



Draft, Submit, Revise: A Manuscript Writing Series



Schedule

TUES, 6 FEB 2024
12-1PM



Manuscript planning:

Overview of manuscripts, approaches for success, and writing techniques

TUES, 5 MARCH 2024
12-1PM



Tech in Writing:

Pros and cons of Generative AI and an overview of citation managers

TUES, 9 APRIL 2024
10-11AM*



Manuscript manufacturing:

Formatting, authorship, storytelling

THURS, 9 MAY 2024
8:30 - 10AM
OR



Edit like a reviewer

Gain hands on experience learning editing techniques from experts in-person.

WED, 22 MAY 2024
8:30 - 10AM

Locations:

9 MAY UW MADISON
SMPH 1220-1222

22 MAY MARSHFIELD CLINICAL RESEARCH INSTITUTE
LAWTON BUILDING, CONFERENCE ROOM A/B

WED, 5 JUNE 2024
12-1PM



Navigating submissions

Addressing reviewer feedback, SMPH's resources for dissemination.



in-person

In-person
space is limited!



Marshfield Clinic[®]
Research Institute

The **Office of Research and Sponsored Programs** (ORSP) is a shared, centralized resource in the Marshfield Clinic Research Institute. We provide essential resources to support research and community outreach within Marshfield Clinic.

Our mission is to enrich research and health outcomes by creating a dynamic administrative environment for those engaged in medical sciences and community outreach.

Areas of support:

- Sponsored Programs (internal, federal, state, private, industry funding)
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- *Scientific Writing, Publication, and Editorial Assistance*
- Administrative oversight for MCRI program initiatives
- Research Navigation
- Clinical Medicine & Research (peer-reviewed journal)

Email:

sponsored.programs@marshfieldresearch.org



Institute for Clinical and
Translational Research
UNIVERSITY OF WISCONSIN-MADISON

Scientific Editing Services

Write

Do you have manuscripts, grants, protocols, or other materials?



Edit

We help refine content customized for your audience and purpose.



Revise

We proofread to address punctuation, spelling, and other errors.



Submit

Increase your chances of a successful outcome.



Scan for more information.

protocoldevelopment@ictr.wisc.edu



Session will be recorded. Please keep yourself on mute and videos off. Please ask questions in the chat.





Draft, Submit, Revise: A Manuscript Writing Series

Welcome!

UW ICTR



Helps, trains, and provides guidance for biomedical and behavioral scientists across all levels.

