ON LIBRARY TOPICS

PhD Course in Clinical and experimental Oncology and Immunology

2020/2021

DIGITAL LIBRARY & V. PINALI MEDICAL LIBRARY

ON LIBRARY TOPICS

7. SCHOLARLY PUBLISHING TIPS

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A good biomedical article is a result of good research, that is…

I. scientifically relevant i.e. *increase in weeks of survival*

II. approved by the ethics committee (if necessary)

III. well planned i.e. *fair and sufficient in number of samples*

IV. planned with an appropriate study design i.e. *the choice of endpoints*

V. well managed and with a good analysis

VI. open or well-documented or reproducible

Use persistent identifier in your papers :

- ✓ ORCID IDs *to identify author(s)*
- ✓ DOI / HANDLE *to identify references*
- ✓ CLIN. TRIAL ID *to identify Clinical Trial(s)*
- ✓ RRID – *Cell lines? Antibodies? Plasmids?*

https://scicrunch.org/resources

Some ways to engage readers with your research...

Write short sentences and paragraphs.

One surefire way to lose readers is to write in long, complicated sentences. Academic subjects tend to bring with them a technical language with long words. Using technical terms already increases the difficulty of reading a piece of writing. If you want to keep hold of your readers and make sure they really understand your message, keep it short and sweet.

From: Lucy Goodchild van Hilten , It's time for academic writing to evolve, posted 22.05.2015 URL: https://www.elsevier.com/connect/its-time-for-academic-writing-to-evolve-professor-says

Some ways to engage readers with your research...

Don’t use unnecessary jargon.

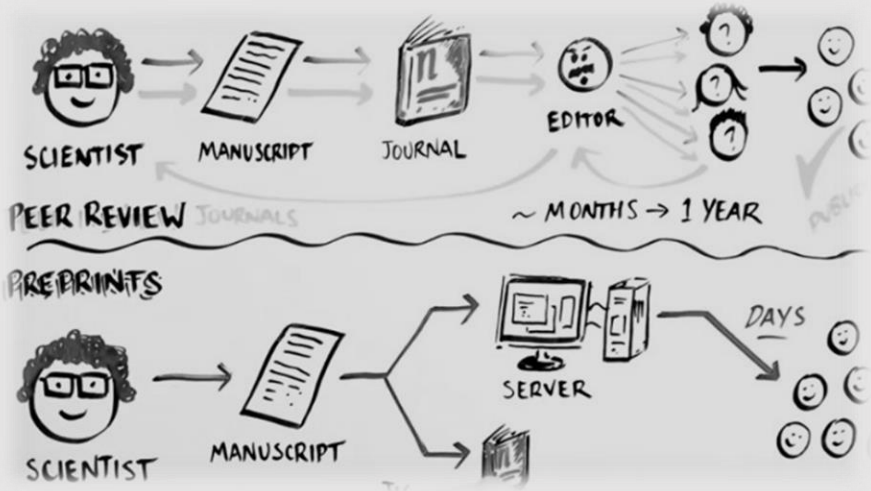
Sure, you’ll need to use some technical terms, but if you can make your writing more interesting with alternatives, give it a try. If you have a choice of words to use, and one is more recognizable than another, go with the familiar one. You could also introduce a technical term, then continue with the more familiar term, for example: “We tracked several colonies of *Apis mellifera* (honeybees) to see how far they travel to food. The honeybees flew up to …”

From: Lucy Goodchild van Hilten , It’s time for academic writing to evolve, posted 22.05.2015 URL: https://www.elsevier.com/connect/its-time-for-academic-writing-to-evolve-professor-says

Some ways to engage readers with your paper...

Publish a post/share links in Academic or Professional Social Networks, Groups or Newsletters

Researchgate, Twitter, LinkedIn and other Professional Social Media are great ways to share links to your Research Work (preprint, just published or …)



The scientific article format

Scientific research articles provide a **method** for scientists to **communicate** with other scientists about the results of their research.

A standard format is used for these articles, in which the author **presents the research in an orderly, logical flow**.

The scientific article format

TITLE

Make your title **specific enough** to describe the contents of the paper, but not so technical that only specialists will understand. The title should be appropriate for the intended audience.

