

# PEARLS OF LABORATORY MEDICINE

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**TITLE: Publication Ethics**

**PRESENTER: Anthony Newman**

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**Slide 1:**

Hello, my name is Anthony Newman. I am a Senior Publisher at Elsevier and also a member of the IFCC Ethics Task Force. Welcome to this Pearl of Laboratory Medicine on “Publication Ethics.” In this short talk, I will try to summarize the concepts and practice of publishing ethically.

**Slide 2: Definition**

Publishing ethics is usually defined as the ethical behavior in writing and submitting a scientific manuscript for publication, typically in a peer-reviewed journal. Readers must be confident that what they are reading in scientific publications is valid, true, and ethical.

**Slide 3: Who manages Publication Ethics worldwide?**

COPE and WAME are the main guardians of ethical conduct in the publishing arena.

The Committee on Publication Ethics (COPE) is an international voluntary organization that coordinates between most publishers and their editors the ‘even-handed’ approach to defining and regulating procedures for handling breaches of scientific publishing ethics.

The World Association of Medical Editors (WAME) has published several documents related to Publication Ethics Policies for Medical Journals.

Scientific ethics have evolved over centuries and are commonly held throughout the world. They are not considered to have national variants or characteristics – there is a single international ethical standard for science, and therefore, also for publishing this science.

Journal Editors and Publishing Houses are very active in this regard, too, and are guided by COPE Decision Trees, Template Letters, Procedures on how to involve institutes of unethical authors, etc.

The IFCC Task Force on Ethics is also very involved in this area and has produced a Publishing Ethics White Paper.

All of these resources, along with links, are listed in the references on Slide 18 at the end of this Pearl.

### Slide 4: Co-Authors

Who are your co-authors? And should they be an author?

The International Committee of Medical Journal Editors (ICMJE) is very specific on who is entitled to be an author and who is not. They state: "Authorship credit should be based on 1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; and 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published, and 4) 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. Authors should meet conditions 1, 2, 3, and 4." Any contributor to a paper who does not fit all four of these criteria should not be an author but instead should be listed in an acknowledgments section of the paper.

In addition, there are general principles on authorship. Who is the **first author**? The first author conducts and/or supervises the data generation and analysis and the proper presentation and interpretation of the results. He/she pulls the paper together and submits it to the journal, once the content is approved by all authors.

The **corresponding author** is either the first author, or a senior author from the institution, who has been involved with all aspects of the paper, and who meets all four conditions above of being an author. The corresponding author's role is important to answer any questions in future years from other researchers worldwide, so this is particularly relevant when the first author is a PhD student or postdoc, who may move on to another institution quite soon. This person, as senior author, is by convention the last name in the list of authors.

It is also important not to add authors who did not contribute significantly, and it is equally important to include all authors who do meet the author criteria.

### Slide 5: Citations/References/Intellectual Property Rights

How do you use other people's material in the right and the wrong way?

- Remember to always cite other people's ideas or results using references at the end of the article.
- Quotes may be used if clearly marked and cited, but do not use too many quotes in your paper.
- Even if you rewrite text to not reuse any text of the previous author, their ideas (intellectual property rights) must be respected and their work should be cited.
- Get permission for reuse of tables and figures – usually from the publisher of the original article.
- Do not use figures without permission – that is not respecting copyright.
- Do not copy work without citation – that is called plagiarism, and is seen as unacceptable unethical behavior by researchers worldwide.

Plagiarism, by the way, is derived from the Latin word 'to kidnap,' and describes what the world thinks of taking the intellectual property of someone else and passing it off as one's own. They have kidnapped it! This is not helpful to one's career path.

### **Slide 6: Self-citations**

How do you handle self-citations? What is acceptable use of your earlier material?

You must mention all relevant previous work briefly and give citations. You must not be selective or only mention a few previous articles due to modesty. If earlier published figures or tables need to be reproduced and not just cited, for the clarity of the reader's understanding, you have to get permission from the publisher of the first article and amend the caption accordingly – it is a question of copyright. This is often a fast online or email process through the website of the original journal and usually there are no costs linked to this permission request.

### **Slide 7: Self-Plagiarism or Duplicate Publishing**

What is unacceptable use of your earlier material?

