Scholarly Publishing

Dr. Sangeeta Mehta
Director Research Solutions
Elsevier Imprints
Origins of scholarly publishing

1439
Gutenberg and moveable type

1580
Founding of the House of Elzevir

Henry Oldenburg (1618-1677)
Founding Editor and Commercial Publisher of the first scientific journal

March 6, 1665
Philosophical Transactions of the Royal Society

First true scholarly journal
Scholarly publishing today
Scientific, technical and medical (STM) publishing

2,000 STM publishers
1.4 million peer-reviewed articles
20,000 peer-reviewed journals
Quiz

What is role of scientific publications or why would you publish with a publisher of repute?
Role of scientific publications

Registration
- The timestamp to officially note who submitted scientific results first

Certification
- Perform peer-review to ensure the 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
Planning your article
Are you ready to publish?

Not ready
Work has no scientific interest

Outdated work
Duplication of published work
Incorrect conclusions

Ready
Work advances the field

Original results or methods
Significant enhancement of published work
Up-to-date review of a subject or field
Journal article production

- **Preprint**
  Author submits manuscript

- **Manuscript accepted**

- **Document proof**
  Copy editing, Author proofing, preparation for publishing

- **Published journal article**
  Logo, pagination, branding

- **Electronic Warehouse**
  Published as print, HTML or PDF copy
Planning Your Article
What makes a strong manuscript?

- Clear and useful message
- A logical manner
- Readers grasp the research

Editors, reviewers and readers all want to receive well presented manuscripts that fit within the aims and scope of their journal.
Quiz

What are different kinds of manuscripts that an author can submit to publish
Planning your article
Types of manuscripts….. These and more

Full articles
• Substantial, complete and comprehensive pieces of research
  *Is my message sufficient for a full article?*

Letters or short communications
• Quick and early communications
  *Are my results so thrilling that they should be shown as soon as possible?*

Review papers
• Summaries of recent developments on a specific top
• Often submitted by invitation

Your supervisor or colleagues are also good sources for advice on manuscript types.
Choosing the right journal

Best practices

- Aim to reach the intended audience for your work
- Choose only one journal, as simultaneous submissions are prohibited
- Supervisor and colleagues can provide good suggestions
- Shortlist a handful of candidate journals, and investigate them:
  - Aims
  - Scope
  - Accepted types of articles
  - Readership
  - Current hot topics

Articles in your reference list will usually lead you directly to the right journals.
Choosing the right journal
The Impact Factor

- It indicates how many times the more recent papers in a journal are cited on average in a given year
- It is influenced by editorial policies of journals and turnover of research

The impact factor can give you a general guidance, but it should NOT be the sole reason to choose a journal.
Choosing the right journal
Journal Finder Tool

Elsevier for authors

How to publish in an Elsevier journal

Every year, we accept and publish more than 250,000 journal articles. Publishing in an Elsevier journal starts with finding the right journal for your paper. If you already know which journal, you can enter the title directly in the search box below. Alternatively, click on the 'Start matching' button to find a suitable journal based on the abstract of your article.

The Elsevier publishing process step by step

1. Find the right journal
The first step is finding the right journal for your paper. Among the thousands of journals and books published by Elsevier are some of the world’s most prominent and respected medical, scientific and technological publications. These include The Lancet, Cell, Tetrahedron Letters and a host of others. Find a journal match for your abstract by clicking on the blue ‘Start matching’ button above.
Preparing your manuscript
Guide for Authors

- Find it on the journal homepage of the publisher, e.g. Elsevier.com
- Keep to the Guide for Authors in your manuscript
- It will save your time
How to get published
Structuring your article
Quiz

What is the general structure of a research article
General structure of a research article

- Title
- Author name and affiliation
- Abstract
- Keywords
- Introduction
- Methods
- Results and Discussion
- Conclusion
- Acknowledgements
- References
- Supporting Materials

