



Springer



BioMed Central
The Open Access Publisher

How to write a good paper ...and get it published

Xi Cheng, PhD 程熹
Journal Development Editor

Aims of this workshop



讲座目的：尽可能提高投稿成功率

****Overall goal: maximize chances of getting published****

Where to submit your paper 向哪里投稿

What editors are looking for 编辑最看中什么

Submitting your manuscript 投稿的过程

Understanding and responding to peer review 理解并回应同行评审

Research and publication ethics 研究和出版中的伦理问题

Aims of this workshop



讲座目的：尽可能提高投稿成功率

****Overall goal: maximize chances of getting published****

Where to submit your paper 向哪里投稿

What editors are looking for 编辑最看中什么

Submitting your manuscript 投稿的过程

Understanding and responding to peer review 理解并回应同行评审

Research and publication ethics 研究和出版中的伦理问题

Where to submit your paper

What audience do you want to reach?

想让哪些读者看到这篇文章？

How high can you aim?

研究成果能达到什么高度？

- Impact factor 影响因子
- International reputation 国际影响力

Other points to consider

其他需要考虑的因素

- Speed 速度
- Open access 开放获取

An example: you are submitting a paper on the role of a family of microRNAs in breast cancer

例：和乳腺癌有关的microRNA家族的研究

A general biology audience 面向所有生物学家研究人员

- Nature, BMC Biology

Genomics researchers 基因组相关研究人员

- Genome Biology, BMC Genomics

Cancer researchers 癌症相关研究人员

- Cancer Cell, BMC Cancer

Breast cancer researchers 乳腺癌相关研究人员

- Breast Cancer Research

How high can you aim? Depends on the level of advance and breadth of interest

能达到什么高度取决于研究结果的创新程度和影响广度

Very high-impact journals with broad audiences

拥有广大读者的高质量期刊

- For example, Nature, Science, Cell
- Ground-breaking findings 里程碑式的新发现
- Of interest to a broad audience 对广大读者都有意义
- Findings must be very well supported 结论须充分证明
- For example, **new** family of microRNAs that act through a **novel** mechanism to alter a **key** pathway in breast cancer that **strongly** supports a **novel** way of treating the disease 新micro-RNAs家族通过全新机制来改变乳腺癌的关键通路，从而强有力地支撑治疗该疾病的新方法

How high can you aim? Depends on the level of advance...

能达到什么高度取决于研究结果的创新程度

More specialist (but still broad) journals with high impact 更专（也很广）的高质量期刊

- For example, Genome Biology
- Findings with significant novelty 具有显著创新的发现
- Should appeal to many researchers in the field
能影响领域内众多科研人员
- Findings must be well supported by data
结论须通过数据充分证明
- For example, a **known** family of microRNAs acts through a **novel** mechanism to alter a **key** pathway in breast cancer 已知的microRNAs家族通过全新机制来改变乳腺癌的关键通路

How high can you aim? Depends on the level of advance...

能达到什么高度取决于研究结果的创新程度

More subject-specific journals 更专的期刊

- For example, BMC Cancer
- Findings with some novelty 具有一定创新的研究
- Should appeal to researchers within the field
对领域内的科研人员具有一定影响力
- Findings must be well supported by data, but can be more room for speculation
结论须通过数据证明，但允许一定的推断空间
- For example, a **known** family of microRNAs is shown to alter a pathway that has been implicated in breast cancer 已知的microRNAs家族通过已有机制来改变乳腺癌的关键通路

How high can you aim? Depends on the level of advance...

能达到什么高度取决于研究结果的创新程度

Inclusive journals 包罗广泛的期刊

- For example, BMC Research Notes, PLoS One
- Will take findings that are confirmatory only
可接收仅仅具有验证性的研究
- Doesn't have to have broad appeal 不需要具有大影响
- Science must be sound 研究本身须符合科学合理性
- For example, a **known** family of microRNAs is confirmed to regulate a breast cancer pathway
证实已知的microRNAs家族可改变乳腺癌的关键通路

QUESTION: can you publish negative results?