Do not mention your previous work without a citation. Otherwise, readers will think you are trying to get two or more publications out of one piece of research.

Do not take blocks of text and reuse them in your next paper, as readers rightfully have the “expectation of originality.”

If you reuse material previously published by yourself (even in another language) without citation, it is called “duplicate publishing,” “self-plagiarism,” “redundant publication,” or “recycling fraud.” All of these are terms for not a smart thing to do as a scientist and an author!

If you have published a major article in the past in a language other than English, and it has not been noticed by English-speaking scientists, and you think it should be, it is possible to translate and republish this in a specific manner. The IFCC White Paper has all the details of this process.

### **Slide 8: Plagiarism detection tools and graphics checking software**

Most publishers now use CrossCheck, based on iThenticate, which checks suspect submitted manuscripts against millions of previously published papers, checking for plagiarized text. It is a 10-12 minute process that tells the Editor the percentage duplication scores for each article.

Even if an article is not in one of the thousands of journals in CrossCheck, often researchers worldwide will spot unethical behavior and report it accordingly. There is no time limit on correcting unethical scientific papers – even decades later. Once spotted, they either get retracted or removed, or an erratum is issued.

For graphics, in the US, the Office of Research Integrity (ORI) is responsible for investigating all forms of scientific fraud, including plagiarism, data fabrication, etc., by researchers receiving any US funding. They have created a freely available graphics-checking software plug-in for Photoshop that is used by publishers the world over.

### **Slide 9: Conflicts of Interest – aim for transparency**

Any reported results and discussion in a paper, which may have benefits to any of the authors, is a possible conflict of interest. Potential conflicts of interest related to individual authors' commitments have to be dealt with by being acknowledged upon submission of a paper, such that the editor and referees can take this potential conflict of interest into consideration whilst peer-reviewing any submitted paper.

According to the U.S. Office of Research Integrity, having a conflict of interest is not in itself unethical, and there are some that are unavoidable. Full transparency is always the best course of action, and, if in doubt, disclose.

Many journals or conferences in the clinical and medical area use the WAME's guidelines to declare and manage Conflict of Interest, and they state, "The general standard for judging whether a conflict of interest situation exists is whether a reasonable person with knowledge of all the relevant facts would have reason to question your impartiality in the matter."

Many publishing houses have specific statements in their manuscript submission guidelines dealing with Conflicts of Interest. Some publish the statement with the article and others file it for future reference.

### **Slide 10: Conflicts of Interest**

Conflict of interest situations are more extensive than many people think. When an investigator, author, editor, or reviewer has a financial/personal interest or belief that could affect his/her objectivity, or inappropriately influence his/her actions, a potential conflict of interest exists. Such relationships are also known as dual commitments, competing interests, or competing loyalties.

The most obvious conflicts of interest are financial relationships such as employment, stock ownership, grants, patents, and the like. Indirect potential conflict would be honoraria, consultancies to sponsoring organizations, mutual fund ownership, paid expert testimony, and so on. Prior research projects funded by the same company on another product must also be declared. Some journals are very specific with prior research time limits, for example.

Undeclared financial conflicts may seriously undermine the credibility of the authors, and the science itself, even if it is sound. An example might be an investigator who owns stock in a pharmaceutical company that is commissioning the research and so should declare the potential conflict.

For a researcher, conflicts of interest can also exist as a result of personal relationships, academic competition, and biased opinion. Examples include:

- a relative who works at the company whose product the researcher is evaluating
- a self-serving stake in the research results (which might lead to potential promotion/career advancement based on outcomes)
- having a biased opinion that is in direct conflict with the topic he/she is researching

People often don't think about these subtle aspects of conflicts of interest.

### Slide 11: Parallel Submissions

Is parallel submission possible to save time? Parallel submission is duplicate submission and so is unethical. It is unethical to submit your paper to more than one journal in parallel. Each submission of the same paper, or the same research results and discussion, should be sequential. Should you be in a hurry and choose not to wait for the final decision on a paper, for whatever reason, you may withdraw your paper and submit it to another journal at that point – not before.

Involve Co-authors: Each co-author must be in agreement with the entire contents of the paper, both at the initial submission stage and any subsequent submissions of revised versions of the paper. If you do not involve the co-authors and they disagree with your edits, they can insist you withdraw the submitted article.