Read the Guide for Authors for the specific criteria of your target journal.
Style: active, engaging writing

- Scientific articles are written in the passive voice
- Lay summaries should be in the active voice
- Active writing is more engaging for a wider audience
  - “The plant was grown at 95% humidity by the researchers”
  - “The researchers grew the plant at 95% humidity”
- Refer to people
  - “Dr. Smith and her team wanted to find out if humidity affected the way plants grow. To test this, they grew the plant at 95% humidity…”
Effective manuscript titles

- Attract reader’s attention
- Contain fewest possible words
- Adequately describe content
- Are informative but concise
- Identify main issue
- Do not use technical jargon and rarely-used abbreviations

Editors and reviewers do not like titles that make no sense or fail to represent the subject matter adequately. Additionally, if the title is not accurate, the appropriate audience may not read your paper.
Quiz

Simplify this…… and lets see how many citations can you get when people understand your title
Authorship

**Good** listing principle
- ✓ First author
- ✓ Corresponding author

**Poor** listing procedure
- ✗ Ghost authorship
- ✗ Gift authorship

Be consistent in how you write the authors’ names.
Quiz

1. What is gift authorship?
2. What is ghost authorship?
Authorship: Do’s and don’ts

General principles for who is listed first:

First Author:
- Conducts and/or supervises the data analysis and the proper presentation and interpretation of the results
- Puts paper together and submits the paper to journal

Co-Author(s):
- Makes intellectual contributions to the data analysis and contributes to data interpretation
- Reviews each paper draft
- Must be able to present the results, defend the implications and discuss study limitations

Abuses to be avoided:

Ghost Authors:
- Leaving out authors who should be included

Scientific Writers and Gift Authors:
- Including authors when they did not contribute significantly
Authorship disputes

- Must be resolved by Authors
- Editors cannot adjudicate or act as judge
- Delay publication: Editor has to get agreement from all Authors about any changes
- After publication, can be published as a correction, but needs agreement from all Authors with justification
Keywords

- Are the labels of the manuscript
- Are used by indexing and abstracting services
- Should be specific
- Should use only established abbreviations (e.g. DNA)

Check the Guide for Authors for specifics on which keywords should be used.

<table>
<thead>
<tr>
<th>Article title</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>“An experimental study on evacuated tube solar collector using supercritical CO2”</td>
<td>Solar collector; supercritical CO2; solar energy; solar thermal utilization</td>
</tr>
</tbody>
</table>
Abstract

- Summarize the problem, methods, results, and conclusions in a single paragraph
- Make it interesting and understandable
- Make it accurate and specific
  - A clear abstract will strongly influence whether or not your work is considered
- Keep it as brief as possible

Take the time to write the abstract very carefully. Many authors write the abstract last so that it accurately reflects the content of the paper.
Preparing your article

Graphical Abstracts

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

- Provide a brief context to the readers
- Address the problem
- Identify the solutions and limitations
- Identify what the work is trying to achieve
- Provide a perspective consistent with the nature of the journal

Write a unique introduction for every article. DO NOT reuse introductions.
What are few good practices of writing material/method section
Methods

- Describe how the problem was studied
- Include detailed information
- Do not describe previously published procedures
- Identify the equipment and materials used
Methods – ethics committee approval

- Experiments on humans or animals must follow applicable ethics standards
- Approval of the local ethics committee is required and should be specified in the manuscript, covering letter, or the online submission system
- Editors can make their own decisions on ethics
Results

- Include only data of primary importance
- Use sub-headings to keep results of the same type together
- Be clear and easy to understand
- Highlight the main findings
- Feature unexpected findings
- Provide statistical analysis
- Include illustrations and figures
Discussion

Interpretation of results

Most important section

Make the discussion correspond to the results and complement them

Compare published results with your own

Be careful not to use the following:
- Statements that go beyond what the results can support
- Non-specific expressions
- New terms not already defined or mentioned in your paper
- Speculations on possible interpretations based on imagination
Conclusion

- Be clear
- Provide justification for the work
- Explain how your work advances the present state of knowledge
- Suggest future experiments
Short break
"I DON’T KNOW WHAT TO BELIEVE...”
Making sense of science stories
A short explanation of peer review

Research finishes stage of work.