- For example, you find:
 - -a family of microRNAs does not play a role in regulating a specific pathway, contradicting previous findings. 该microRNAs家族通过各种途径皆无法调节和乳腺癌有关的通路，与之前的研究不相符
- Can you publish this work?

Yes, you can publish negative results 负面结果也可以发表

- For example, Negative Results in Biomedicine – Impact Factor 1.47
- A family of microRNAs does not after all play regulate a pathway involved in breast cancer 该microRNAs家族通过各种途径皆无法调节和乳腺癌有关的通路
- The science must be sound 研究本身须符合科学合理性



Other points to consider when choosing a journal 选择期刊需考虑的其他因素

Do you want to publish open access? 是否想以开放获取形式发表？

- Make your research accessible to everyone 使所有人了解该成果
- Can increase the visibility of your research 提高该研究的可见度

Speed 速度

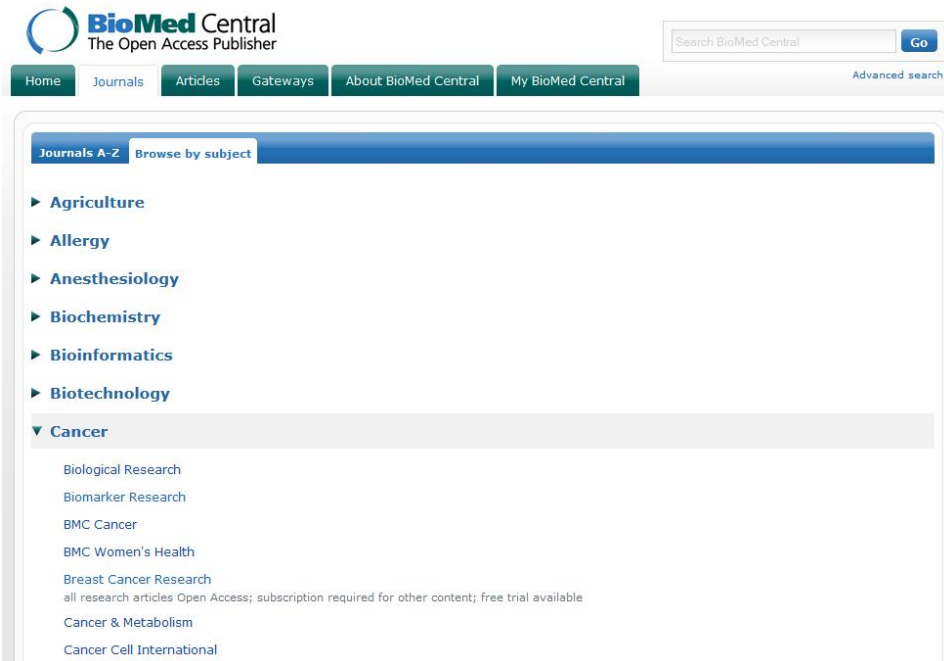
- Of the editorial process 审稿过程的速度
- Genome Biology has average time to decision following peer review of just 35 days
Genome Biology作出初审决定（含同行评审）的时间 平均为35天
- Some journals take much longer 一些期刊要久得多
- Open Access journals tend to publishing articles faster after acceptance
在文章被接收后，开放获取期刊的发表速度更快

Peer review model 同行评审的几种模式

- Single blind peer review – reviewers are anonymous 单盲-匿名审稿人
- Double-blind peer review – reviewers and authors are anonymous 双盲-双方皆匿名
- Open peer review – author and reviewer names are revealed; reports posted online
公开同行评审 - 作者和审稿人都知道对方身份，且审稿报告随文章一起发表

12

How to find a suitable journal – visit publisher websites



The screenshot shows the BioMed Central website interface. At the top, there is a navigation bar with the BioMed Central logo and tagline 'The Open Access Publisher', a search bar with a 'Go' button, and a menu with links: Home, Journals, Articles, Gateways, About BioMed Central, and My BioMed Central. Below the navigation bar, there is a 'Journals A-Z' tab and a 'Browse by subject' tab. Under 'Browse by subject', a list of subjects is shown with expandable arrows. The 'Cancer' subject is expanded, revealing a list of journals: Biological Research, Biomarker Research, BMC Cancer, BMC Women's Health, Breast Cancer Research (with a note: 'all research articles Open Access; subscription required for other content; free trial available'), Cancer & Metabolism, and Cancer Cell International.




