Scientific Publication and Peer Review Ethics

Professor Aboul Ella Hassanien,
Founder and Chair: Scientific Research Group in Egypt
Professor at Faculty of Computer and Information – Cairo University
abo@egyptscience.net & aboitcairo@gmail.com
http://egyptscience.net/ & http://www.fci.cu.edu.eg/~abo
http://scholar.cu.edu.eg/abo
The essential mission of SRGE toward the research and education in Egypt is to foster learning and promoting research integrity in the current and next generation of researchers in Egypt. SRGE is rededicating itself to this fundamental purpose.

**Slides are adapted from several presentations on the internet as well as Richard Henderson, Elsevier Hong Kong and Springer ethics I, COPE, Yale University School of Medicine**
Permission

Permission is granted to use or modify this presentation to support education about the responsible conduct of research, scholarship, and creative activities. Users are expected to cite this source.
Agenda

Terminologies

- Part (1) Scientific research
- Part (2) The Peer Review Process
- Part (3) Publishing and Peer-Reviews ethics
- Part (4) Research Misconduct
- Part (5) Authorships
- Part (6) The Committee on Publication Ethics
- Case studies

Finally notes
Terminologies

- Unacceptable research practices
- Research integrity
- Research misconduct
- Fabrication
- Plagiarism
- Whistle-blowing
- Serious deviation
- Falsification

Committee on Publication Ethics (COPE)
Part (1) Scientific research
Case study: Are there ethical issues?

Professor Abo runs a very active, productive research group with several graduate students and doctors. He is a well-regarded scientist who reviews many manuscripts and serves on study sections and other review panels. Abo makes an effort to help his SRGE member (trainees) develop their communication skills: they give talks in group meeting, seminars in the department, and papers at meetings and they write reports and papers. To help his trainees understand the peer review system, Abo ask one member to review manuscripts assigned to Abo from prestigious journal.

Some of SRGE member have become quite skilled; their reviews need virtually no editing before Professor Abo signs them and sends them to the journals.

Professor Abo is surprised when a colleague says that this practice is not ethical.

Cases adapted from http://academia.stackexchange.com/questions/7200/asked-again-to-review-a-paper-when-the-authors-dont-wish-to-modify-it
Case Study
What would you suggest me to do?

I have received a manuscript to review for a journal. The interesting thing is, I had already reviewed this article (exact same title, abstract and author list, almost exact same content) for another journal a few weeks ago where I recommended that it be published, but only after major revisions of both form and content. When I first reviewed it, I wrote a two-page review, listing some questions and several “actionable” comments, ranging from some concerns about exactness of the text (some conclusions didn't seem fully backed by the results) all the way down to trivial stuff (grammar, a few typos, graphic issues with the figures, etc.).

Now, the manuscript has come to me for review again, but it is almost unchanged from the first version. None of the serious stuff has been addressed, and even most of the trivial stuff was not fixed (there's at least one remaining typo, and the figures still aren't fully legible). However, I think this behavior from the authors is clearly a bad signal, which should be somehow conveyed to the editor: they're not willing to amend their work, and would rather do some journal-shopping.

Should I just re-send my earlier review?
Add a note to the editor about my knowledge of the “history” of the paper?
Or maybe even include it in my review, so the authors are aware that people know of their behavior, and maybe feel bad enough to change their ways?
Scientific paper

- A scientific paper is a written and published report describing original research results.
- An accepted original scientific publication containing scientific information.
- A scientific experiment is not complete until the results have been published and understood.
- A scientific paper is a paper organized to meet the needs of valid publication.

The well-written scientific paper should report its original data in an organized fashion and in appropriate language....
Originality

Not republishing the same findings
(except under special circumstances, with the original source cited)

Not submitting the same manuscript to two or more journals at once

Not dividing one research project into many little papers (“salami science”)
Manuscript submission

Electronic submission of papers for publication: the days of a complicated, hard-copy paper trail are gone ... good riddance!

After deciding on the appropriate journal for publication of your paper, carefully READ the “Instructions to Authors” for that particular journal.

Pay attention to formatting requirements, manuscript structure, literature citation style, and allowable file types for figures, illustrations, and tables.

