How To Get Published
An Introduction to Scholarly Publishing

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What will we cover in this workshop?

- Understanding scholarly publishing
- How to get published
- How to structure your article
- How not to Publish - publishing ethics
- Peer Review
- Mendeley
‘How To Get Published’
Understanding scholarly publishing
Today’s research environment

Every year, 1.2 MILLION researchers begin their careers.

...where the young researchers need guidance.
Peer-Reviewed Journal Growth 1665-2013

Total Number of Active, Refereed, Academic/Scholarly Serials

- Philosophical Transactions of the Royal Society (London)
- 2013: 40 million peer-reviewed articles in >30,000 journals by >2,000 publishers

Source: Ulrichsweb.Com Nov. 2011
NB: Data For Recent Years Incomplete
ITESM – Article output
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.

Publishers are investing in innovation and technology to fulfil these roles.
The Publishing Cycle

- Solicit & manage submissions
- Manage peer review
- Production: Edit & prepare
- Publish & disseminate
- Archive & promote use

- 30-60% rejected by >7,000 editors
- 10 million articles in archive
- >480 million downloads by >30 million researchers in >180 countries!
- 500,000+ reviewers
- Nearly ½ million articles accepted
- 9.8 million articles available
- >480 million downloads by >30 million researchers in >180 countries!
The Digital Age of Publishing

- Solicit and manage submissions
- Manage Peer Review
- Edit and Prepare
- Production
- Production tracking systems
- Publish and Disseminate
- Archive and promote use
- Author submission & Editorial systems
- eJournal Backfiles eReference Works
- Electronic warehousing
- Electronic platforms
- Mobile content
Global Expansion of Scientific Research

<table>
<thead>
<tr>
<th>Country</th>
<th>Articles 2010 (Thousands)</th>
<th>Compound Annual Growth Rate In Articles 2006-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>500</td>
<td>5%</td>
</tr>
<tr>
<td>China</td>
<td>400</td>
<td>15%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>350</td>
<td>25%</td>
</tr>
<tr>
<td>Romania</td>
<td>300</td>
<td>35%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>250</td>
<td>40%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>200</td>
<td>30%</td>
</tr>
<tr>
<td>Egypt</td>
<td>150</td>
<td>20%</td>
</tr>
<tr>
<td>Brazil</td>
<td>100</td>
<td>15%</td>
</tr>
<tr>
<td>Thailand</td>
<td>75</td>
<td>10%</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>50</td>
<td>5%</td>
</tr>
<tr>
<td>France</td>
<td>40</td>
<td>0%</td>
</tr>
<tr>
<td>Germany</td>
<td>35</td>
<td>-5%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>30</td>
<td>-10%</td>
</tr>
<tr>
<td>Mexico</td>
<td>25</td>
<td>-15%</td>
</tr>
<tr>
<td>Japan</td>
<td>20</td>
<td>-20%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>15</td>
<td>-25%</td>
</tr>
<tr>
<td>Turkey</td>
<td>10</td>
<td>-30%</td>
</tr>
<tr>
<td>Brazil</td>
<td>5</td>
<td>-35%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>5</td>
<td>-40%</td>
</tr>
<tr>
<td>Egypt</td>
<td>5</td>
<td>-45%</td>
</tr>
</tbody>
</table>

Note: The data represents the number of articles and the compound annual growth rate for scientific research contributions from various countries.
What is Open Access Publishing?

The History

• Free availability on the public internet

• Permitting users to read, download, copy, distribute, print, search, or link to the full texts of these articles

• Crawl them for indexing

• Licenses to allow use and re-use without financial, legal, or technical barriers

• Accessible online without cost to readers, but not costless to produce. So, funding needed by authors, institutions, funders or others
Publishing with Open Access

- Elsevier’s open access publication fees are market based & provide competitive prices which range from 500-5000 USD.
- Offer authors a choice of user licenses, including Creative Commons.
- Developed a number of institutional and funding body agreements to help streamline processes and manage open access policies.

For more Open Access information:
http://www.elsevier.com/about/open-access/open-access-options
‘How To Get Published’
Question

What is it that distinguishes an excellent article from a poor one?

"All animals are equal, but some animals are more equal than others."
George Orwell - Animal Farm
What Makes A Strong Manuscript?

- Clear & useful message
- A logical manner
- Readers grasp the research
Are You Ready To Publish?

- Duplication
- Outdated work
- New + original results
- Review
- Re-interpretation of results
Types Of Manuscripts

- Full articles
- Letters or short communications
- Review papers
Citations per Article Type

![Citations Graph](image)
Your paper is **worthless** if no one reads, uses, or cites it

A research study is meaningful only if...