The title usually describes the **subject matter** of the article: *Effect of Smoking on Academic Performance*

Sometimes a title that summarizes the results is more **effective**: *Students Who Smoke Get Lower Grades*

The scientific article format: title

A good title should contain the fewest possible words that adequately describe the contents of a paper. Keep your title short!

Effective titles:

- Identify the main issue of the paper
- Begin with the subject of the paper
- Are accurate, unambiguous, specific, and complete
- Do not contain infrequently-used abbreviations
- Attract readers

The scientific article format: title

Give your article an interesting title.

Make it clear to readers what your work is about, but keep the title short and snappy.

The title is a great place to filter out unnecessary jargon. For example, the title “Analysis of the process of altering the flavor of the liquid beverage derived from plants of the family *Rubiaceae* using crystallized short-chain carbohydrates” might instead be “Analyzing the taste of coffee sweetened with sugar.”

From: Lucy Goodchild van Hilten , It’s time for academic writing to evolve, posted 22.05.2015 URL: https://www.elsevier.com/connect/its-time-for-academic-writing-to-evolve-professor-says

The scientific article format: title

Long title…

"On the discovery of a useful new laboratory research method for isolating and purifying the lactose-degrading enzyme β-galactosidase from the economically important, yogurt-producing bacterial species Lactobacillus bulgaricus"

Short title…

"Recombinant Human Antithrombin III"

The scientific article format:

AUTHORSHIP

The person who did the work and wrote the paper is generally listed as the **first author** of a research paper.

In a scholarly article, other people who made substantial contributions to the work are also listed as authors. Ask your co-author's permission before including his/her name as co-author.

The scientific article format: authorship

Authorship credit should be based on:

1. substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
2. drafting the article or revising it critically for important intellectual content;
3. final approval of the version to be published.

Authors should meet conditions 1, 2, and 3. Those who have participated in certain substantive aspects of the research project should be acknowledged or listed as contributors.

See: http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html

The scientific article format: authorship

Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship..

Each author should have sufficiently participated in the work to take public responsibilities for appropriate portions of the content.

The corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included on the paper. If there is plagiarism or other ethical problems, the corresponding author cannot hide behind or remain innocent..

From: Tarkang EE, Kweku M, Zotor FB. Publication Practices and Responsible Authorship: A Review Article. *J Public Health Afr*. 2017;8(1):723. Published 2017 Jun 27. doi:10.4081/jphia.2017.723

The hidden research paper
Horton R. JAMA. 2002;287(21):2775-2778.

- **METHODS:** Purposive sampling of 10 research articles published in The Lancet; qualitative analysis of answers to 6 questions about the meaning of the study put to contributors who were listed on the byline of these articles. Fifty-four contributors listed on the bylines of the 10 articles were evaluated, and answers to questions were compared between contributors within research groups and against the published research report.
- **RESULTS:** A total of 36 (67%) of 54 contributors replied to this survey. Important weaknesses were often admitted on direct questioning but were not included in the published article. Contributors frequently disagreed about the importance of their findings, implications, and directions for future research. I could find no effort to study systematically past evidence relating to the investigators' own findings in either survey responses or the published article. Overall, the diversity of contributor opinion was commonly excluded from the published report. I found that discussion sections were haphazardly organized and did not deal systematically with important questions about the study.

The scientific article format:

ABSTRACT

1. An abstract, or summary, is published together with a research article, giving the reader a "preview" of what's to come. Such abstracts may also be published separately in bibliographical sources, such as Biological Abstracts. They allow other scientists to quickly scan the large scientific literature, and decide which articles they want to read in depth. The abstract should be a little less technical than the article itself; you don't want to dissuade your potential audience from reading your paper.

2. Your abstract should be one paragraph, of 100-250 words, which summarizes the purpose, methods, results and conclusions of the paper.

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format: abstract

3. It is not easy to include all this information in just a few words. Start by writing a summary that includes whatever you think is important, and then gradually prune it down to size by removing unnecessary words, while still retaining the necessary concepts.