How to find a suitable journal – visit the journal website



Genome Biology

IMPACT
FACTOR

10.5

for

Go

Advanced search

[Home](#)
[Articles](#)
[Authors](#)
[Reviewers](#)
[About this journal](#)
[My Genome Biology](#)
[Subscriptions](#)

[General information](#)
[Editorial Board](#)
[FAQ](#)
[Article processing charge FAQ](#)
[Article metrics FAQ](#)
[Contact us](#)
[Privacy policy](#)

About *Genome Biology*

[Aims and scope](#) | [Editorial team](#) | [Open access](#) | [Article-processing charges](#) | [Indexing services](#) | [Publication and peer review process](#) | [Editorial policies](#) | [Citing articles in *Genome Biology*](#) | [Why publish your article in *Genome Biology*?](#)

This page includes information about the aims and scope of *Genome Biology*, editorial policies, open access and article-processing charges, the peer review process and other information. For details of how to prepare and submit a manuscript through the [online submission system](#), please see the [instructions for authors](#).

Aims & scope

Genome Biology serves the biological research community as an international forum for the dissemination, discussion and critical review of information about all areas of biology informed by genomic research. Key objectives are to provide a guide to the rapidly developing resources and technology in genomics and its impact on biological research, to publish large datasets and extensive results that are not readily accommodated in traditional journals, and to help establish new standards and nomenclature for post-genomic biology.

Genome Biology publishes research articles, new methods and software tools, in addition to reviews and opinions, from the full spectrum of biology, including molecular, cellular, organism or population biology studied from a genomic perspective, as well as sequence analysis, bioinformatics, proteomics, comparative biology and evolution.

The journal offers two distinct types of publication:

- Regular systematic reviews, critical assessments, reports, research news and commentary on genomics and on biology as it is informed by genomics, including timely, topical and

Submit a manuscript

Register

Sign up for article alerts

Contact us

 Follow us on Twitter

Search information pages

Go

ADVERTISEMENT

Register Today for Our FREE Webcast
November 19, 2014
8am PDT | 11am EDT
4am GMT | 5am CEST

How to find a suitable journal – other ways

- Look at where good papers in your field are being published
领域内其他好文章发表在哪些期刊上
- Ask your colleagues and collaborators for their experiences
向同事和合作伙伴了解他们的经验
- Visit publisher stands at larger conferences
在大型学术会议上与参展的出版社面对面交流

If you are unsure, send a presubmission enquiry 如果不确定，可以试试预投稿

- Not a formal submission, just an email to the editors 给编辑写信并不算正式投稿
- ...so you can approach several journals 可以同时接触多个期刊
- You can expect a rapid response 可能会很快有回应
- Please don't send the manuscript 千万别把整篇文章发给编辑

What should go in it? 能确定哪些方面？

- Can just be an enquiry about scope 可能仅仅针对文章的主题
- Can be more detailed - approach, key findings, significance of the work
可能会具体到方法、主要发现、研究重要性等

What kind of response will you get? 能得到什么样的回应？

- A definite no – based on scope 否定回答-基于文章的主题
- Discouraged from submitting – on advance and/or breadth of appeal
不鼓励投稿-基于研究的创新程度和影响广度
- Equivocal response – need to see the full manuscript 模糊回答-需要看到全文
- Provisional yes – the journal will probably send the manuscript for peer review
暂时的肯定回答-编辑可能会将全文进行同行评审