Some journals ask for signed declarations forms from all named authors.

### Slide 12: Authors

Authors have the responsibility to be ethical. It is up to authors to be ethical and to know what is, and more importantly, what is not allowed. Ignorance is no excuse.

There are several useful resource sites on the web, such as the Committee on Publication Ethics (COPE) website, the Publishing Ethics Resource Kit (PERK), etc. Also, many universities have designated people who can help with advice. If in doubt, ask!

### Slide 13: Referees

Referees have ethical responsibility too. Authors expect referees to peer-review their work impartially and confidentially.

For most journals, the peer-review process is single-blind, meaning that the referee's identity is not revealed to the author or the scientific community at large, but there are a few scientific fields that do publish the identity of the referees, along with their reasoned comments, by prior agreement.

Referees must not contact the author directly, but must make any comments about the manuscript to the author via the review process and the handling editor of the journal. At the same time, the author should not attempt to identify and contact who reviewed their manuscript.

If a referee thinks that he/she might have a conflict of interest in peer-reviewing a paper, the manuscript review must be refused, and the journal's Editor notified. If the referee suspects a breach of ethics, he/she should draw this to the attention of the journal's Editor, with specific suspicions or comments, and if possible, supportive evidence.

Once the peer-review has taken place and the report sent in, the electronic file and any printouts of the submitted paper should be destroyed by the referee to maintain confidentiality. Any scientific information obtained by the referee in the peer-review process is confidential and cannot be used until after the paper is published. The published version of the article is the only valid version – all draft/peer-review versions having been deleted.

### **Slide 14: Editors**

Editors have to uphold ethics as well. The Committee on Publication Ethics (COPE) viewpoint is clear: "Editors should be accountable for everything published in their journals. This means the editors should: strive to meet the needs of readers and authors; strive to constantly improve their journal; have processes in place to assure the quality of the material they publish; champion freedom of expression; maintain the integrity of the academic record; preclude business needs from compromising intellectual and ethical standards; always be willing to publish corrections, clarifications, retractions, and apologies when needed." The International Committee of Medical Journal Editors has similar views.

It is journal Editors that normally have the responsibility of following up complaints about specific articles published in that journal. Papers can be retracted by the Editor following a breach of ethics by the author(s).

Editors who make final decisions about manuscripts must have no personal, professional, or financial involvement in any of the issues they might judge. In other words, no Conflict of Interest.

### **Slide 15: Readers**

Readers have a responsibility to their field to report suspicious articles or behavior. If, whilst reading various articles in a journal, a suspected breach of ethics is found, the reader should draw this to the attention of the journal's Editor, with specific suspicions or comments, and if possible, supportive evidence, e.g. a copy of the original article that was plagiarized, etc. The journal Editor should acknowledge this, and then instigate a suitable investigation, and wherever possible, advise the reader of the final outcome. Journal Editors who do not investigate suspected breaches of ethics can be reported to COPE for further action.

### **Slide 16: Publishers**

Publishers, and Societies that own and publish journals, have a responsibility to the scientific record to ensure that the journals they publish are as free of publishing ethics violations as they can be. They should respect the privacy and rights of researchers, protect the intellectual property and copyright of the authors, and foster the editorial independence of the publishing process without interference by themselves or any other party.

### **Slide 17: Reporting Publication Ethics Violations**

What do you do if you, as an author, are a victim of ethical abuse?

Plagiarism:

If you find that your paper has been plagiarized, always contact the Editor of the journal the other article appeared in, and where possible sending a copy of your article for comparison. Also contact the Publisher of the journal your article appeared in – they often hold copyright and so can help you. Retractions of plagiarized papers do take place, sometimes years later, when the ethical breach is eventually discovered or confirmed.

Missing as co-author:

If you think that you are, or should be, a co-author, and were either not consulted or not listed on a paper, contact the Editor of the journal in which the paper appeared as soon as possible. Papers get corrected by publishing Corrigenda or Errata or similar to reflect such changes.

**Slide 18: References**

**Slide 19: Disclosures**

**Slide 20: Thank You from [www.TraineeCouncil.org](http://www.TraineeCouncil.org)**

Thank you for joining me on this Pearl of Laboratory Medicine on “Publication Ethics.”