- It’s clearly described, so
- Someone else can use it in his/her studies
- It arouses other scientists’ interest, and
- Allows others to reproduce the results

By submitting a manuscript you are basically trying to sell your work to your community
Practical Advice

• Evaluate your research area
  – Journals, authors, citations, publications per year (Scopus)

• Evaluate which journal is right for your article
  – Impact Factor
  – Alternative metrics (H-index, SNIP, SCImago)
  – Journal Analyzer (Scopus)

• Find out more about the journals
  – Who are the editors?
  – Guide for authors
Evaluate your research area – free tools

Top 25 Hottest Articles
ScienceDirect Top 25 Articles across all subject areas
April to June 2013

1. Increased intraepithelial (CD103+) CD8+ T cells in the airways of smokers with and without chronic obstructive pulmonary disease • Article
   Immunobiology, Volume 218, Issue 2, February 2013, Pages 225-231
   Mikko, M.; Forslund, H.; Cui, L.; Grunewald, J.; Wheelock, A.M.; Wahlstrom, J.; Skold, C.M.

2. One-Step Generation of Mice Carrying Mutations in Multiple Genes by CRISPR/Cas-Mediated Genome Engineering • Article
   Cell, Volume 153, Issue 4, May 2013, Pages 910-918
   Wang, H.; Yang, H.; Shivanna, Chikdu S.; Dawlaty, Meclad M.; Cheng, Albert W.; Zhang, F.; Jaenisch, R.
   [9] Cited by Scopus (8)

3. Users of the world, unite! The challenges and opportunities of Social Media • Article
   Business Horizons, Volume 53, Issue 1, January 2010, Pages 59-68
   Kaplan, Andrea M.; Haenlein, Michael

4. Hallmarks of Cancer: The Next Generation • Review article
   Cell, Volume 144, Issue 5, March 2011, Pages 646-674
   Hanahan, D.; Weinberg, Robert A.
   [9] Cited by Scopus (7918)

5. Betatrophin: A Hormone that Controls Pancreatic β Cell Proliferation • Article
   Cell, Volume 153, Issue 4, May 2013, Pages 747-758
   Yi, P.; Park, J.S.; Melton, Douglas A.
   [9] Cited by Scopus (3)

6. Human Embryonic Stem Cells Derived by Somatic Cell Nuclear Transfer • Article
   Cell, Volume 153, Issue 6, June 2013, Pages 1228-1238
   [9] Cited by Scopus (7)
Evaluate your research area – in Scopus

“Save as Alert”: Remind yourself about the new findings.
Evaluate your research area – in Scopus

• **Ancestry Approach**: acquiring a research paper and examining its references „backward searching“

• **Descendency Approach**: identify a paper’s offspring: those recent publications that reference the earlier work „forward searching“
Review the development of your research area

Check the phase in the life-cycle of your research topic.

N.B. Decline may be caused by backlog in publication
Choose the right journal

Do not just “descend the stairs”
Top journals
Field-specific top journals
Other field-specific journals
National journals

DO NOT gamble by submitting your manuscript to more than one journal at a time. International ethics standards prohibit multiple/simultaneous submissions, and editors DO find out!
Choose a target journal

• Use your own references
• Check databases to find in what journals most articles on your topic were published
Impact Factor
[the average annual number of citations per article published]

- For example, the 2011 impact factor for a journal would be calculated as follows:
  - $A =$ the number of times articles published in 2009 and 2010 were cited in indexed journals during 2011
  - $B =$ the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2009 and 2010
  - 2011 impact factor = $A/B$
  - e.g. $\frac{600 \text{ citations}}{150 + 150 \text{ articles}} = 2$

Is this a prestigious journal?
SJR and SNIP new journal “metrics”

- **SCImago Journal Rank (SJR)**, is a measure of the scientific prestige of scholarly sources: value of weighted citations per document. A source transfers its own 'prestige', or status, to another source through the act of citing it.
  - A citation from a source with a relatively high SJR is worth more than a citation from a source with a lower SJR.

- **Source Normalized Impact per Paper (SNIP)** measures contextual citation impact by weighting citations based on the total number of citations in a subject field.
  - The impact of a single citation is given higher value in subject areas where citations are less likely, and vice versa.

www.journalmetrics.com
Is this a prestigious journal?