Aims of this workshop



讲座目的：尽可能提高投稿成功率

****Overall goal: maximize chances of getting published****

Where to submit your paper 向哪里投稿

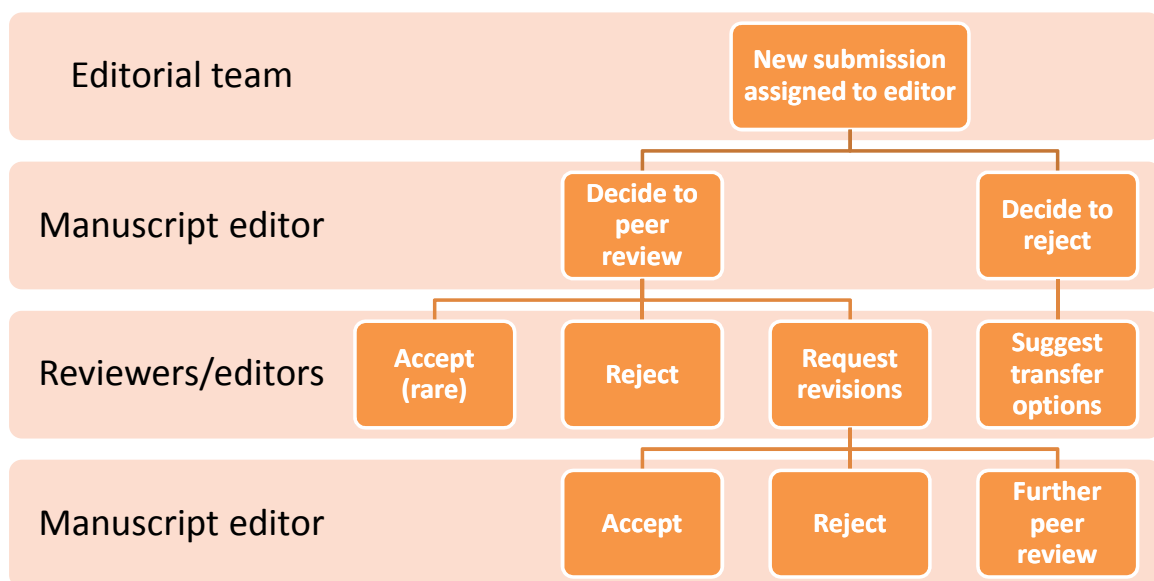
What editors are looking for 编辑最看中什么

Submitting your manuscript 投稿的过程

Understanding and responding to peer review 理解并回应同行评审

Research and publication ethics 研究和出版中的伦理问题

The editorial process



- Can be further rounds of revision and peer review

可能需要进一步修改和同行评审

- May consult editorial board at any stage

随时都可能请教编委会成员

- Genome Biology receives 120-200 manuscripts per month

Genome Biology 每月会受到120-200篇文章

- Editors do many other things as well as assess manuscripts

编辑除了对文章初审外还有许多其他工作

- For example, go to conferences, commission reviews, give talks...

如参加学术会议、邀稿、演讲

- Develop editorial policy 完善编审政策

- ****Bottom line: editors need to make decisions on manuscripts quickly****

最重要的一点：编辑需要尽快对稿件作出初审决定



How does an editor decide whether to send a manuscript for peer review?

Is the manuscript in scope for the journal? 文章是否符合期刊主题？

Does it present enough of an advance? 是否足够创新？

Is it of interest to a broad enough audience? 是否能吸引足够多读者？

Does the science seem to be sound? 是否符合科学合理性？

Are there any ethical issues? 是否存在伦理问题？

Are other requirements met – eg data deposition? 其他-如数据存储？

20

Once you've decided where to submit

Writing a cover letter 准备投稿信

- Don't write it like an abstract 不要写得像摘要
- And definitely don't just paste in the abstract
千万别从摘要复制粘贴
- Focus on main advances, not fine detail
重点写主要创新，不要只写一般的细节
- Make sure it is written in clear English 确保使用准确的英语
- Put it in the context of previous findings 加入已有成果的内容
- Explain who will be interested and why 谁会感兴趣及原因

For example...