Ignoring the specific requirements for manuscript formatting and organizational style can result in your paper being returned for correction or put reviewers and editors in a bad mood even before they judge the quality of the science – not a good move!
Origins of Scientific Writing

Knowledge is lost without written records

Knowledge could not be widely circulated with no effective duplication

Knowledge is awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning.
Knowledge is lost without written records

- Cave paintings and inscriptions were the first attempts to leave records (الكهوف).
- About 2000 BC, Papyrus paper was used as a medium of communication (ورق البردى).
- In 190 BC, parchment made from animal skin came into use (جلد الحيوان).
- In 105 AD, the Chinese invented paper (الورق).
Knowledge could not be widely circulated with no effective duplication

- In 1100 AD, the Chinese invented movable type
- In 1455 AD, Gutenberg printed his 42-line Bible from movable type on a printing press
- By the year 1500 AD thousands of copies of hundreds of books were printed
- In 1665, the first scientific journals were published

incunabula
A scientific paper is a written report describing original research results whose format has been defined by centuries of developing tradition, editorial practice, scientific ethics and the interplay with printing and digital publishing services.

The result of this process is that virtually every scientific paper has a title, abstract, introduction, materials and methods, results and discussion – the so-called IMRD structure.
Research integrity

Includes:
the use of honest and verifiable methods in proposing, performing, and evaluating research

reporting research results with particular attention to adherence to rules, regulations, guidelines, and

following commonly accepted professional codes or norms (Ethics).
What can happen when research lacks integrity?

Research Misconduct

- Plagiarism
- Fabrication of data
- Falsification of data

More egregious acts, such as a doctoral candidate fabricating significant amounts of data in the dissertation, might result in rescission of a degree or termination. Obviously, it is the high crimes of research, or the acts of research misconduct, that tend to reach the media and threaten public trust in research.
Example
Patient safety and privacy

Ethics Committee Approval

• Where does clinical practice end and research begin?
• Are standards the same for public institutions vs. private practices?

Patient informed consent

• Do patients understand whether or not they will be identified?
• Do patients understand how their data will be used in research?
• Do patients understand the associated benefits and risks?
• What about research in children, mentally disabled, or in different cultural settings?

“Nothing about me without me”
Good Publication Practices

- **Avoid misrepresentation in publications**
  - Publish accurate, complete, clear, and unbiased work
- **Avoid fragmentary publication**
  - Publish manuscripts that represent substantial findings
- **Avoid duplicate manuscript submission & publication**
  - Publish research that will add new contributions to the field

**Acknowledgment of prior publications**

‘A suitable footnote might read: “This article is based on a study first reported in the [title of journal, with full reference].”’ – ICJME guidelines
Organization of a Research Paper: The IMRAD Format

Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words Introduction, Materials and Methods, Results, And, Discussion.

An important point to keep in mind is that there is no standard or uniform style that is followed by all journals. Each journal has its own style; but they all have their own Instructions to Authors. Once you select a journal to which you wish to submit your manuscript, please FOLLOW THE JOURNAL’S INSTRUCTIONS TO AUTHORS.
Organization of a Research Paper: The IMRAD Format

I = Introduction, what problem was studied

M = Methods, how was the problem studied

R = Results, what are the findings

A and D = Discussion, what do these findings mean

The most common is the IMRAD: If a number of methods were used to achieve directly related results:

M + R = Experimental section

The results are so complex that they need to be immediately discussed:

R + D = Results and Discussion section

It indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: Title, Authors, Keywords, Abstract, Conclusions, and References. Additionally, some papers include Acknowledgments and Appendices.
Diagrammatic representation of the IMRAD structure

Title

Abstract

Introduction

Study Site

Methods

Results

Discussion

Conclusions

Acknowledgments

References

What's it about? (Brief, informative, and readily searchable by a person or a machine!)

What is it in a nutshell? (Follow the IMRAD logic and highlight major findings.)

Why did you do it? (The problem, importance, known, unknown, and your research questions/hypotheses/objectives.)

Where did you do it? (Why here? Relevance to your study? This may be part of Methods.)

How did you do it? (Not only methods used, but also justifications for using them.)

What did you find? (Summarize findings with headings and informative figures; don't discuss!)