Write a paper presenting their methods, findings and conclusions.

Submit to a scientific journal for publication.

If the journal editor thinks it’s good enough, they send it to experts asking them to:

- Comment on its validity
- Judge the significance
- Determine its originality
- Give an opinion as to whether the paper should be published, improved or rejected.
Online peer review systems accept manuscript submissions and facilitate online peer review.
How to write a lay summary
Improving research impact

2015
What to do with your lay summary

- Submit with a funding application
- Publish on your personal website or blog
- Share on social media
- Send to your press office or communications team
Writing the lay summary

- 250-400 words
- Short sentences of 20-30 words
- Short paragraphs of 2-3 sentences
- Around five paragraphs, starting with conclusion
- Engaging, accessible style
- Simple language, plain English
Plagiarism
What is plagiarism?

“Plagiarism is the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit, including those obtained through confidential review of others’ research proposals and manuscripts.”

*Federal Office of Science and Technology Policy, 1999*

“Presenting the data or interpretations of others without crediting them, and thereby gaining for yourself the rewards earned by others, is theft, and it eliminates the motivation of working scientists to generate new data and interpretations.”

*Professor Bruce Railsback, Department of Geology, University of Georgia*
Quiz

What can be plagiarized?
What may be plagiarised?

Work that can be plagiarised includes…

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

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

Higher Education Academy, UK
Why do we need originality and ethical conduct?

Unethical behavior by Researchers degrades the scientific record and the reputation of science and medicine in the broader community. It can unfairly affect the reputation and academic record of individual researchers/authors.

A Massive Case Of Fraud
Chemical & Engineering News
February 18, 2008

Journal editors are left reeling as publishers move to rid their archives of scientist's falsified research

William G. Schulz

A CHEMIST IN INDIA has been found guilty of plagiarizing and/or falsifying more than 70 research papers published in a wide variety of Western scientific journals between 2004 and 2007, according to documents from his university, copies of which were obtained by C&EN. Some journal editors left reeling by the incident say it is one of the most spectacular and outrageous cases of scientific fraud they have ever seen. …
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
- To maintain the credibility and accuracy of the scientific literature
Plagiarism is serious but easily avoidable

- Plagiarism is easily avoided
- You can use ideas, phrases and arguments from sources already published, just acknowledge the source and the original author
Paraphrasing
Paraphrasing is restating someone else's ideas while not copying their actual words verbatim.

It is unacceptable:
- Using exact phrases from the original source without enclosing them in quotation marks
- Emulating sentence structure even when using different words
- Emulating paragraph organization even when using different wording or sentence structure

– Statement on Plagiarism
Department of Biology, Davidson College.
www.bio.davidson.edu/dept/plagiarism.html
Can you plagiarise 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

For example
You publish a paper and in a later paper, copy your Introduction word-for-word and perhaps a figure or two without citing the first paper

Editors may conclude that you intentionally exaggerated your output
Who is really responsible for Ethics?

All Stakeholders

Authors

Institutions/Companies/Agencies/Funding Bodies

Publishers/Journal Editors

All Elsevier journals are members of: COPE COMMITTEE ON PUBLICATION ETHICS
Further reading at

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www.elsevier.com/editors
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College of Skills Training
Boost your publishing skills in journals and books

College of Big Ideas
Discuss trending topics in publishing and academia

College of Networking
Make the most of every opportunity

College of Research Solutions
Training for effective and efficient research skills

College of Career Planning
Get ahead in your academic career

College of Recommended Organizations
Reach your potential with support from global resources

publishingcampus.com
Thank you

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Information about publishing in journals
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