4. Don't use abbreviations (alone) or citations in the abstract. It should be able to stand alone without any footnotes!

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format: abstract

But, in an abstract…“more is more,” despite clear and abundant advice to the contrary…. This is an interesting and surprising result!

An intriguing hypothesis is that scientists have different preferences for what they would like to read versus what they are going to cite (…)”.[a]

From: Weinberger CJ, Evans JA, Allesina S (2015) Ten Simple (Empirical) Rules for Writing Science. PLoS Comput Biol 11(4): e1004205. doi:10.1371/journal.pcbi.1004205

The scientific article format: abstract

Why?

Despite the fact that anybody in their right mind would prefer to read short, simple, and well-written prose with few abstruse terms, when building an argument and writing a paper, **the limiting step is the ability to find the right article.**

For this, scientists rely heavily on search techniques, especially search engines, **where longer and more specific abstracts are favored**.

Longer, more detailed, prolix prose is simply more available for search.

From: Weinberger CJ, Evans JA, Allesina S (2015) Ten Simple (Empirical) Rules for Writing Science. PLoS Comput Biol 11(4): e1004205. doi:10.1371/journal.pcbi.1004205

The scientific article format:

INTRODUCTION

What question did you ask in your experiment? Why is it interesting? The introduction summarizes the relevant literature so that the reader will understand why you were interested in the question you asked.

One to four paragraphs should be enough. End with a sentence explaining the specific question you asked in this experiment.

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format:

MATERIALS AND METHODS

1. How did you answer this question? There should be enough information here to allow another scientist to repeat your experiment. Look at other papers that have been published in your field to get some idea of what is included in this section.

2. If you had a complicated protocol, it might be helpful to include a diagram, table or flowchart to explain the methods you used.

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format: materials & methods

3. Do not put results in this section. You may, however, include preliminary results that were used to design the main experiment that you are reporting on. ("In a preliminary study, I observed the owls for one week, and found that 73 % of their locomotor activity occurred during the night, and so I conducted all subsequent experiments between 11 pm and 6 am.")

4. Mention relevant ethical considerations. If you used human subjects, did they consent to participate. If you used animals, what measures did you take to minimize pain?

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format:

RESULTS

1. This is where you present the results you've gotten. Use graphs and tables if appropriate, but also summarize your main findings in the text. Do NOT discuss the results or speculate as to why something happened; that goes in the Discussion.

2. You don't necessarily have to include all the data you've gotten during the semester. This isn't a diary.

3. Use appropriate methods of showing data. Don't try to manipulate the data to make it look like you did more than you actually did.
"The drug cured 1/3 of the infected mice, another 1/3 were not affected, and the third mouse got away.“

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format:

TABLES AND GRAPHS

1. If you present your data in a table or graph, **include a title** describing what's in the table ("Enzyme activity at various temperatures“ NOT "My results") For graphs, you should also label the x and y axes.

2. **Don't use a table or graph just to be "fancy".** If you can summarize the information in one sentence, then a table or graph is not necessary.

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

The scientific article format:

DISCUSSION

1. Highlight the most significant results, but don't just repeat what you've written in the Results section. **How do these results relate to the original question? Do the data support your hypothesis**? Are your results consistent with what other investigators have reported? If your results were unexpected, try to explain why. Is there another way to interpret your results? What further research would be necessary to answer the questions raised by your results? How do your results fit into the big picture?

2. **End with a one-sentence summary of your conclusion**, emphasizing why it is relevant.

