An Introduction to Scholarly Publishing

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The role of scholarly publications

- **Registration**: Timestamp to officially note who submitted scientific results first
- **Certification**: Perform peer review to ensure validity and integrity of submissions
- **Dissemination**: Provide a medium for discoveries and findings to be shared
- **Preservation**: Preserving the minutes and record of science for posterity
- **Use**: Promoting and facilitating the use of scholarly information
How to get published
Preparing and developing your manuscript
Decide the most appropriate type of manuscript

- Original Research Articles
- Letters or short communications
- Review papers
The process of writing – building the article

Title and abstract

Conclusion

Introduction

Methods

Results

Discussion

Figures/Tables (your data)
What makes up a strong manuscript?

- Has a **clear**, **useful**, and **exciting** message
- Presented and constructed in a **logical** manner
- Reviewers and editors can **easily** grasp the **significance**

Make it easy on the editor and reviewers to understand your story
Effective manuscript titles

A good title should contain the **fewest** possible words that **adequately** describe the content of a paper.

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 rarely-used abbreviations
- **Attract readers** - short, catchy titles are often better cited
  - Remember: Readers are the potential authors who will cite your article
Abstract

- This is the advertisement of your article and is freely available in abstracting & indexing services such as PubMed, Medline, Embase, Scopus, etc.

- Make it interesting and understandable - will be read by the most people

- Make it accurate and specific

- A clear abstract will strongly influence whether or not your work is considered - Include important data (sample size, statistics), results and a figure or video

- Keep it as brief as possible
Keywords

Keywords are used by indexing and abstracting services and serve as the labels for your manuscript.

Avoid making them
- too general (e.g. “nanomaterials” = 33K results)
- too narrow (e.g. “nanosimulation” = 5 results)
- duplicates of words already in the title

Effective approach
- Search the author keywords of articles relevant to your manuscript and see how many results are returned
Introduction

Introduction is especially important! A high proportion of “lack of novelty” rejections are made after reading abstract, introduction and conclusions.

- Provide a brief context to the readers
- Address the problem
- Identify the solutions and limitations
- Indicate novelty of approach
- Offer clear hypothesis and proposed solution

You are telling a story.
Introduction sets the scenario.

Do not attempt to summarize the whole field (it is not possible!)

What is your motivation?
What are the gaps in knowledge?

Why is your approach different or better?
How do you plan to fill the gaps?

At the end of the introduction, the reader should know the problem and the solution you propose.
Conclusion

- Not the same as a summary!
- Give conclusions that are supported by your results
- Do not overreach. Statements such as “this method can potentially be used…” do not belong to the conclusions
- Provide justification for how your work advances the field
- Suggest future experiments
References

Cite the main scientific publications on which your work is based

Do not use too many references

Always ensure you have fully absorbed material you are referencing

Avoid excessive self-citations

Avoid excessive citations of publications from the same region

Conform strictly to the style given in the guide for authors
Cover Letter

Very important:
Your chance to speak directly to the editor

- Often overlooked by authors
- You have spent months working on your paper. Do not hurry up now!
- Explain the main findings and motivation
- Highlight the novelty and significance of results
- State final approval of all co-authors
- State prior reviews, revisions, etc.
- Note special requirements
- Referees names

State any conflicts of interest
Read the instructions for authors

- Find them on the journal homepage
- Follow the Instructions for Authors in your manuscript
- Editors or reviewers may be negatively influenced by poorly prepared manuscripts
Why should you publish

Publishing is essential to the scientific research process and to the advancement of knowledge. It is also necessary for career advancement.

What to Publish:
• New and original research results
• Reviews of the literature
• Editorials, commentaries, and letters to the editor
• Conference papers that advance current knowledge
• Case Reports with novel insights to patient care
• Videos of new or novel techniques and results

You need a complete story told and a strong manuscript to present to the scientific community.
Multitask

• As you are doing your research be thinking ahead about the manuscript outline or meeting presentation

• Record your methods, animals, and reagents, vendors, etc. as you run experiments

• As results are generated, begin to design figures and think about the best and clearest way to present your data

• Use lab meetings or other conferences to float “trial balloons” by your colleagues

• Once your “story” is complete, you can think about telling it to the world
Outline your manuscript

1. What is the question or purpose of your work? (Introduction)
2. What did you do? (Methods)
3. What did you find? (Results)
4. What does it mean? (Discussion)

Refer to the Journal’s Guide for Authors.

Follow the instructions!
Authors may be asked to confirm…

- Originality of submitted work
- Data is real and not fabricated
- Obtaining of necessary permissions
- Obtaining of any necessary privacy waivers (subjects)
- Compliance with research standards
- Compliance with publisher and journal ethics and conflicts of interest policies
- Manuscript has been submitted to only one journal at a time
- Agreement of all co-authors
A researcher completes her paper. Along the way she consulted her advisor for guidance on the experiment, the data analysis and writing and revising the final article.

A professor in India assisted her in analyzing the data only. A lab assistant helped her in preparing the experimental design and maintaining and operating the equipment. Two fellow grad students read her paper and edited it, though they had no hand in the experiment.

Who is listed as an Author?