What does it mean, and so what? (Results explained? Objectives achieved? Limitations? Implications for future research and application?)

What are your major findings and their significance? (Don't simply repeat what has been said in Discussion. This may be part of Discussion.)
How to Prepare the Title

- Make a list of the most important keywords
- Think of a title that contains these words
- The title could state the conclusion of the paper
- The title **NEVER** contains abbreviations, chemical formulas, proprietary names or jargon
- Think, rethink of the title before submitting the paper
- Be very careful of the grammatical errors due to faulty word order
- Avoid the use of the word “using”
Publication of a research

PUBLICATION OF A RESEARCH article represents the final stage of a scientific project. It is the culmination of many months and sometimes years of meticulous planning, execution, and analyses of hundreds of experiments.
Publish Articles

- After writing the academic paper, the researchers submit it to a journal.
- Typically you start with the most regarded journal and then work yourself down the list, until a journal accepts the article.
- Scientific journals use peer review process, which is a panel of other researchers (most likely in the same field) who review the work, to ensure that the quality of the paper. Publication bias is a well-known phenomenon, as the peer review process often rejects "null results".
- A journal rejection does not necessarily mean that you do not have a chance to resubmit the journal though.

*Publication of your article can be a very time-consuming process.*
Parties involved in the act of publishing

- Author
- Editor
- Reviewer
- Publisher

Society
Duties

**Duties of Editors**

- Publication decision
- Fair play
- Confidentiality
- Disclosure and Conflicts of interest
- Involvement and cooperation in investigations

**Duties of Reviewers**

- Contribution to Editorial
- Decision
- Promptness
- Confidentiality
- Standards of Objectivity
- Acknowledgement of Source
- Disclosure and Conflicts of Interest
Duties

Duties of Authors

• Reporting standards
• Data Access and Retention
• Originality and Plagiarism
• Multiple, Redundant or Concurrent Publication
• Acknowledgement of Sources
• Authorship of the Paper
• Hazards and Human or Animal Subjects
• Disclosure and Conflicts of Interest
• Fundamental errors in published works

Duties of the Publisher

• Ensuring that advertising,
• Reprint or other commercial revenue has no impact or influence on editorial decisions.
• Assist in communications with other journals and/or publishers where this is useful to editors.
• Working closely with other publishers and industry associations to set standards for best practices on ethical matters, errors and retractions
Publication reward

- Publication of results is an integral and essential component of research.
- The University encourages all researchers to promote their work through publishing and other forms of dissemination.
Ten common reasons for rejection
Scientific papers

1. Unoriginal work
2. Unsound work
3. Incorrect journal
4. Incorrect format
5. Incorrect type allocation

1. Previous rejection
2. Slicing & Duplication
3. Plagiarism (= copying)
4. Unready work
5. English so bad it’s ambiguous

* Incorrect type allocation
  - Case Report submitted as Letter to the Editor

* Unsound work
  - Experimental set-up flawed
  - Statistical analysis flawed
  - Suggestion of scientific fraud or data manipulation!
Top ten behaviors

- Publishing the same data or results in two or more publications
- Withholding details of methodology or results in papers or proposals
- Using inadequate or inappropriate research designs
- Dropping observations or data points from analyses based on a gut feeling that they were inaccurate
- Inappropriately assigning authorship credit
- **Falsifying** or ‘cooking’ research data
- Ignoring major aspects of human-subject requirements
- Using another’s ideas without obtaining permission or giving due credit (**plagiarism**)
- Unauthorized use of **confidential** information in connection with one’s own research
- Failing to present data that **contradict** one’s own previous research
the importance of science

science saves lives
What happens after your manuscript is accepted for publication?

Some journals publish the paper online as a PDF file of the final manuscript that was accepted for publication (days to weeks).

Within a few weeks, journal sends page proofs of your article as it will appear in printed or electronic form. These proofs need to be read very carefully to check for printer’s errors or other items that need to be corrected. Journals usually want the corrected proofs back within a few days.

First, the celebration ...
Kenneth Ten top list

Be honest
Be fair
Do good science
Know and follow the rules
Don’t break rules: change them if needed
Ask questions.