From: http://www.columbia.edu/cu/biology/ug/research/paper.html

References: relevant biomedical literature search & evaluation

a. Do not waste your time on something already done

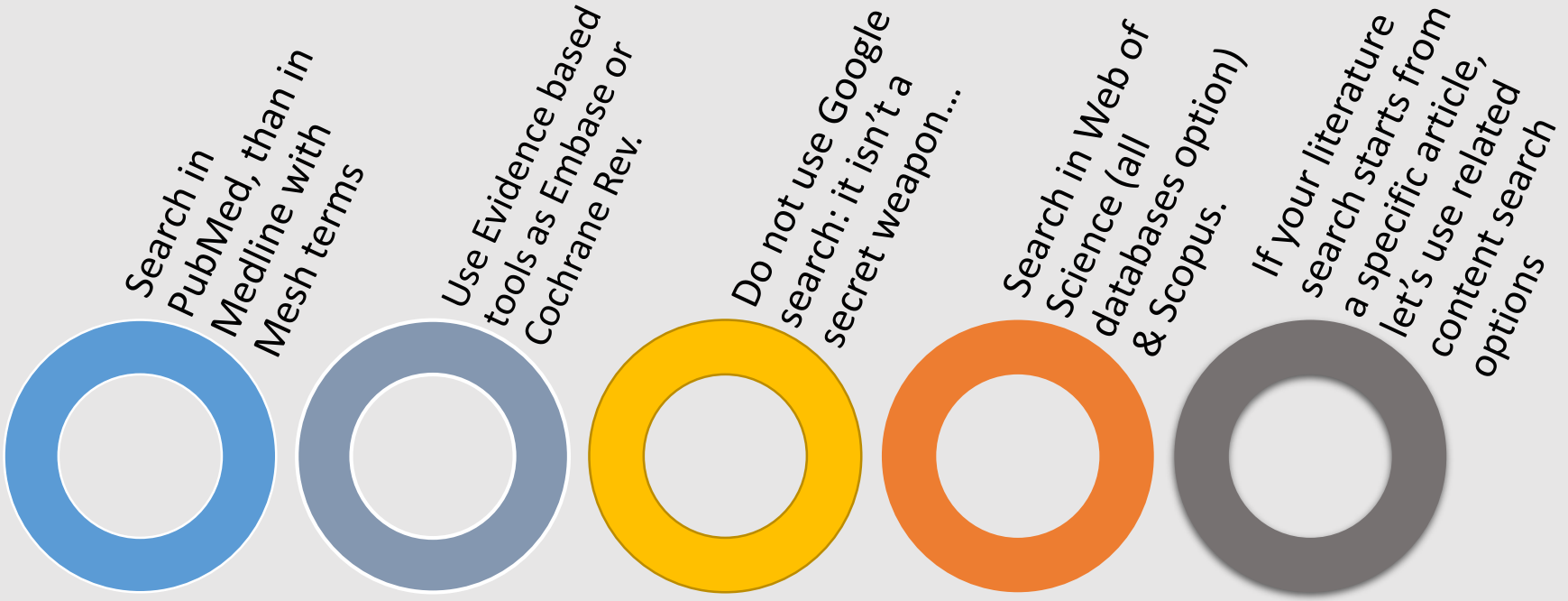
b. Read the articles, not just collect them

c. Choose good keywords and bibliographic search strategies

d. Find most cited works: Web of Science or Scopus calculate articles citation frequency. Altmetrics are also useful to retrieve information about impact of a Work

e. First of all, check papers cited in most relevant journals of the disciplinary field

References: where to find Relevant biomedical literature



Bibliography Tips:

1. Use a citation manager (Zotero, EndNote, Mendeley…)

2. Collect only useful citations and insert them in a brand new folder

3. Reference style: use it properly

4. Do not overdo the bibliographical references and accurately contextualize citations

5. Cite the works probably already known to the referees or which are scientifically consolidated

6. It is possible to cite "little-known" articles only if these are extremely relevant to your work

A reasonable approach to writing a scientific manuscript:

1. First write the Methods section, largely derived from your initial research protocol, and perhaps during the experimental phase of the work itself so that all details are included.
2. Construct all of the figures and tables that contain the data included in the work, and then write the Results section.
3. Depending upon the type of study, there may be some iteration in the presentation of the data and writing of the text. Reconsider the scientific questions the manuscript will address, again referring to your research protocol, and then write the Introduction.
4. Next, use the Introduction and Results to guide the writing of the Discussion.
5. Summarize everything in an Abstract, and then condense and refocus the Abstract into a Conclusions section.