Partners since 2007



Marshfield Clinic Research Institute

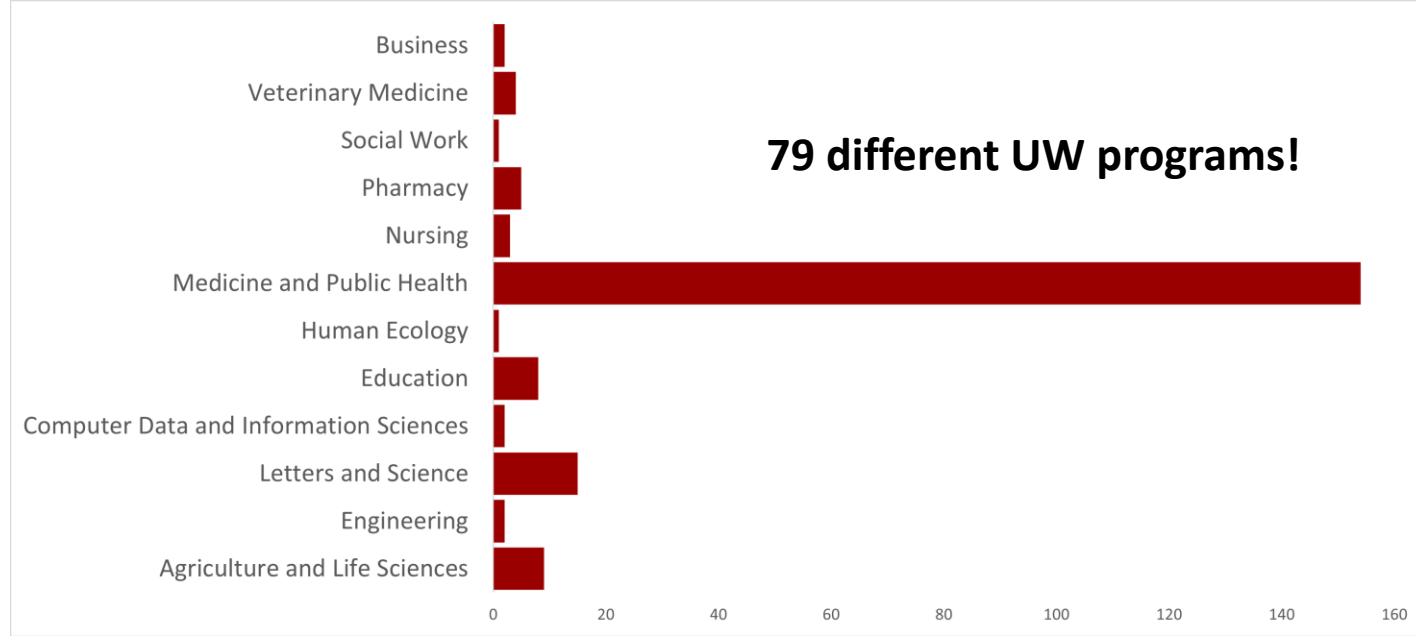
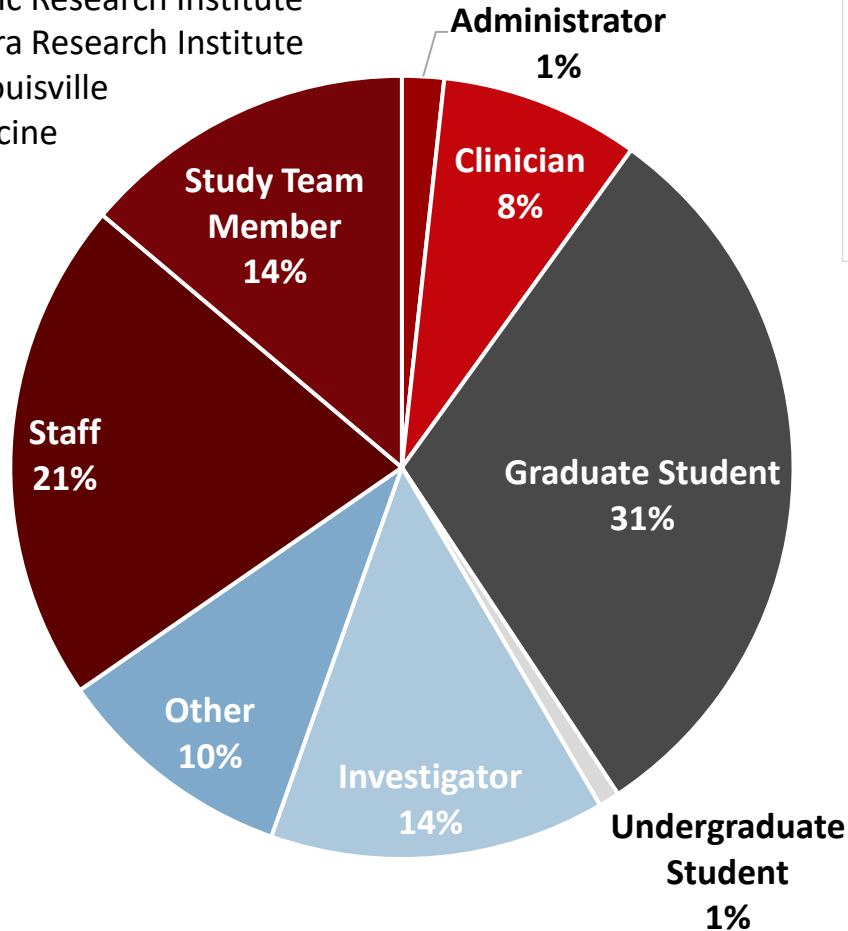


Uniquely positioned to conduct innovated, translational and applied research, serving a large underserved rural segment of Wisconsin.

Welcome!

Organizations Represented:

University of Wisconsin Madison
UWHealth
Marshfield Clinic Research Institute
Advocate Aurora Research Institute
University of Louisville
Michigan Medicine
Consultants



238 people!

Poll Questions

1. How many manuscripts have you written?
2. What activity are you most likely to do when you procrastinate your writing tasks.

Draft, Submit, Revise: A Manuscript Writing Series

Session 1: Manuscript Planning

February 6th, 2024

Speakers:

Jen Merems, PhD (she/her): Overview of writing genres

Bernadette Gillick, PhD: Manuscript planning

David Puthoff, PhD (they/he): Writing techniques

Please ask questions in the chat as you think of them.
Our team will compile questions to ask the speakers.



Session will be recorded. Please keep yourself on mute and videos off.



Jen Merems, Science Editor

PhD Wildlife Ecology
MS Wildlife Ecology
BS Natural Resources

Combined 9 years writing, editing, publish, and mentoring others.

Scientific writing: manuscripts, grants, protocols, posters and presentations

Science communication/Plain language: print and digital magazines, and newsletters

Other: book editor

Current Role: Science Editor for UW ICTR.

Help strengthen and clarify scientific documents by providing customized developmental and structural edits.



GIANT INVERTEBRATES: SCIENTISTS DEADLIEST ACCIDENTS OR COMPETITIVE SUPERIORITY THROUGH EVOLUTION?

Posted on October 21, 2022 | by Jennifer Merems | [Leave a comment](#)





The ugly truth

You can't learn to be a good science writer in a 1-hour webinar or in a semester long series.

"The beautiful part of writing is that you don't have to get it right the first time; unlike, say, a brain surgeon."

– Robert Cormier

"We are all apprentices in a craft where no one ever becomes a master."

– Ernest Hemingway

Becoming *any kind* of writer takes *time* and *experience*.





What is scientific writing?