Other tools of journal evaluation have become available (e.g. in Scopus)
Determine the level of your achievements: \( h \) index

**impact factor** and the **SJR**: based on *journal evaluation*

**\( h \)-index**: accounts for a researcher’s body of work without the influence of other factors

Dr. Jorge E. Hirsch, University of San Diego
Assessment often highly based on publications and citations

“not everything that can be counted counts, and not everything that counts can be counted”

Albert Einstein (1879-1955)
Choosing The Right Journal

Visit e.g. elsevier.com to find:

- Aims & Scope
- Accepted types of articles
- Readership
- Current hot topics

- Ask for help from your supervisor or colleagues
- DO NOT submit manuscripts to more than one journal at a time
Read The ‘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
- Editors do not like wasting time on poorly prepared manuscripts
Do publishers correct language?

No! It is the Author’s responsibility...

...but resources are available

http://webshop.elsevier.com
‘How To Get Published’
Structuring An Article

September 2013
General structure of a research article

**Title Abstract Keywords**
Make them easy for indexing and searching
Informative, attractive, effective

**Introduction Methods Results and Discussion**
Convey the main messages and findings effectively
Make it as concise as possible

**Conclusion Acknowledgements References Supporting Materials**
Order can change
Authorship

- **Corresponding Author**
- **First Author**
- **Good Listing Principle**
- **Ghost Authorship**
- **Gift Authorship**
- **Poor Listing Principle**

Conducts or supervises the data collection, analysis, presentation and interpretation of the results

Puts together the paper for submission
Titles: attract the attention

- Fewest possible words
- Adequately describes content
- Identifies main issue
- Does not use rarely-used abbreviations or technical jargon

Effective manuscript titles
### Keywords

- Are used by indexing and abstracting services
- Are the labels of the manuscript; avoid words with broad meanings.
- Use only established abbreviations (e.g. DNA)

### Article Title

“An experimental study on evacuated tube solar collector using supercritical CO$_2$”

### Keywords

Solar collector; supercritical CO$_2$; solar energy; solar thermal utilization

Check guide for authors!
Make it interesting and understandable
Freely available on Pubmed, Scopus etc...

Make it accurate and specific
Summarize problem, method, result & conclusion

A clear abstract will strongly influence whether or not your work is considered

Keep it brief and catchy

Tip: write your Abstract last
The Process of Writing – Building the Article

- Title & Abstract
- Conclusion
- Introduction
- Methods
- Results
- Discussion
- Figures/Tables (your data)
Introduction

- Provide a brief context to the readers, but not a history lesson
- Introduce the main scientific publications
- Address the problem
- Identify the solutions & limitations
- What is hoped to be achieved
- Provide perspective consistent with the nature of the journal
<table>
<thead>
<tr>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe how the problem was studied</td>
</tr>
<tr>
<td>Include detailed information</td>
</tr>
<tr>
<td>Do not describe previously published procedures</td>
</tr>
<tr>
<td>Identify the equipment and describe materials used</td>
</tr>
</tbody>
</table>
Results

- Be clear & easy to understand
- Highlight the main findings, essential to the discussion
- Feature and explain unexpected findings
- Provide statistical analysis
- Include illustrations & figures
Discussion

What do the results mean?

Most important section
Sell your article!

Make the discussion correspond to the results

You need to compare published results with your own
The Conclusion

- Should be clear
- Provide justification for the work
- Advance the present state of knowledge
- Provide suggested future experiments
Advisors

Financial Supporters & Funders

Proofreaders & Typists

Suppliers who may have donated materials

Acknowledgments
References

- 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
How not to Publish
Publishing Ethics
Publish *AND* Perish! – if you break ethical rules

- International scientific ethics have evolved over centuries and are commonly held throughout the world.

- Scientific ethics are not considered to have national variants or characteristics – there is a *single ethical standard* for science.

- Ethics problems with scientific articles are on the rise *globally*.

Plagiarism high amongst ethics issues

Sample of cases reported to Elsevier Journals publishing staff in 2012
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

M. Errami & H. Garner, A tale of two citations
### What may be Plagiarised?

Work that can be plagiarised includes:

<table>
<thead>
<tr>
<th>Words (Language)</th>
<th>Graphs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas</td>
<td>Illustrations</td>
</tr>
<tr>
<td>Findings</td>
<td>Information</td>
</tr>
<tr>
<td>Writings</td>
<td>Lectures</td>
</tr>
<tr>
<td>Graphic Representations</td>
<td>Printed Material</td>
</tr>
<tr>
<td>Computer Programs</td>
<td>Electronic Material</td>
</tr>
<tr>
<td>Diagrams</td>
<td>Any Other Original Work</td>
</tr>
</tbody>
</table>

Higher Education Academy, UK
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:

1. To place your own work in context
2. To acknowledge the findings of others on which you have built your research
3. To maintain the credibility and accuracy of the scientific literature
Paraphrasing

Paraphrasing is restating someone else's ideas while not copying their actual words verbatim.