See also: Azevedo LF, Canário-Almeida F, Almeida Fonseca J, Costa-Pereira A, Winck JC, Hespanhol V. How to write a scientific paper--writing the methods section. *Rev Port Pneumol*. 2011;17(5):232-238. doi:10.1016/j.rppneu.2011.06.014

Where to submit? *You should weigh the **pros and cons** before submitting your biomedical article in a journal..*

1. NOT indexed in PUBMED
2. NOT indexed in Journal of Citation Reports (no impact factor) *Pay attention to bibliometrics!*
3. NOT indexed in Scopus/Scimago *Pay also attention to bibliometrics!*
4. NOT indexed in Web of Science or Embase
5. Reliable OA Journals are indexed in DOAJ (directory of open access journals)
6. With a fast (or without a “real”) PEER REVIEW (less than 4 weeks)
7. With a low cost of OA publication, with a single author discounted APC offer or similar “ad hoc” promotional issues
8. VANITY PRESS
9. SPAM Publishers
10. Only “indexed” in Google Scholar
11. Journals without ISSN or DOI IDs…

Where to submit? *You should check:*

a. relevance of the topic with the category or "mission" of the selected journal

b. presence \ absence, in a academic journal, of a review or scientific debate on the research that you want to publish

First submission

1. Choose the Journal before you start writing the Article ...

2. Make the Manuscript as good as possible before Submission
   - It’s time saved
   - to be accurate is crucial
3. Max Accuracy on:
   - references (are only those mentioned in the text!)
   - numbering of tables and graphs
   - tables and charts
   - pictures (following the instructions for authors)
   - reference style

Peer Review

a. Try to do more refereeing as possible: catching errors of others helps to correct your own

b. Use Peer Review to Improve your skills

c. Ask your colleagues and supervisor to review your manuscript first. Ask them to be highly critical, and be open to their suggestions

d. Cherish the chance of discussing your work directly with other scientists in your community. Please prepare a detailed letter of response.

From: How to Write a Good Paper for a Top International Journal in Elsevier Author Workshop Hohai University, October 22, 2008
https://www.elsevier.com/__data/promis_misc/international_publishing_china.pdf

Keep in mind while responding to the reviewers:

a. Answer to each comment point by point. Write your answer to each comment below the corresponding comment, responding specifically and clearly to the reviewer's question.

b. If you added changes in the manuscript, mark them in yellow so that the reviewer can easily find the changes reading the paper. If necessary, send back two copies of the article to the editor, one clear version and one version with changes marked.

c. When you respond to a comment, mention if you modified the manuscript and if so, explain on which page, line and section.

From: How to Write a Good Paper for a Top International Journal in Elsevier Author Workshop Hohai University, October 22, 2008 https://www.elsevier.com/__data/promis_misc/international_publishing_china.pdf

Keep in mind while responding to the reviewers:

d. Remember that if the editor offers you to modify the manuscript, it means that both the editor and the reviewers actually want to publish the article. So don't take the reviews as critiques, but as an opportunity to improve your paper and to publish it.

e. Do everything you can to answer to all requests from the reviewers, even if you do not fully agree with the reviewer, for example if you think that they are not necessary or that they are extravagant.

See also: Noble WS. Ten simple rules for writing a response to reviewers. PLoS Comput Biol. 2017;13(10):e1005730. Published 2017 Oct 12. doi:10.1371/journal.pcbi.1005730

Keep in mind while responding to the reviewers:

f. If you decide for any reason to not address one of the comments, for example, because the reviewers ask you to perform an experiment that is not realistic, you should at least explain why and try to be convincing in your argumentation.

g. Finally, keep in mind the integrity of you work. If you strongly disagree with a reviewer, then don't apply his comments to your manuscript, because in the end, the paper will be published under your name only. The identity of the reviewers and the comments will not be revealed. The final version of the article is what your fellow scientists will read

See also: https://authorservices.taylorandfrancis.com/publishing-your-research/peer-review

Everyone has papers rejected:

How to respond to difficult or negative peer-reviewer feedback

A systematic approach to critiques and queries can help keep emotions at bay.