Scientific writing is a technical form of writing that is designed to

- Communicate scientific information to other scientists
- Frames problems in the context of current research
- Is in a format that is easy to skim for major findings and conclusions

Key characteristics of scientific writing

1. It is concise and precise
2. Audience is other scientists or individuals within the field of research
3. Cites current literature

Depending on the genre, some aspects may change like

- Purpose, audience, or organization



Tip 4 - Methods: provide a cookbook with the study's ingredients!



Scientific writing genres

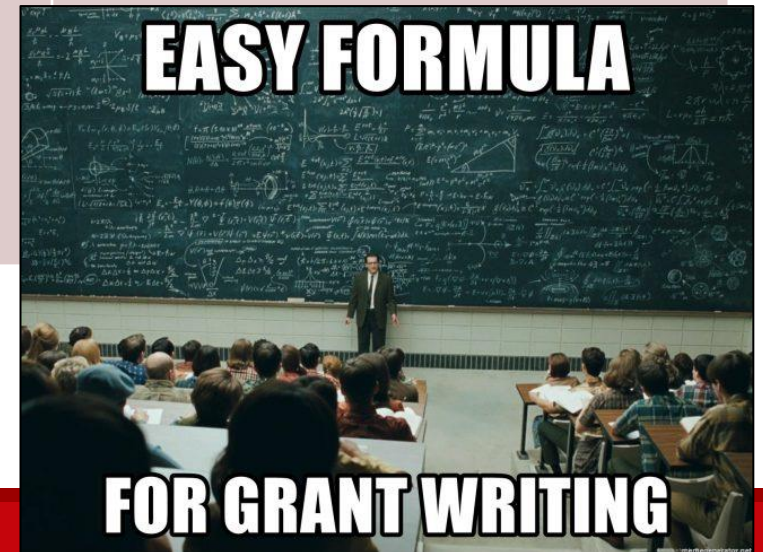
Genres	Description	Audience/Purpose	Style/Convention	Organization
Journal Article	Publications that explores and shares new research among scientists.	Share the <i>results</i> of a study with other <i>scientists</i> .	<ul style="list-style-type: none">• Be concise• Use visuals like graphs and illustrations• Cite relevant literature.	<ul style="list-style-type: none">• Abstract• Introduction• Methods• Results• Discussions
Literature Reviews	Summarizing and synthesizing research that has already been carried out.			
Etc.				





Scientific writing genres

Genres	Description	Audience/Purpose	Style/Convention	Organization
Research proposals	A set of documents submitted to an organization with the explicit intent to secure research funding.	<ul style="list-style-type: none"> • People who may be somewhat familiar with your line of research <i>decide</i> if you deserve funding. • Your purpose is to <i>persuade</i> them. 	<ul style="list-style-type: none"> • Readability is most important. • Maintain a clear hierarchical heading format • Goals and objectives written in present tense • Lists are efficient and effective tools 	<ul style="list-style-type: none"> • Formatting will be grant specific. • Common practices are: <ul style="list-style-type: none"> • Project summary • Project description • References.



Need help developing your IRB or grant proposals?

Contact ICTRs Protocol Development Program: protocoldevelopment@ictr.wisc.edu



Scientific writing genres

Genres	Description	Audience/Purpose	Style/Convention	Organization
Sci-Comm	Science communication is more complex than simply translating the jargon of science into language the public understands. - NIH	<ul style="list-style-type: none"> • People who most likely are <i>not</i> familiar with your line of research or science in general. • Your purpose is to <i>entertain</i> and <i>educate</i>. 	<ul style="list-style-type: none"> • Clear and accessible language. • No jargon, acronyms, math, etc. 	<ul style="list-style-type: none"> • Dependent on goals and audience.

This include plain language summaries!

Scientist: My discoveries are useless if taken out of context



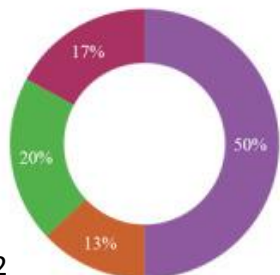
Media:
Scientist claim their discoveries are useless



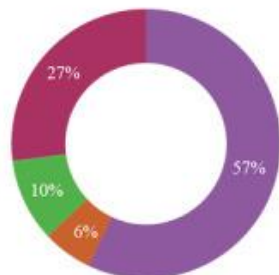
Plain Language Summaries



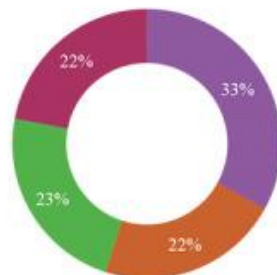
Psoriasis (n=32)



Multiple sclerosis (n=32)



Rheumatoid arthritis (n=103)



Preferred PLS (first-choice preference)

- Infographic
- Low-complexity text
- Medium-complexity text
- High-complexity text



Points to remember

- Writing a scientific article is a work of art that is honed with experience.





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- Success does not come from writing but writing effectively.