- “We have discovered a novel family of microRNAs”
- “This family acts through a previously unrecognized mechanism”
- “We show for the first time that these microRNAs regulate a key breast cancer pathway”
- “Recent studies on this topic have been published in Nature, suggesting that this is an area of broad interest (see references 1-3)”
- “These findings should be of interest to anyone working on noncoding RNAs or on breast cancer signalling pathways”

How much detail to include 包含多少细节

- DON'T include too much experimental detail
不要写过多的实验细节
- DO mention the key approaches that you used, especially if they are cutting edge 重点写主要实验方法，尤其是最前沿的
- DO indicate how firm your conclusions are (from speculative to very well supported) 写明结论的坚实程度
- DO mention sample size if this is an important consideration 如果样本大小算是重要考虑因素须写明
- DO feel free to include a list of key references
可以加入重要的参考文献

Aims of this workshop



讲座目的：尽可能提高投稿成功率

****Overall goal: maximize chances of getting published****

Where to submit your paper 向哪里投稿

What editors are looking for 编辑最看中什么

Submitting your manuscript 投稿的过程

Understanding and responding to peer review 理解并回应同行评审

Research and publication ethics 研究和出版中的伦理问题

Preparing the article

- Read the Instructions for Authors
仔细阅读作者指南
- Format it correctly
正确排版
- Write clearly and concisely
写作简明扼要
- Provide any additional information (e.g. flowcharts as required by reporting guidelines)
提供附加材料 (如报告指南要求提供的流程图)

The screenshot shows the BMC Medicine website. At the top, there is a search bar and navigation links: Home, Articles, Authors, Reviewers, About this journal, and My BMC Medicine. The BMC Medicine logo is prominently displayed, along with the Impact Factor of 7.28. Below the navigation bar, a description of BMC Medicine is provided. The Editor's name, Sabina Alam PhD, is listed. A red circle highlights the link "Instructions for authors | PDF" in the footer of the editor's section. To the right, there is a sign-up box for article alerts. Below this, a section titled "Selected articles" features three articles: "Challenges in circumcising a nation", "Preventing violence against women", and "Association of behaviour change techniques with effectiveness of dietary interventions among adults of retirement age: a systematic review and meta-analysis of randomised controlled trials". Each article includes a thumbnail image and a brief summary.

Preparing the article.. continued



Cover Letter

- Get the journal name right!
写对期刊名字！
- Rationale for the study should be well argued.
精确论述该研究的根本理论
- What is the key finding?
主要发现是什么？
- Why is this important?
为什么重要？
- Why is it a good fit for the journal?
为什么契合该期刊？

Preparing the article.. continued



Writing the abstract

A well written abstract should provide: 好的摘要应具备以下条件

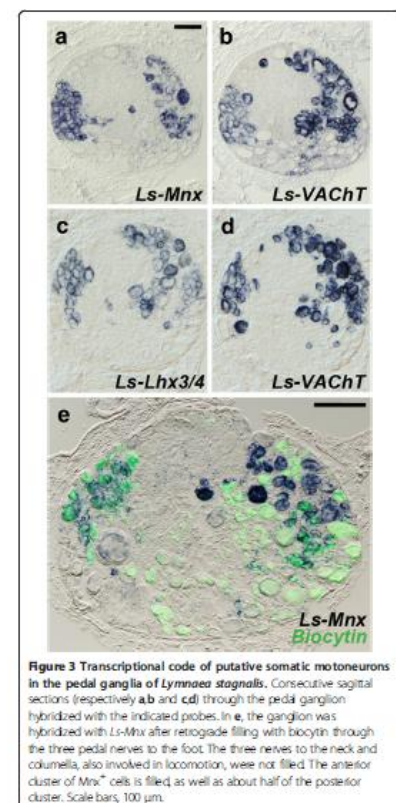
- Clear background and aim
清晰地阐述研究背景和研究目的
- Appropriate level of details about study design and results
恰当具体地描述实验设计和实验结果
- Clear conclusions
清楚的结论

This is the only detail invited referees see before they agree to be a peer reviewer
这是审稿人在同意审稿之前能看到的唯一文字

Preparing the article.. continued

Figures, tables AND legends

- Main results and data should be shown with illustrations: many readers look at the figures and tables without reading the whole article
主要结果须在图片中以图注的形式出现
- Figure layout clear and logical (e.g. top to bottom or clockwise arrangement of components)
合理排列图片顺序
- All components in the figure labeled and described in the legend
图注中要包括图中所有内容
- Enough detail in the legend for readers to understand what type of data and analyses are presented and what the key results are
详细的图注有利于读者对关键结果的理解