18 May 2021

Natalie Parletta

1. do not take it personally.
2. try to understand why the paper was rejected.
3. re-evaluate your work and decide whether it is appropriate to submit the paper elsewhere

https://www.natureindex.com/news-blog/how-to-respond-difficult-negative-peer-reviewer-feedback?utm_source=NI-newsletter&utm_medium=email&utm_campaign=18-May-2021

Resubmission:

a. Don’t resubmit a rejected manuscript to another journal without significant revision!

b. The original reviewers (even editors) often find out, leading to animosity towards the author.

c. You might explain why you are resubmitting the paper to this journal, e.g., this journal is a more appropriate journal; the manuscript has been improved as a result of its previous review; etc

See also: https://www.aje.com/arc/your-paper-was-rejected-what-next

Before Peer Review - Preprint Publishing

Preprints Involving Medical Research—Do the Benefits Outweigh the Challenges?

Annette Flanagin, RN, MA[1]; Phil B. Fontanarosa, MD, MBA[1]; Howard Bauchner, MD[1]

» Author Affiliations | Article Information

JAMA. 2020;324(18):1840-1843. doi:10.1001/jama.2020.20674

Preprint Servers' Policies, Submission Requirements, and Transparency in Reporting and Research Integrity Recommendations

Mario Malički, MD, MA, PhD[1]; Ana Jerončić, MSc, PhD[2]; Gerben ter Riet, MD, PhD[3]; et al

» Author Affiliations | Article Information

JAMA. 2020;324(18):1901-1903. doi:10.1001/jama.2020.17195

See also:

https://asapbio.org/preprint-products

After peer review:

PUBPEER

https://pubpeer.com

PUBPEER
The online Journal club

PEERIODICALS

https://peeriodicals.com

PEERIODICALS
Select the best science beta

Retraction Watch https://retractionwatch.com

Retraction Watch

Tracking retractions as a window into the scientific process

PAGES

- How you can support Retraction Watch
- Meet the Retraction Watch staff
  - About Adam Marcus
  - About Ivan Oransky
- Papers that cite Retraction Watch

Researcher loses medical degree for using paper mill to write his dissertation

How to get published in an academic journal*:

Get published by writing a review or a response

Writing reviews is a good way to get published - especially for people who are in the early stages of their career. It's a chance to practice at writing a piece for publication, and get a free copy of a book that you want. We publish more reviews than papers so we're constantly looking for reviewers.
Some journals, including ours, publish replies to papers that have been published in the same journal. Editors quite like to publish replies to previous papers because it stimulates discussion.

How to get published in an academic journal*:

Don’t try to cram your PhD into a 6,000 word paper

Sometimes people want to throw everything in at once and hit too many objectives. We get people who try to tell us their whole PhD in 6,000 words and it just doesn’t work. More experienced writers will write two or three papers from one project, using a specific aspect of their research as a hook.

From: https://www.theguardian.com/education/2015/jan/03/how-to-get-published-in-an-academic-journal-top-tips-from-editors

How to get published in an academic journal*:

Always follow the correct submissions procedures

Often authors don’t spend the 10 minutes it takes to read the instructions to authors which wastes enormous quantities of time for both the author and the editor and stretches the process when it does not need to

How to get published in an academic journal*:

A common reason for rejections is lack of context

Make sure that it is clear where your research sits within the wider scholarly landscape, and which gaps in knowledge it's addressing. A common reason for articles being rejected after peer review is this lack of context or lack of clarity about why the research is important.

See also: https://www.wiley.com/network/researchers/submission-and-navigating-peer-review/9-common-reasons-for-rejection

How to get published in an academic journal*:

Think about how quickly you want to see your paper published

Some journals rank more highly than others and so your risk of rejection is going to be greater. People need to think about whether or not they need to see their work published quickly - because certain journals will take longer. Some journals, like ours, also do advance access so once the article is accepted it appears on the journal website. This is important if you're preparing for a job interview and need to show that you are publishable.

How to get published in an academic journal*:

Remember: when you read published papers you only see the finished article

Publishing in top journals is a challenge for everyone, but it may seem easier for other people. When you read published papers you see the finished article, not the first draft, nor the first revise and resubmit, nor any of the intermediate versions – and you never see the failures.

*from: How to get published in an academic journal: top tips from editors, *The Guardian*, Higher education network 2015 https://www.theguardian.com/education/2015/jan/03/how-to-get-published-in-an-academic-journal-top-tips-from-editors

Thank you!

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Support:

https://bibliotecadigitale.cab.unipd.it/en/helpline