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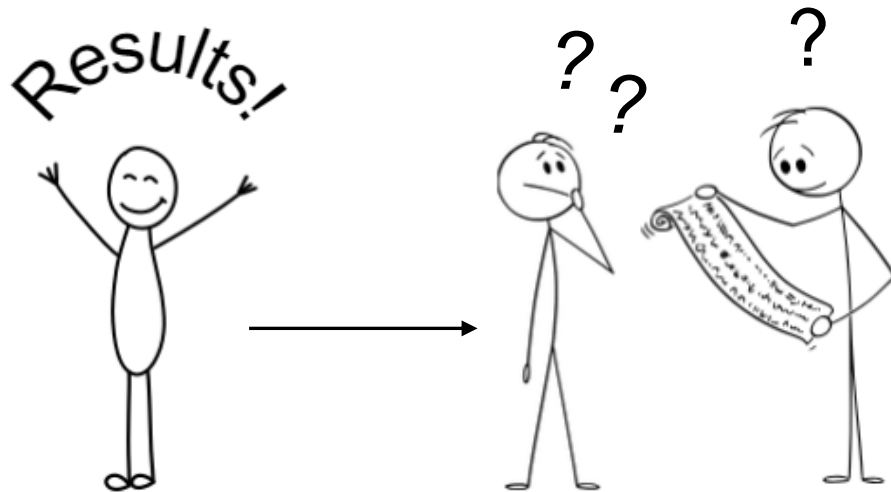
Points to remember

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So, how do we do this?

Start with a good plan!



How to Plan for Success: Approach to Writing Manuscripts

February 6, 2024

Presenter: Bernadette Gillick, PhD, MSPT, PT
ICTR Director of Research Design
Associate Professor, Pediatrics
Director, Waisman Pediatric Neuromodulation Laboratory

Speed Thought Exercise

- 1) Think of an article that really made an impression on you
 - Do you remember what the topic was about?
 - Do you remember the authors?
 - Do you remember the year it was published?
 - Do you remember in what Journal?

- 2) If we locked the doors, what would **you** want to write about?
 - Why is it important to you?
 - Why would you think it would add value to current literature?
 - What is holding you back from writing it?

Why publish?

What is a scientific manuscript?

Written document that presents findings of scientific research that is submitted to a scientific journal for publication

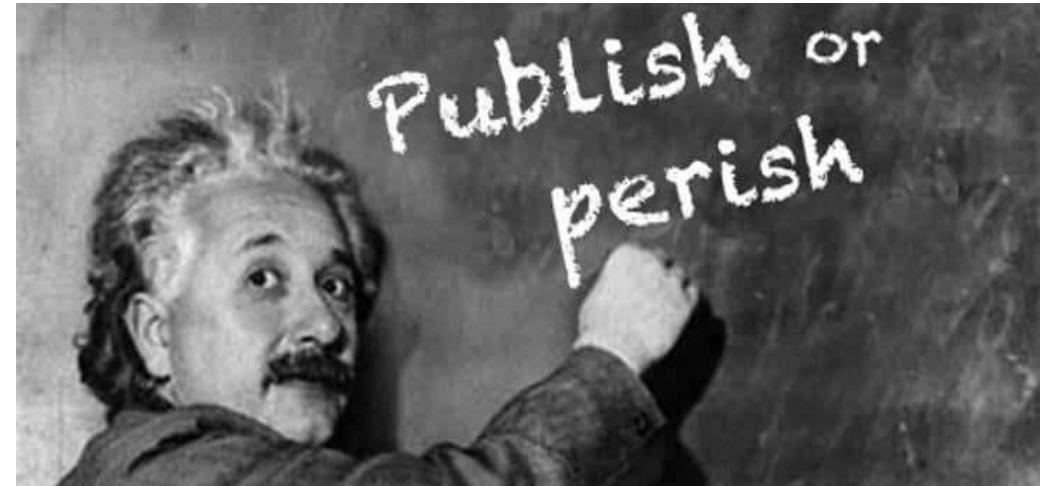
Why publish a manuscript?

This is how we build the body of knowledge that is science.

- Disseminate new information
- Allows feedback
- Establishes you as a member of the research community

Types of manuscripts

- Original Research
- Hypothesis – Intervention
- Descriptive, Surveillance
- Methods or Procedures
- Case Series/Meta-Analysis
- Case Reports
- Literature Reviews



<https://www.linkedin.com/pulse/publish-perish-launch-die-new-mantra-digital-age-chris-faraday>

When do I start?

When you have enough data for a manuscript?

- Are your sample sizes meaningful?
 - Size of CI, data reaches statistical significance, etc.
- Do your results tell a story (**learn how in Session 3 on April 9th**)
- Try writing an outline or a rough draft to expose any holes

When have you identified your ‘main point’ or ‘global message’?

- What is the one most important finding you want the reader to know?
- Distill complex findings into concise messages making it easier for readers to grasp the main conclusion and implications of the study.
 - *Adopting Healthy Lifestyle Practices Mitigates Risk of Condition Z*
 - *Drug X Demonstrates Superior Efficacy in Reducing Symptom Severity*

What goes where?

Component	Defining Aspect	Goal
Abstract	Summary	Engage Reader*
Introduction	Why?	Motivate reader
Materials and Methods	How?	Enable Replication
Results	What did you find?	Share data
Discussion	Significance?	Suggest Comparisons/Contrasts/ Interpretation
Conclusion	Summary of Results	Future Perspectives

Who 'contributes' as an author?