Preparing to submit



One chance to make a good first impression 抓住机会留下好的第一印象

Ensure your co-authors have approved the paper before you submit

投稿前应确保所有共同作者已检查过文章内容

At submission:

- Who will be the corresponding author? This author takes responsibility for 'agreeing' to submission terms and conditions
- Thoughtful **cover letter** 考虑周全的投稿信
- Well written **abstract** 恰当的文章摘要
- Think of what editors are looking for 明白编辑在寻找何种文章
- Put results in context of current literature 将实验发现结合已有文献
- Adhere to relevant reporting guidelines and provide all necessary information on ethics and consent (where applicable) 参考相关的报告指南，提供伦理审核信息
- **Providing all the required information will expedite initial decision of whether to peer review 提供一切所需信息，可加快送审过程**

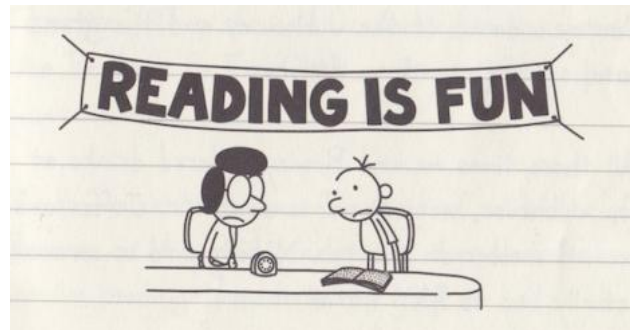
Tip 1**Read many papers 多读文章**

- Join a journal club

加入journal club (论文俱乐部)

- Read outside of your area to develop broad scope

读一些研究领域以外的文章以拓宽知识面



Tip 2

Don't write and edit at the same time 不要边写边改

- Write the parts of the paper you're most excited about first.
先写你认为最激动人心的部分
- Decide what the main message is early on.
决定最想表达给读者的信息
- Quality vs quantity.
质量比数量重要
- Get a colleague to feedback on your draft.
给同事看手稿征求意见



Tip 3



- **Write clearly! 清楚的表达 !**
- Complex language is not needed. Best science is where complex ideas are expressed in a way that people not in that field can understand
用非专业人士也能看懂的方式来表述复杂的想法
- Poorly written manuscripts get rejected – reviewers or editors lose patience or can't 'see' the results or advance
表意不明的文章会被拒稿——审稿人和编辑会对研究成果失去耐心
- Use a professional copy-editing service, such as Edanz
可使用专业润色机构，如理文编辑

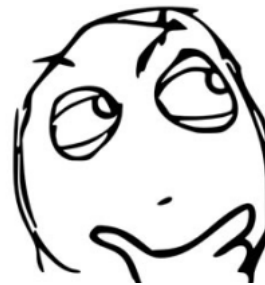
Tip 4

Don't forget about your figures and tables 图片和表格同样重要

- Ensure these are high quality and clear.
保证高质量的图片和表格，使其清晰表达研究结果
- Figure legends need to be descriptive.
图片注释须具有很强的描述性
- Get a colleague outside your field to feedback on your graphics.
把图表发给研究领域以外的同事征求意见

Tip 5

Be objective about your work
客观对待自己的工作



.....Editors and reviewers will be

.....编辑和审稿人都很客观

Tip 6

Quality is everything 质量决定一切

- Try to publish in as high a quality journal as you can.
尽可能发表在质量最高的期刊上
- One great study is better than several lesser quality ones
一篇高质量的文章>多篇内容相似的一般文章
- Avoid trying to publish lots of research papers that provide small amounts of new data from a single research project.
避免将一项研究中诸多进展较小的结果分别发表