If you think “I can get away with this......STOP”
If you think “I know it’s unethical but......STOP”
If you see something you aren’t sure of, investigate.
You are not trapped.
Part (2) The Peer Review Process

**These coming slides are adapted from a presentation by Richard Henderson, Elsevier Hong Kong**
Peer review is the evaluation of creative work or performance by other people in the same field in order to maintain or enhance the quality of the work or performance in that field.

In the case of peer reviewed journals, which are usually academic and scientific periodicals, peer review generally refers to the evaluation of articles prior to publication.
When did peer review start?

Some would say that “Peer Review” goes back as far as the 17th century, when it was known as “The Inquisition of the Holy Roman and Catholic Church”. Scholars’ works were examined for any hints of “heresy”.

http://en.wikipedia.org/wiki/Peer_review
Peer review in “modern times”

Peer review (known as refereeing in some academic fields) is used in:

1. Publication process
2. Awarding of funding for research
3. Patents
4. Standards

Each of these involve slightly different practices, but ultimately colleagues are evaluating each other.
Once a paper has been submitted for consideration of publication, the editor will select 1-2 or 3 scholars from a pool of volunteers to read and evaluate the paper. Typically it is a double blind process: the reviewers do not know who the author is and the author does not know who the reviewers are. That way only the merits of the paper are evaluated.
The Peer Review Process starts with the researcher:

The researcher writes a paper and submits it to the editor of a journal.

The editor determines whether the article is of sufficient quality and appropriate content. He will either reject or accept it. If he accepts the article, he gives it to the reviewers.

These reviewers have specialized knowledge of the subject area and are often times researchers themselves. They review the article for quality of research. Their goal is to find any gaps in reasoning and to ensure that nothing has been overlooked.

The editor receives the revised article and makes the final decision to publish or not, taking into consideration the reviewers' feedback.

The article is returned to the researcher along with the reviewers' feedback and any requests for revision. She will have to revise the article and resubmit it.

The article is returned to the editor along with a recommendation to either reject the article, revise it or accept it.

End Result: Publication!
Advantages

• The peer review process stops a lot of substandard and poor science from reaching publication

They can, therefore, reject duplicate research and plagiarized papers.

• Saves a lot of wasted time and money, especially if the work is plagiarized.

Without referees,

More papers submitted than could be “printed”

Eliminate “bad” science, pseudo-science, harmful science

Why do peer review?

Peer reviewing is not only used for journals but for grant applications and University standard textbooks. This helps to ensure that money is diverted only towards viable research proposals. The peer review of textbooks ensures that students are taught correctly and are provided with excellent information.

The journals that use peer review enjoy an excellent reputation and are trusted by experts in the field. This also helps them to attract the best researchers and scientists to submit papers.
Disadvantages

An excellent paper written by a new or maverick scientist can be rejected, whilst a poorer but uncontroversial paper by an established researcher can sail through the peer review process. The whole process, especially for prestige journals, is very time consuming and expensive. Papers can be held up for many months.

Much of the decision-making power rests in the hands of the editors, who are the link between author and referee. In most cases, this is fine, and helps the process to proceed smoothly, but it can lead to misuse of this authority.
Part (3) Peer-review ethics
Publishing ethics

The publication of an article in a **peer-reviewed journal** is:

- An essential building block in the development of a coherent and respected network of knowledge.
- It is a direct reflection of the quality of the work of the authors and the institutions that support them.

Peer-reviewed articles support and embody the scientific method.

It is therefore important to agree upon standards of expected **ethical behavior** for all parties involved in the act of publishing: the **author**, the journal **editor**, the **peer reviewer**, the **publisher** and the **society** of society-owned or sponsored journals.
How Journals Detect and Handle Problem Papers

- Information received from reviewers or other editors
- Literature search for related papers by the author
- Withdrawal of a paper from publication
- Banning منع authors from publication in the journal for 3-5 years and informing the co-authors and editors of related journals of our action
- For less serious cases, placing the author on a “watch list” for careful examination of their submissions prior to requesting review
Peer review
When a paper arrives at a journal’s office

A. Editor reviews paper herself/himself
B. Editor assigns to Associate Editor (AE)
C. Editor or AE assigns to Peer Reviewers
Peer review process

What to look for

Good for the journal

- Is the topic relevant to the journal?
- Is the topic timely?
- Is the topic significant?
- Is the study unique? If so, How?