- What is your role?
- With whom have you worked on this study?
- Is there an order to authorship?
- When is the best time to discuss authorship?
 - The first author should be that person who contributed most to the work, including writing of the manuscript
 - The sequence of authors should be determined by the relative overall contributions to the manuscript.
 - It is common practice to have the senior author appear last, sometimes regardless of his or her contribution. The senior author, like all other authors, should meet all criteria for authorship

Authorship issue explained
PMID: [21217997](#)

Where should I publish?

Over 80,000 academic, peer-reviewed English journals in 2019; 30,000 are classified under Medicine and Health.

In 2016 the International Committee of Medical Journal Editors announced “A growing number of entities are advertising themselves as ‘medical journals’ yet do not function as such (**predatory journals**)”

<https://beallslist.net/>

NIH issued recommendation for authors to ensure the credibility of their research findings when publishing

- Adhere to the principles of research integrity and publication ethics;
- Identify journals that follow best practices promoted by professional scholarly publishing organizations;
- Avoid publishing in journals that do not have a clearly stated and rigorous peer review process

Where should I publish?

BEALL'S LIST OF POTENTIAL PREDATORY JOURNALS AND PUBLISHERS

PUBLISHERS

STANDALONE JOURNALS

VANITY PRESS

CONTACT

OTHER

Potential predatory scholarly open-access publishers

Instructions: first, find the journal's publisher – it is usually written at the bottom of the journal's webpage or in the “About” section. Then simply enter the publisher's name or its URL in the search box above. If the journal does not have a publisher use the [Standalone Journals](#) list.

All journals published by a predatory publisher are potentially predatory unless stated otherwise.

Useful pages

[List of journals falsely claiming to be indexed by DOAJ](#)

[DOAJ: Journals added and removed](#)

...

Criteria for evaluating a journal

Scientific Rigor

- Tables/figures should be clearly marked, legible and appropriate.
- References should be comprehensive and current
- A solid peer review process
- The journal requires use of recognized guidelines for reporting research
- Registration of clinical trials before the time of first patient enrollment to be considered for manuscript review
- Transparency of journal practices and policies for data sharing

Editorial Quality

- Quality of publications can provide clues into journal quality
 - A title should be descriptive
 - An abstract should not need to be read more than once to understand.

Peer Review Process

- The process should be transparent; criteria used, selection of reviewers, type of peer review, timeframes for review, etc.

Ethics

- Should include information on website, their author expectation, how they address issues, they will endorse guidelines and best practices for publishers such as the Internal Committee of Medical Journal Editors and Committee on Publication Ethics

Editorial Board Members

- Should reflect experts in the field related to the aim and scope of the journal, affiliated with known institutions and hold appropriate academic credentials.

Criteria for evaluating a journal

Journal Reputation & Business Model

- Aim and scope, mission statement and the societal organization that sponsors the journal should be clearly stated.
- Publication fees should be clearly stated (i.e., no surprise fees)

Author Rights and Copyright

- Authors are advised to anticipate any future re-uses of their publications before selecting a journal and signing a copyright agreement form. Some authors are required to comply with public access mandates from organizations such as the NIH or the NSF.
- If a journal does not allow for compliance with public access mandates, authors will need to consider another journal. Some journals allow oral rights to the work or reuse of a figure or table in a subsequent work or posting of the work on a repository; others do not.
- Journals may also stipulate various uses based on the version of the work (preprint, post-print, and final published version).

Impact Factor Scores

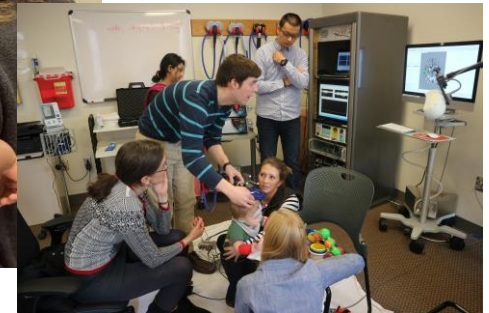
- Calculations are based on the number of citations within a specific timeframe garnered by publications from journals.
- Authors should be wary of vague scores touted from non-citation data sources.
- A more holistic approach in selecting a journal is recommended instead of relying on impact factor scores.

PubMed Impact Factor

How to Plan for Success: Approach to Writing Manuscripts

If we locked the doors, what would **you** want to write about?

What is holding you back from writing it?



Thank you!



What does contribution mean?

Guiding principles for contribution

- Transparency
 - all stages of the publication process are clearly documented and communicated
- Inclusion & fairness
 - promote innovation by bringing ideas and approaches together from diverse individuals or across disciplines, which can result in high-impact science and increased creativity
- Protection & promotion
 - Flat team structure (major decision-making occurs among a larger group of individuals across career levels) can reduce power differences among members and the likelihood that power will be abused.
- Accountability
 - Strategies to facilitate accountability and integrity among team members include drafting author contribution statements, transparency at all stages of manuscript development, and discussions of contributorship vs. accountability
 - Learn more about **Authorship in Session 3 on April 9th**
- Efficiency & productivity
 - critical to foster and develop in every collaborative manuscript to ensure that research products are created and disseminated in a timely fashion, and to ensure that scientists who participate in team science are incentivized to do so.
- Creativity
 - foster both individual and group creativity to maximize novel and innovative science using strategies that include time for both individual reflection and team brainstorming on research topics throughout the manuscript development process

How to delegate tasks?