**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.
http://www.bio.davidson.edu/dept/plagiarism.html
Figure Manipulation

As long as they don’t obscure or eliminate info present in the original image.

- Brightness
- Contrast
- Colour Balance
- Nonlinear adjustments

Must be disclosed in the figure legend.

- Enhanced
- Obscured
- Moved
- Removed
- Introduced
Figure Manipulation

Example - Different authors and reported experiments

Am J Pathol, 2001
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.

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.
Plagiarism Detection

Cross Check Initiative (2009)

Huge database of 30+ million articles, from 50,000+ journals, from 400+ publishers

Software alerts Editors to any similarities between the article and this huge database of published articles

Many Elsevier journals now check every submitted article using CrossCheck
The article of which the authors committed plagiarism: it won’t be removed from ScienceDirect. Everybody who downloads it will see the reason of retraction…
‘How To Get Published’
Reviewing
Principles of Peer Review

A well understood concept

Improving, validating, registering, and preserving research

Without it there is no control in scientific communication
Purpose of Peer Review

- Ensures best quality papers are selected
- Improves quality of the published paper
- Ensures previous work is acknowledged
- Detects plagiarism and fraud
- Plays a central role in academic career development
Role of Reviewer and tasks

- The peer review process is based on trust
- The scientific publishing enterprise depends largely on the quality and integrity of the reviewers
- Reviewer should write reports in a collegial and constructive manner
- Treat manuscripts in the same manner as if they were your own
Reviewers look at:

- Importance and clarity of research hypothesis
- Originality of work
- Delineation of strengths and weaknesses of methodology, experimental / statistical approach, interpretation of results
- Writing style and figure / table presentation
- Ethics concerns (animal / human)
Review Process

Regular articles are initially reviewed by at least two reviewers

When invited, the reviewer receives the Abstract of the manuscript

Articles are revised until the two reviewers agree on either acceptance or rejection, or until the editor decides that the reviewer comments have been addressed satisfactorily

The reviewers’ reports help the Editors to reach a decision on a submitted paper

The reviewer recommends; the editor decides!

If there is a notable disagreement between the reports of the reviewers, a third reviewer may be consulted

The anonymity of the reviewers is strictly maintained
Unless a reviewer asks to have his/her identity made known to the authors
Review Process (ii)

- Reviewers do *not* communicate directly with authors
- All manuscripts and supplementary material must be treated confidentially by editors and reviewers
  - The manuscript cannot be distributed outside this small group
- The aim is to have a “first decision” to the authors as fast as possible after submission of the manuscript
- Meeting these schedule objectives requires a significant effort on the part of the Editorial staff, Editor and Reviewers
- If reviewers treat authors as they themselves would like to be treated as authors, then these objectives can be met
Initial Editorial Review

Many journals use a system of initial editorial review. Editors may reject a manuscript without sending it for review.

Why?
- The peer-review system is grossly overloaded and editors wish to use reviewers only for those papers with a good probability of acceptance.
- It is a disservice to ask reviewers to spend time on work that has clear and evident deficiencies.
Rejection without External Review

The Editor-in-chief evaluates all submissions, and determines whether they go into the review process or are rejected by the editor.

Criteria

- Example – “Rules-of-Three”
  - Out of scope
  - Too preliminary
  - Lack of Novelty
- English language is inadequate
- Prior publication of (part of) the data
- Multiple simultaneous submissions of same data
- Etc., each with specific examples
What can you get back from peer review?

• Accepted without change (very rare!)
• Accepted after minor revision (means you will have to change a few things)
• Accepted after consideration (means you will have to rewrite a few things, possibly sections, figures, provide more data, etc)
• Reconsider after major revision (means you will have to address some fundamental shortcomings – possibly doing additional research and certainly rewriting big sections)
• Rejection (means the manuscript is not deemed suitable for publication in that journal)
What leads to acceptance?

- Attention to details
- Check and double check your work
- Consider the reviewers’ comments
- English must be as good as possible
- Presentation is important
- Take your time with revision
- Acknowledge those who have helped you
- New, original and previously unpublished
- Critically evaluate your own manuscript
- Ethical rules must be obeyed

– Nigel John Cook
Editor-in-Chief, Ore Geology Reviews
Thank You

Further reading on plagiarism:
www.ethics.elsevier.com

For writing/submission tips and author services:
www.elsevier.com/authors

Free webcast tutorials on getting published:
www.elsevier.com/trainingwebcasts
UNAM – Article output