What type of paper/research is it?

- If research, how is it structured?
  - Randomized, controlled, blinded Meta-analysis?
  - Retrospective?
  - Case series or single case

Adapted from a presentation by Richard Henderson, Elsevier Hong Kong
Editors and Peer-review Process

Editors/Peer Reviewers look for:

Did the author follow the instructions of the journal?

- Correct Number of Authors?
- Conflict of Interest/Disclosure Statement?
- Copyright release signed?
- Informed consent (if applicable)/Ethics considerations
Peer review Process

Did the author follow the Instructions of the journal?

Is the article format correct?

– Structured abstract?

– Correct article format (Abstract, Introduction, Methods, Results, Discussion, Conclusion, Refs?)

– Are References in correct format?
Peer review Process

Peer Reviewers look for:

Are the technical aspects correct?

Research Structure:
• Correctly described and performed

Statistics:
• Correct analysis?
• Accurate interpretation?
• Clear presentation?
Peer review Process

Editors/Peer Reviewers look for:

Technical aspects, continued

Tables and Figures:

• Accurate and clear structure, presentation, and presentation?
• Do the numbers add up?
• Are the data consistent with the body of the paper?
• Do number of patients, other data match?
The review of manuscripts raises many ethical issues and problems

Reviewers should be aware of these:

• When deciding whether to review a paper
• Throughout the review process
• After they submit their reviews

The ethical issues can be complex. There may be no clear right or wrong pathway to follow.
Possible outcomes of the manuscript review process

Acceptance without revision (a rare event)

Acceptance with minor revisions

Revise major changes – usually with additional experiments required; Editor usually sends the revised manuscript back to one or more of original reviewers)

Reject (with encouragement to re-submit after extensive revisions and addition of new experimental data to address the flaws/issues in the original manuscript)

Reject (submit to another journal)
Role of the reviewer

**Journal staff** – oversees the receipt of manuscripts, manages communications with authors and reviewers and processes accepted manuscripts for publication.

**Scientific editors** - make the final decision as to whether a specific manuscript will be accepted for publication, returned for revisions, or rejected.

**Members of the editorial board** – read and review papers, select reviewers and monitor quality of reviews, and recommend actions to editor.

**Reviewers** – provide reviews of manuscripts, make recommendations concerning publication.

One must understand the peer review process and the role of the reviewer.
What do the editors look for in reviewers?

• Expertise in one or more areas of paper
• No conflicts of interest
• Good judgment
• Able to think clearly and logically
• Able to write a good critique
  • Accurate
  • Readable
• Helpful to editors and authors
• Reliable in returning reviews
• Able to do the review in the allotted time frame
Overview of review process
(considerable variation between journals)

- Potential reviewer contacted by journal
- Given authors, title, abstract, and time frame for review
- Reviewer agrees to review paper (or declines)
- Reviewer receives paper
- Reviewer performs review
- Reviewer submits review to editors
- Editors examine reviews, obtain additional reviews if needed, and make decision
- Decision goes to author, with comments from reviewers
- Reviewer thanked; may be informed of decision; may receive copy of comments sent to author

Overview of review process (considerable variation between journals)
Remember and Confidentiality is critical

Remember:

You cannot use the information in the paper in your own research or cite it in your own publications.

This can raise serious ethical issues if the work provides insights or data that could benefit your own thinking and studies.

Confidentiality is critical

Not only the paper, but also the outcome and content of the review are confidential.
Can you pass the paper on to someone else to review?

Only with the permission of the editor

Permission sometimes granted in cover letter; if not, the editor should be contacted in advance

The reviewer initially contacted should always let the editor know that the manuscript has been given to another reviewer

Important for journal records

Journal staff may need to configure web portal for the new reviewer

Allows actual reviewer to receive credit for his/her efforts
Some ethical issues to consider as you read and review the paper

Can you contact the author about the work or the paper?

No – this destroys the blinding of the review process. If you need information from the author, contact the journal staff, and they will contact the author.
Can you seek help with your review?