What does it mean to delegate?

It does NOT mean to offload work to other people or micromanage or abdicate responsibility.

It means “the act of empowering to act for another” (Merriam-Webster) or “delegation is amplification” (Happy Scientist)

Delegation empowers yourself and others

- Accomplish more together and maximize efficiency
- Provide others with opportunities to learn, grow, and demonstrate proficiency

Overcome delegation difficulties

- Call it out as ‘a favor’
- Be flexible
- Have clear expectations
- Check in regularly
- Give credit where credit is due
(authorship/acknowledgements)

Example tasks to delegate in a manuscript

- Conception and design
- Acquisition of data
- Analysis and interpretation





Writing Techniques

Pointers & Best Practices

David Puthoff, PhD.

Marshfield Clinic Research Institute

02/06/2024

About your presenter

David Puthoff

(they/them, preferred, *or* he/him)

- PhD English (American Literature)
- MA English (English Studies)
- BA English (Poetry)
- Combined 10 years teaching/working in Technical Writing
-



0.1 research appointment for advising on projects

Current role:
Scientific Writer and Researcher,
MCRI

Intellectual Contributions:
theory, design, analysis, interpretation, manuscript preparation

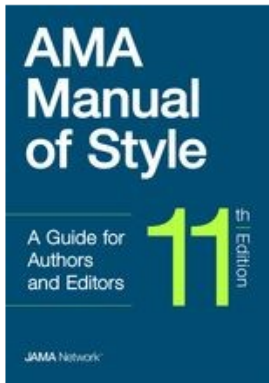
Advises all writing steps from drafting through revision



ToC

1. What is good writing?
2. Methods, Results, and literature review
3. Journal identification
4. Writing and clarity
5. End at the beginning
6. Revise for style

1. What is good writing?



AMA Manual of Style: A Guide for Authors and Editors (11th ed.)

AMA Manual of Style Committee

Search in this book

Contents

▶ Front Matter

CHAPTER

1.0 Types of Articles

Phil B. Fontanarosa

<https://doi.org/10.1093/jama/9780190246556.003.0001> Pages 1–12

Published: February 2020

 Split View  Cite  Permissions  Share ▼

Abstract

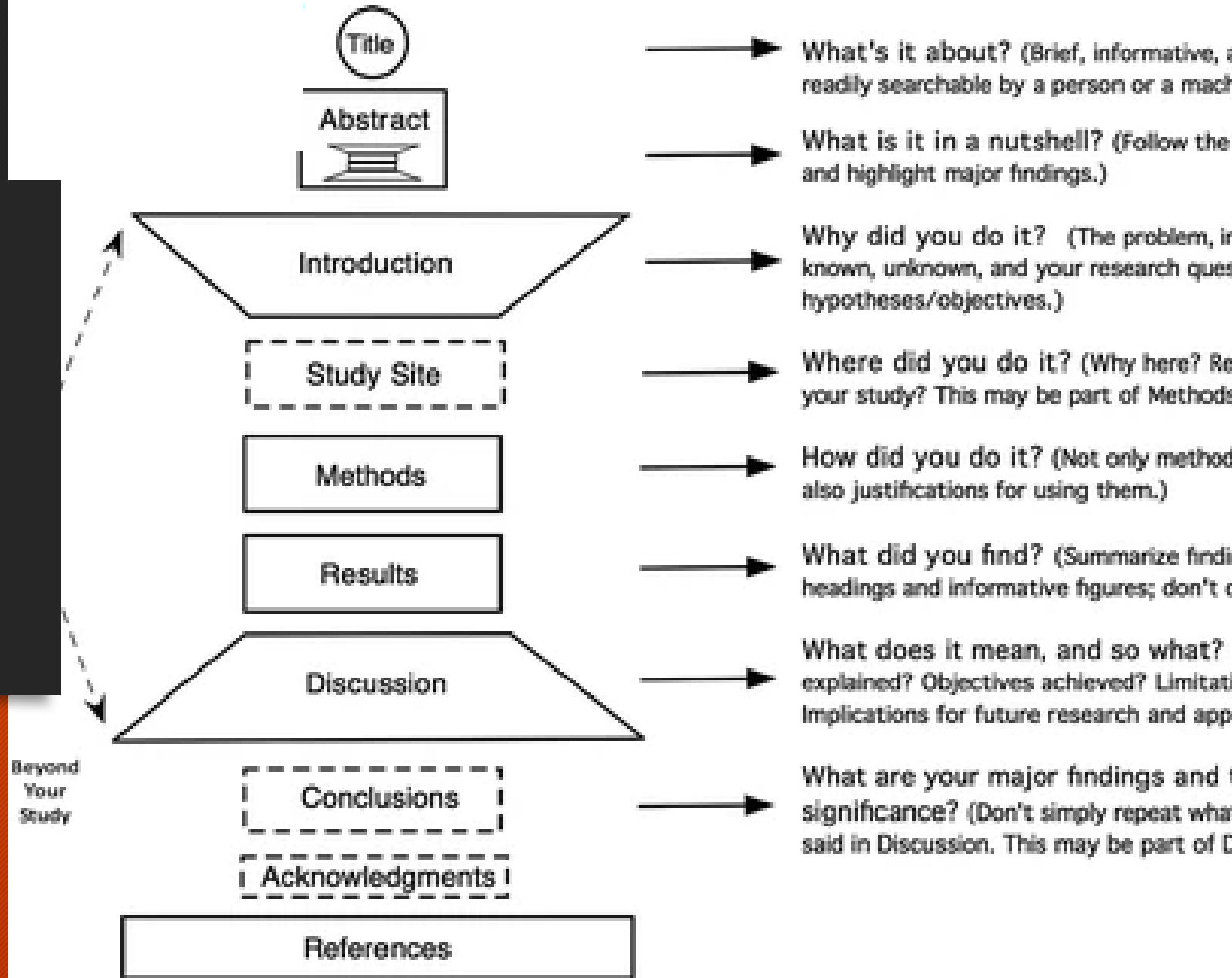
The Types of Articles chapter of the 11th edition of the *AMA Manual of Style* considers the different types and formats of articles that scientific journals may use to present their content: research reports, reviews (systematic and narrative), other substantive articles (nonresearch, nonreview), opinion (viewpoints or commentaries, editorials, personal vignettes and reflections), and correspondence (including research letters). Guidance is directed to authors for use in preparation of articles, as well as to journal editors in providing clear instruction to the journal's authors.

