pay fees.
- Start early. (Permissions sometimes take a long time to obtain.)

Revising Your Manuscript

- Once the manuscript is complete, review it for consistency and refine it.
- Obtain peer review—through the publisher, on your own, or both.
- Make required or advisable changes. Perhaps discuss alternatives with the editor.

Book Production

- Manuscript editing
  - Includes posing queries to author, for example about ambiguities or inconsistencies
- Page design
- Cover design
- Checking of proofs
- Indexing
- Releasing the book (in print, as e-book, or both)

Helping to Market the Book

- Completing an author questionnaire—for example, identifying
  - Relevant organizations through which to publicize the book
  - Conferences at which to publicize the book
  - Relevant journals publishing book reviews
- Giving presentations, being interviewed, producing podcasts, etc

And then . . .

- Maybe starting to think about the next edition
- Maybe starting to think about the next book

Some Resources

(Suggested by Texas A&M University Press)

- *From Dissertation to Book,* by William Germano (University of Chicago Press, 2005)
- *Getting It Published: A Guide for Scholars and Anyone Else Serious about Serious Books,* 2nd edition, by William Germano (University of Chicago Press, 2008)
- *Thinking Like Your Editor: How to Write Great Serious Nonfiction—and Get It Published,* by Susan Rabiner and Alfred Fortunato (W. W. Norton & Company, 2002)
- *Handbook for Academic Authors,* 5th edition, by Beth Luey (Cambridge University Press, 2009)

Reminders

- Graded introductions and discussions will be returned next week (can be e-mailed)
- Individual conferences next week and week after (optional)
  - With Dr. Young: Please e-mail him to set up times.
  - With me: List(s) of potential meeting times will be provided by e-mail.
  - With others: Please e-mail them to arrange.

Some Resources for Continuing to Develop Your Professional-Communication Skills

(in part a review)

What resources, if any, are you considering using to continue developing your research-communication skills?

Some Resources Mainly for Non-Native Users of English

- UsingEnglish.com (www.usingenglish.com)
- Academic Phrasebank (www.phrasebank.manchester.ac.uk)
- Scientific English (see link within www.authoraid.info/resource-library/china-medical-board-program-resources/cmb-lessons-in-scientific-writing/folder_contents)
- ESL presentations by guest speaker Susan Aiello, DVM

Some Other Useful Resources

- Getting the Most out of Words, from *Editing and Publication: A Training Manual* (available at www.authoraid.info/resource-library/Editing%20and%20Publication-Chapter%202.pdf/view)
- OneLook Dictionary Search (www.onelook.com)
- Grammar Girl (grammar.quickanddirtytips.com)
- *The Elements of Style* (www.bartleby.com/141/)

AuthorAID at INASP (www.authoraid.info)

- A project mainly to help researchers in developing countries to write about and publish their work
- Some potentially relevant components
  - Resource library
  - Blog
  - E-mail discussion list
  - Mentorships (can be a mentee, mentor, or both)

Non-Electronic Resources

- Your textbook
- Other books (for example, on writing in your fields)
- Presentations
- Writing centers
- Faculty members
- Editors
- Each other

Wrap-Up Exercise: Designing a Workshop on Research Writing

Workshop-Design Exercise

Imagine that your group is asked to give a half-day workshop on research writing. Prepare a plan for the workshop, and be ready to present the plan. In your plan, include the 5 Ws and an H: who, what, where, when, why, and how. If you wish, your workshop can be geared to people in your field (for example, social science, public health, or virology).

- Planning time: about 30 minutes
- Presentation time: 3 to 5 minutes per group

Course Evaluation

Open Discussion

And Now

- Today's class formally ends at 11:30 a.m.
- At this point you may do any of the following:
  - Just leave. (You've been working hard.)
  - Have a workshop. (Admire the completed drafts.)
  - Attend the July postdoctoral association meeting.
    - 11:45–1:00 in the Mark Francis Room
    - Lunch will be available.
    - I'll give a presentation/discussion titled "Writing in English as a Foreign Language: Tips for Non-Native Speakers and Those Working with Them." (You've heard me say these things before, but you're welcome to attend.)

Wishing you all the best!