In some cases, simple questions can be asked without compromising the confidentiality of the review process. Before going beyond such anonymized questions, the reviewer should contact the editor. *The consultation becomes part of a confidential process.*

- The consultation should be made with appropriate discretion.
- The consultant becomes committed to handling the paper and its contents in confidence.

The review should note in the comments to the editor that the consultant has seen the paper.
NOTE: Computer-generated images

Important comment about preparation of data for use in figures for publication (from Journal of Virology):

Computer-generated images may be processed only minimally. Processing (e.g., changing contrast, brightness, or color balance) is acceptable only if applied to all parts of the image, as well as to the controls, equally, and descriptions of all such adjustments and the tools used (both hardware and software) must be provided in the manuscript. Unprocessed data and files must be retained by the authors and be provided to the editor on request.
Acceptable enhancement

Adobe Photoshop “levels” command was applied to entire image - no data are created or removed
Unacceptable enhancement

Adobe Photoshop "levels" command was applied to green channel only, and only one portion of the image.
Ethical “Hot” Issues – Biomedical Journals

• Conflicts of Interest
• Authorship Decisions
• Role of Funders
• Patient Safety and Privacy
Rewarding reviewers

Some journals find it useful to publicly thank reviewers for their generous volunteer efforts. This may take the form of a published list of reviewers that appears in the journal on a regular (annually, semiannually) basis.
Part (4) Research Misconduct
What is research misconduct?

Research misconduct includes, fabrication, falsification or plagiarism, in proposing, performing or reviewing research or in reporting research results OR any other practice that seriously deviates from practices.

(a) **FABRICATION** is making up data or results and recording or reporting them.

(b) **FALSIFICATION** is manipulating research materials, equipment or processes, or changing or omitting data or results that the research is not accurately presented in the research record.

(a) **PLAGIARISM** is the appropriation of another person’s ideas, processes, results or words without giving appropriate credit.

(b) Research misconduct DOES NOT include honest error or differences of opinion or necessarily, inability to replicate.

Researchers sometimes mistakenly accuse their peers of misconduct. It is important to distinguish between misconduct and honest error or a difference of scientific opinion to prevent unnecessary and time-consuming misconduct proceedings, protect scientists from harm, and avoid deterring researchers from using novel methods or proposing controversial hypotheses.
Do not

Lie (fabrications)

Cheat (falsifications)

Steal (plagiarism)

An easy to remember scientific moral code
Why does misconduct happen?

- Publish or Perish Pressure
- Desire to “get ahead”
- Personal problems
- Character issues
- Cultural Differences

How is misconduct identified

- Suspected and reported by a colleague
- Failure to confirm research results by own lab or others
Instances of misconduct

• A post doc changed the numbers in assays in order to 'improve' the data."

• A colleague used Photoshop to eliminate background bands on a western blot to make the data look more specific than they were.

• A colleague duplicated results between three different papers but differently labeled data in each paper.

• A co-investigator on a large, interdisciplinary grant application reported that a postdoctoral fellow in his laboratory falsified data submitted as preliminary data in the grant. As principal investigator of the grant, I submitted supplementary data to correct the application.
Case A

Abo is submitting a grant application to support a large-scale research project. The grant agency requires evidence that experimental methods have been successful in smaller-scale projects. Abo hasn’t conducted any preliminary investigations, but he believes his methods will be successful, so he created a “make-believe” report about preliminary studies to include in the grant proposal.

Questions

1. Is this plagiarism, **fabrication**, falsification, or serious deviation?
2. What consequences could Abo be facing?
3. How could this problem be prevented?

- Abo’s misconduct may be reported to the profession in a publication. As a result, his reputation may be profoundly affected.
- Abo will not receive the grant. As a result, his research productivity will be negatively affected.
- He may be barred from future funding applications to the same agency.
- Abo may lose his job or suffer other penalties at his university.

**Abo needs to do the work associated with good scholarship**
Abo is a member of a SRGE in which everyone uses variations of the same experimental methods. In the first draft of his dissertation, Abo love original phrases from one of his mentor’s publications to describe his experimental methods. Abo was not concerned because he knew that her mentor used exactly the same wording in multiple publications.

Questions

1. Is this plagiarism, fabrication, falsification, or serious deviation?

2. What consequences could Abo be facing?

3. How could this problem be prevented?

- Abo may use the “my advisor does this all the time” defense. If this claim is investigated, Abo’s mentor may also have problems.