Aims of this workshop



讲座目的：尽可能提高投稿成功率

****Overall goal: maximize chances of getting published****

Where to submit your paper 向哪里投稿

What editors are looking for 编辑最看中什么

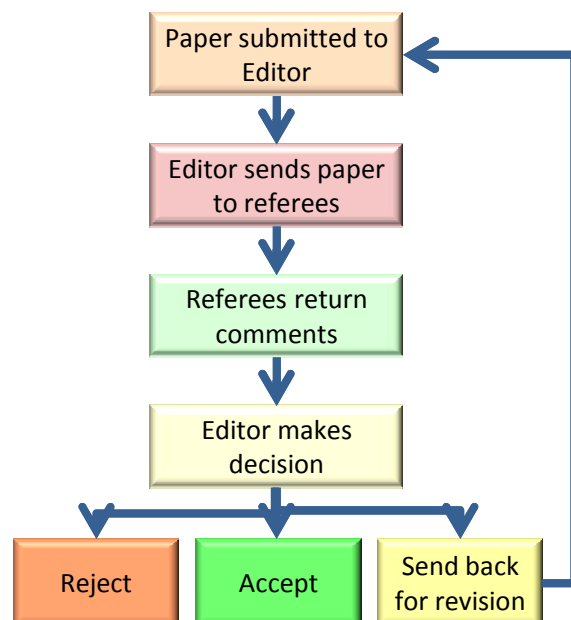
Submitting your manuscript 投稿的过程

Understanding and responding to peer review 理解并回应同行评审

Research and publication ethics 研究和出版中的伦理问题

The peer review system

- Independent experts advise on articles submitted for publication
各自独立的业内专家为每篇投稿提出评审意见
- Constructive feedback from referees and editors is highly valued by authors
来自评审和编辑的建设性反馈意见一贯受到作者的高度重视



Referees (peer reviewers)



- Referees are unpaid and are sometimes too busy...
评审专家义务为期刊审稿
- We use at least **2** referees, with additional statistical referee if required
邀请至少两位专家审稿，如果需要还会邀请统计学专家进行评审
- We provide guidelines
期刊为评审提供审稿指南
- We ask referees to return their comments within 10 days
要求审稿人10个工作日内完成
- **Single-blind review:** identities of author are revealed but those of referees are kept anonymous
采用单盲评审：审稿人知道作者身份，审稿人匿名
- Some other journals operate:
其他期刊采用不同的评审流程
 - **Double-blind peer review:** Author identity is also concealed
 - **Open peer review:** Author and referee identities are revealed

What do peer reviewers look for?



- Quality of submission 稿件的质量要求
 - Contribution to the literature: novelty, importance 对领域的贡献：创新等
 - Appropriate methods and statistics 恰当的研究和统计方法
 - Soundness of the analysis and conclusions 合理的分析和结论
 - Clarity of aim of paper and achievement of aim 明确文章的目的和成就
 - Presentation of figures, tables 图表的表达
 - Existing literature cited appropriately 恰当地引用现有文献
- Areas for improvement 文章中哪些方面可以提高



Peer review is not a democracy 同行评审≠少数服从多数

Reviewers often disagree with each other
审稿人之间有时也会意见不统一

Editors may overrule reviewers
编辑可能否决审稿人的意见

Editors, not the reviewers, decide ultimately what is published
文章最终能否发表由编辑决定，而非审稿人



Respond to reviewers and editors



- Ensure you understand what reviewers and editors are asking for (if unsure make an informal query to the editor prior to submitting your response).

明白评审和编辑提出什么要求

- Provide a full, and concise point-by-point response to the reviewers and editors.

提交完整的回复，将评审和编辑的要求逐点做出说明

- If you disagree with an issue, provide a clear rationale for your argument within the response. Back up with references where possible.

如果对评审提出的问题有异议，需在回复中提供详细的论证，最好附有参考文献

- Give clear indication where revisions in the manuscript have been made (tracked changes, highlighted etc).