There are dozens of specific genres in scientific publications.

Good writing will be contextual—dependant on your audience, purpose, medium.

From: Improving the writing of research
IMRAD and beyond, Wu 2011.

1.A Refresher: IMRAD



Nota Bene: This is useful
but *not universal*.

3. Methods, Results, and literature review

David's Handy Starting Steps

1. Write Methods first
2. Reach out for lit review help
3. Design a graphic
4. Find a journal!
5. Write Results

4. Writing and clarity



Rough drafts: think about how you'd say it to a friend.



Talking to an academic audience: “The third gap is the lack of research that either addresses the issue at its broadest trends or extrapolates from particular fields to draw out the fact that these trends may generally be true of fields outside the industry.”



Talking to your friend: “And then they left out the big picture or just didn't address how those findings are useful outside their own field!”

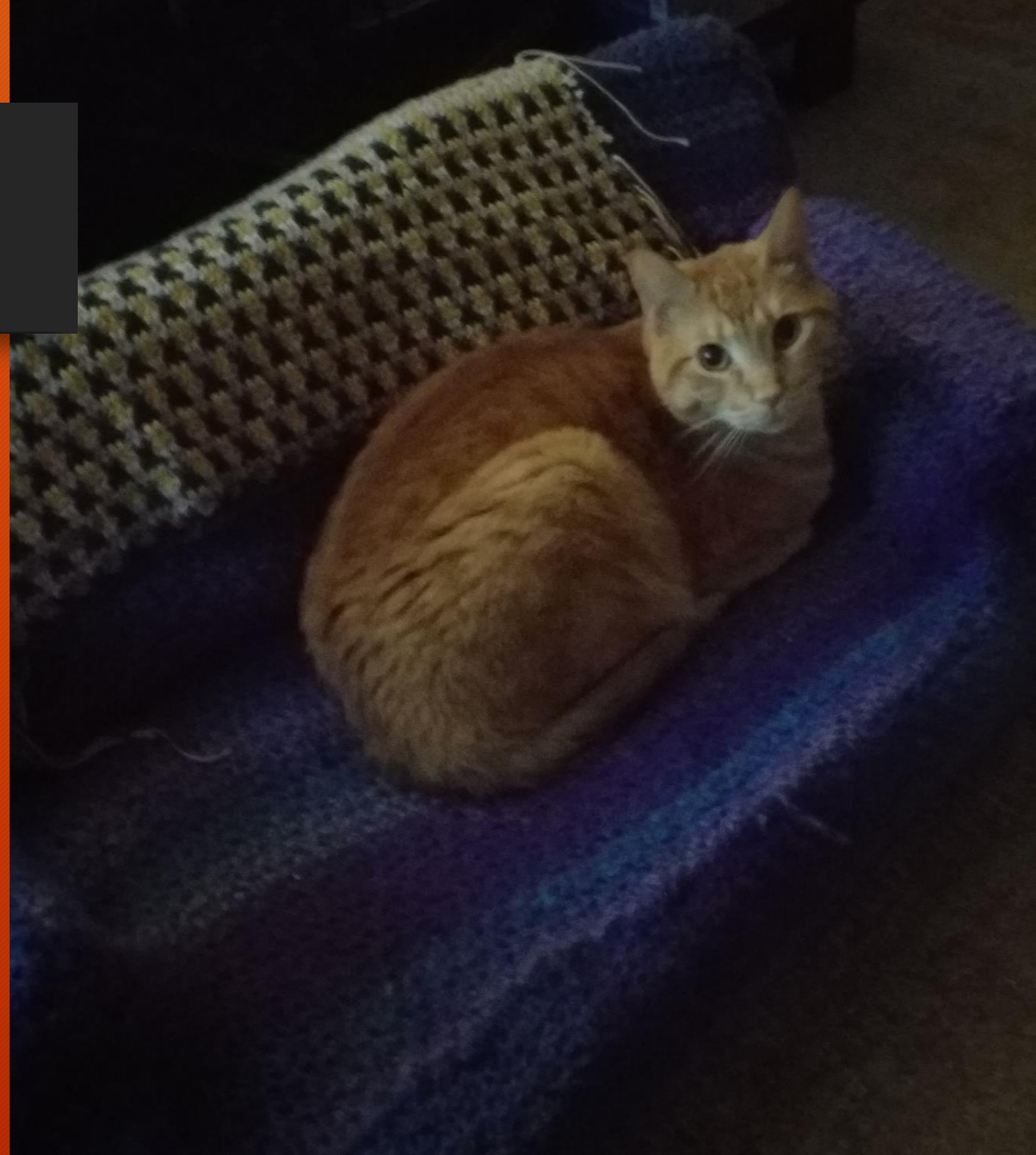


Takeaway: Write to your friends *first*. This will start with clarity. Edit *in* the advanced style.

4. Writing and clarity, cont.

Get to the editing as
quickly as possible!

You can't edit a
blank page!



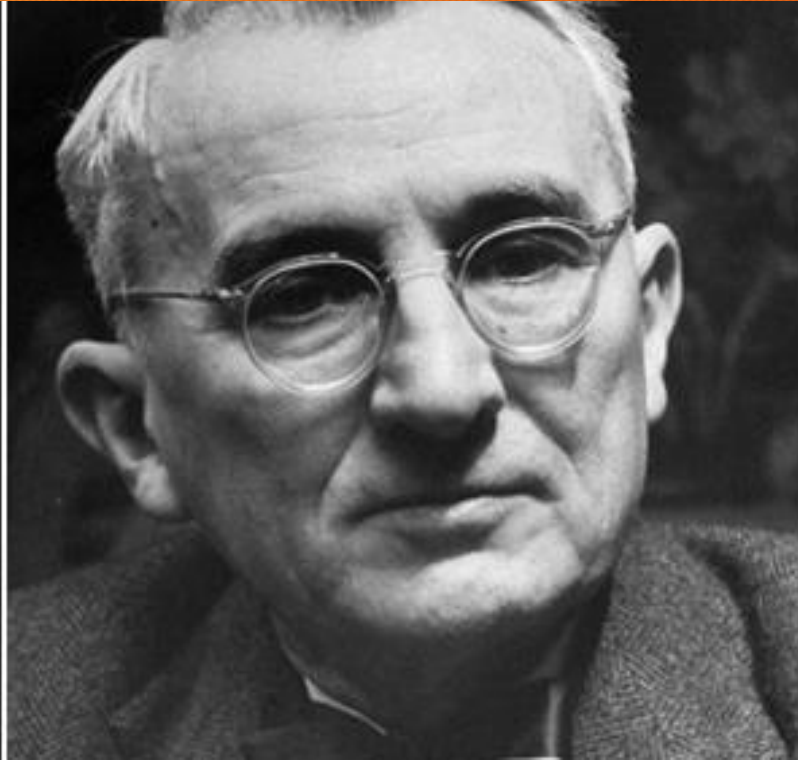
4. Writing and clarity, cont.

Be bolder; cut this out:

“Seem to”

“Here we suggest”

“This study implies”