Consequences if Abo’s plagiarism is not detected:

Consequences if Abo’s plagiarism is detected:
Conflict of interest

A person has a conflict of interest when he or she has an attribute that is invisible to the reader or editor but which may affect his or her judgement.
Plagiarism

Plagiarism is the act of stealing someone else's work and attempting to "pass it off" as your own. This can apply to anything, from term papers to photographs to songs, even ideas!

http://www.ulm.edu/~lowe
Types of Plagiarism:

1. Plagiarism of copying
2. Patchwork Plagiarism
3. Paraphrasing
4. Unintentional
   - Plagiarism of Self
   - Plagiarism of Authorship
   - Plagiarism of Ideas
   - Plagiarism of Words
   - Plagiarism of Structure
Plagiarism of copying

The most well-known and, sadly, the most common type of plagiarism is the simplest: copying. If you copy someone else's work and put your name on it, you have plagiarized.

- Plagiarism of Structure
- Plagiarism of Authorship
- Plagiarism of Ideas
- Plagiarism of Words
The second kind of plagiarism is similar to copying and is perhaps the second most common type of plagiarism: **patchwork plagiarism**. This occurs when the plagiarizer borrows the "phrases and clauses from the original source and weaves them into his own writing" without putting the phrases in quotation marks or citing the author.
The third type of plagiarism is called **paraphrasing plagiarism**. This occurs when the plagiarizer paraphrases or summarizes another's work without citing the source. Even changing the words a little or using synonyms but retaining the author's essential thoughts, sentence structure, and/or style without citing the source is still considered plagiarism.
Unintentional

it occurs when the writer incorrectly quotes and/or incorrectly cites a source they are using. How is this plagiarism, if the author didn't mean to do it?
Common author misconduct situations arising for publishers

- **Figure manipulation or falsification**
- **Data falsification or fraud**
- **Plagiarism**—copying someone else’s words, ideas, procedures without attribution
- **Duplicate/redundant publication, self-plagiarism**—overlap with previous publications or other submission, “salami slicing”
- **Conflicts of interest** (financial, professional, personal)

- **Authorship conflict**—missed authors,
- **Failure to provide a published reagent**
- **Unethical research** (violation of legal/ethical guidelines for use of subjects, materials)
- **Reviewer misconduct**

*NOTE:* Author misconduct is not the only ethical challenge that publishers face—**reviewer ethics** and **editorial ethics** are equally important.
Avoiding Plagiarism

- Take careful notes
- Always credit the work of others
- Be sure to cite sources
- Include all cited sources in the reference list and vice versa
- Obtain permission to include figures, models, graphs, etc.
- Keep track of all bibliographic information and the date you retrieved the information if from the Web.
Part (5) Authorship
Authorship (Case study)

Abo, Nashwa, Ammar and Hassan Aboul Ella have worked on a project on the climate change in Cairo University for two years. Hassan Aboul Ella’s role was as the research grant holder. He designed the research initially but thereafter had little day-to-day involvement. He attended most of the monthly research meetings, at which she made useful suggestions.

Ammar worked part-time for the team (10 hours a week) for the whole two years to support his study as an undergraduate in the Robotic Department. He played a major role in the research in getting questionnaires printed, distributing them, entering the data and performing some basic quantitative data analyses the team directed him to perform (descriptive data and some one-way analyses of variance). He also helped transcribe many of the ‘open comments’ on the questionnaire on to a single file that could be used in conjunction with a qualitative analysis package.
Authorship (Case study) Cont.

**Abo** is one of the three professors in the SRGE and was named on the original grant proposal, though he has played no role in the development of the research from design through to writing up. However, his measure was the central scale used in the study.

Finally, **Nashwa** supervised the project throughout the two years, and was closely involved throughout. She wrote the complete first draft of the paper reporting the results of the study.

Who should get authorship and in what order?
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Authorship should be defined early in the research project before writing the manuscript

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Always obtain permission before acknowledging someone in a submitted manuscript.
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Honorary authors: named authors who have not met authorship criteria

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Ghost authors: individuals not named as authors but who contributed substantially to the work
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