Who is listed first?
For example, the International Committee of Medical Journal Editors recommends that an author must meet the following 4 criteria:

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Authorship (Answer)

The correct answer depends on journal policy. Authorship policies vary across disciplines, cultures and journals.
Increased fasting serum glucose concentration is associated with adverse knee structural changes in adults with no knee symptoms and diabetes.


- Drs. Cicuttini, Wluka, Giles and English were involved in study design and inception.
- Dr. Davies-Tuck, Dr. Wang, Dr. Wluka, Dr. Berry, and Dr. Cicuttini were involved in subject recruitment, data collection, statistical analyses and interpretations.
- All authors were involved in manuscript preparation and revision.
General principles

- Order of authors varies by discipline and culture, but a common rule is that the **first author** is the person who conducts or supervises the data collection, analysis, presentation and interpretation of the results, and also puts together the paper for submission.

- The **corresponding author** can be the first author, or sometimes is a senior author from the institution.

- **Avoid ghost authorship**: excluding authors who participated in the work.

- **Avoid gift authorship**: including authors who did not contribute to the work.

- **All authors** should be aware that they are being included.
## Conflicts of interest (Question)

Indicate if any of the following are examples of conflicts of interest:

1. A University Researcher, who owns stock in a large oil company, conducts an experiment on the environmental effects of oil drilling.

2. A University Researcher, who is developing and testing a new technology, is also a consultant for a financial services firm that weighs investments in new technologies.

3. A Researcher submits an article to a journal for which the Editor-in-Chief is a Professor in the Researcher’s department.

4. A Doctor who abides by traditional healing procedures writes a paper on emerging current medical technologies.
Conflicts of interest can take many forms:

- **Direct Financial** - employment, stock ownership, grants, patents
- **Indirect Financial** - honoraria, consultancies, mutual fund ownership, expert testimony
- **Career & Intellectual** - promotion, direct rival
- **Institutional**
- **Personal Belief**

The proper way to handle potential conflicts of interest is through transparency and disclosure. At the journal level, this means disclosure of the potential conflict in your cover letter to the Journal Editor.
Plagiarism – what is it and what is susceptible?

The list includes what can be plagiarized…

- Words (language)
- Ideas
- Findings
- Graphic representations
- Computer programs
- Diagrams

- Graphs
- Illustrations
- Information
- Lectures
- Printed material
- Electronic material
- Any other original work

Source: Higher Education Academy, UK
Plagiarism detection

- CrossCheck is a huge database of 30+ million articles, from 50,000+ journals, from 400+ publishers
- Software alerts Editors to any similarities between the article and this database of published articles
- Manual review and intervention is still recommended
- Many journals now check every submitted article using CrossCheck
Correct citation is key

Crediting the work of others (including your advisor’s or your own previous work) by citation is important for at least three reasons:

- To place your own work in context
- To acknowledge the findings of others on which you have built your research upon
- To maintain the credibility and accuracy of the scientific literature
Can you plagiarize your own work?  
Text re-cycling/Self-plagiarism

A grey area, but best to err on the side of caution: always cite/quote even your own previous work.

If you publish a paper and in a later follow up paper, copy your Introduction word-for word and a figure or two without citing the first paper, Editors may conclude that you intentionally exaggerated your output.
Consequences (Question)

A researcher has plagiarized another author’s article

What are the potential consequences and what actions be taken?
Consequences (Answer)

Potential consequences can vary according to the severity of the misconduct and the standards set by the journal editors, institutions and funding bodies.

Possible actions include:
- Written letters of concern and reprimand
- Article retractions
- Some form of disciplinary action on the part of the researcher’s institute or funding body

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Getting Your Paper Noticed
Preparing your article

Writing and publishing your article

- Spend time on abstract and conclusion & references
- Share research data and link to it in your article
- Use easy to understand charts and professional illustrations
- Use clear and correct manuscript language
- Choose the right journal

According to one study, 40% of researchers surveyed said they had not read the whole article.
Preparing your article

Search Engine Optimization (SEO)
Preparing your article

Graphical Abstracts

Targeting the lymphatics using dendritic polymers (dendrimers), Lisa M. Kaminskasa, Christopher J.H. Porter, Advanced Drug Delivery Reviews, http://dx.doi.org/10.1016/j.addr.2011.05.016
Promoting your article

1. Conferences
   - Prepare to network
   - Also connect online
   - Online poster

2. Media relations
   - Research statement – Explain the significance of your research and key outcomes
   - Make use of your institution or funding body’s communication channels
Promoting your article

3. Social media
Promoting your article

Twitter
- Follow other researchers
- Post regularly and respond promptly
- Retweet
- Use images

Facebook
- Create a ‘fan’ page
- Invite fellow researchers
- Share images, videos, AudioSlides
- Link to your articles
- Discuss and ask for feedback

One mention of a scholarly article every seven seconds

The tweet is the message: According to a 2016 study, 59% of shared URLs are never clicked on.
Promoting your article

Social collaboration networks

Connect with research colleagues + join new communities

Share your publications with your groups
Monitoring your article

**Article-level metrics:**
- Feedback on downloads, shares and citations
- Data about the geographic locations and research disciplines of your readers
- Search terms used to find your publications
- A comparison of the performance of your article with other people’s articles

The My Research Dashboard provides you as an author with tracking metrics, allowing you to quickly and easily see the impact of any given paper.
Thank you

Questions?

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Useful links

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- PERK - http://www.elsevier.com/editors