Tell the audience what you're going to say, say it; then tell them what you've said.

— Dale Carnegie —

5. End at the beginning

But YOU have to know what you're saying first!

6. Revise for style

1. You speak for science; science does not “speak for itself.”
2. If the writing is enjoyable, readers will be more inclined to read and share
3. Short sentences
4. Strong verbs
5. Punctuation—yes, it helps!
6. Active voice does the work, the passive voice was poorly done
7. Every sentence needs a subject and a verb.

Good verbs make good writing:

“The second of these themes are....”

Becomes:

“The second theme regards”

“They provide an example of....”

Becomes:

“They exemplify”

Help! I can't stop writing long sentences:

Look at the verbs and the nouns.

Are you using “to be” (is/are, were/was) when your *boring* nouns should be *exciting verbs*?

“This method's *adoption* by oncology programs *is reflective* of problems in the field.” (13 words)

Becomes:

“Problems *arise* when oncology programs *adopt* this method.” (8 words)

6. Revise for style, cont.

Go get em,
tiger!





Draft, Submit, Revise: A Manuscript Writing Series

Thank you!

Don't forget to join our 2nd session: Tech in Writing - March 5th 12-1pm



Abdul Shour, PhD;
MCRI Cancer Care and Research
Project Scientist 1



Heather Johnston, MS;
UW IT Policy
Writer and Analyst



Paije Wilson, MLIS;
UW Health Science
Librarian