指明对文章的哪些部分进行了修改

Tip 7

Clear responses to editors and reviewers 清晰明了地回复编辑和审稿人

- Provide a full, and concise point-by-point response
完整、简洁地逐点回答审稿人提出的问题
- If you disagree, provide a clear rationale for your argument. Back up with references.
如果不同意对方的观点，须提出自己观点的理论基础。
- Give clear indication where revisions in the manuscript have been made (tracked changes, highlighted etc).
明确指出文章中哪些部分进行了改动

Tip 8**Become a reviewer 成为审稿人**

- Get used to how to critically assess other authors work.
习惯用批判的眼光审视其他人的研究
- You'll become familiar with issues that reviewers raise as you see other reports.
从而了解审稿人如何对自己的研究提出问题



Rejection – reasons why



Separating ‘scientific soundness’ from ‘interest levels’

区别看待 “科学合理性” 和 “创新性”

Scientific soundness

Results are not sound
结果不符合科学合理性

Interpretation is
fundamentally flawed
阐释与论证有硬伤

Ethical concerns
伦理问题



Manuscript cannot be
published (in current form)
文章不能发表

Interest levels

Not in scope for this journal
不符合期刊主题

Not a big advance
没有重大突破

Not of interest to this
journal's readership
不符合该期刊读者群



Manuscript suitable for a
different journal
该文章更适合其他期刊



Transfer offered

Rejection on 'interest' level

- Manuscripts rejected on 'interests' levels may be transferred to another journal – **can result in faster publication**

如果因为文章的创新程度不够而被拒稿，可将文章传递到其他期刊
可加速文章发表



Tip 9

- **Learn to live with rejection! 正确看待被拒稿**
- All scientific careers are faced with rejection
被拒稿是每个研究人员的必经之路
- Take reviewers advice and improve the study / manuscript
根据审稿人的意见进行修改
- If you are invited to resubmit, do the revisions that the reviewers request. Don't argue for the sake of it
如果有重投的机会，一定要根据审稿人的意见进行修改，切勿进行过多争论



Grounds for considering appeals



- If the editors are convinced that the original decision was a serious mistake, not merely a borderline call that could have gone either way
当原来的决定是个严重的错误，而不只是模棱两可的错误时，才可让编辑信服。
- If a reviewer made substantial errors of fact or showed evidence of bias - but ONLY if a reversal of that reviewer's opinion would have changed the original decision
当大量事实性错误来证明审稿人确实存在偏见，且该偏见确实影响了最终结果。
- Disputes on factual issues need not be resolved unless they were critical to the outcome
如果不解决这些基于事实的争议，会对结论产生严重影响。
- Further consideration usually involves external advice: original or additional reviewers
进一步的行动需要征求外部建议：原审稿人或新审稿人。

Advice to authors



What helps:

- Be clear that you are appealing against the decision (rather than just voicing your disappointment)
不要只是陈述自己有多失望，明确是对结果进行申诉
- Be clear what specific scientific issue is at the root of the appeal
指明支撑该申诉的根本是哪些点
- Reviewers or Editor made factual errors or missed important considerations
指明审稿人犯了哪些实质性错误
- Specific evidence of reviewer bias
关于审稿人偏见的明确证据
- Construct a comprehensive rebuttal - focus on the science
一个全面的反驳须建立在科学的基础上

A real example of an appeal



- A manuscript on DNA methylation patterns is rejected after peer review.
一篇关于DNA甲基化模式的文章在同行评审后被拒稿
- Reason for rejection: one of the reviewers says the paper is not novel.
拒稿原因：其中一个审稿人说该文章创新性不够
- The reviewer cites 3 previous papers, which he says have published similar findings.
审稿人引用了3篇已发表的文章来说明别人已经发表过相似的研究
- The author appeals and argues that the reviewer has misinterpreted the findings of the previous papers, which are not directly relevant to this manuscript.
该作者进行申诉，说明审稿人对已发表文章中的结果理解有误，与该文章并无直接联系
- The author explains in detail the actual findings of each of the 3 previous papers.
作者详细解释了那3篇文章的实际研究结果
- The editor reads the 3 papers and finds that the author is correct.
编辑仔细阅读那3篇文章，认为作者是正确的
- The paper was ultimately published after revisions and re-review.
在修改和重新审稿之后该文章最终被接收

Aims of this workshop



讲座目的：尽可能提高投稿成功率

****Overall goal: maximize chances of getting published****

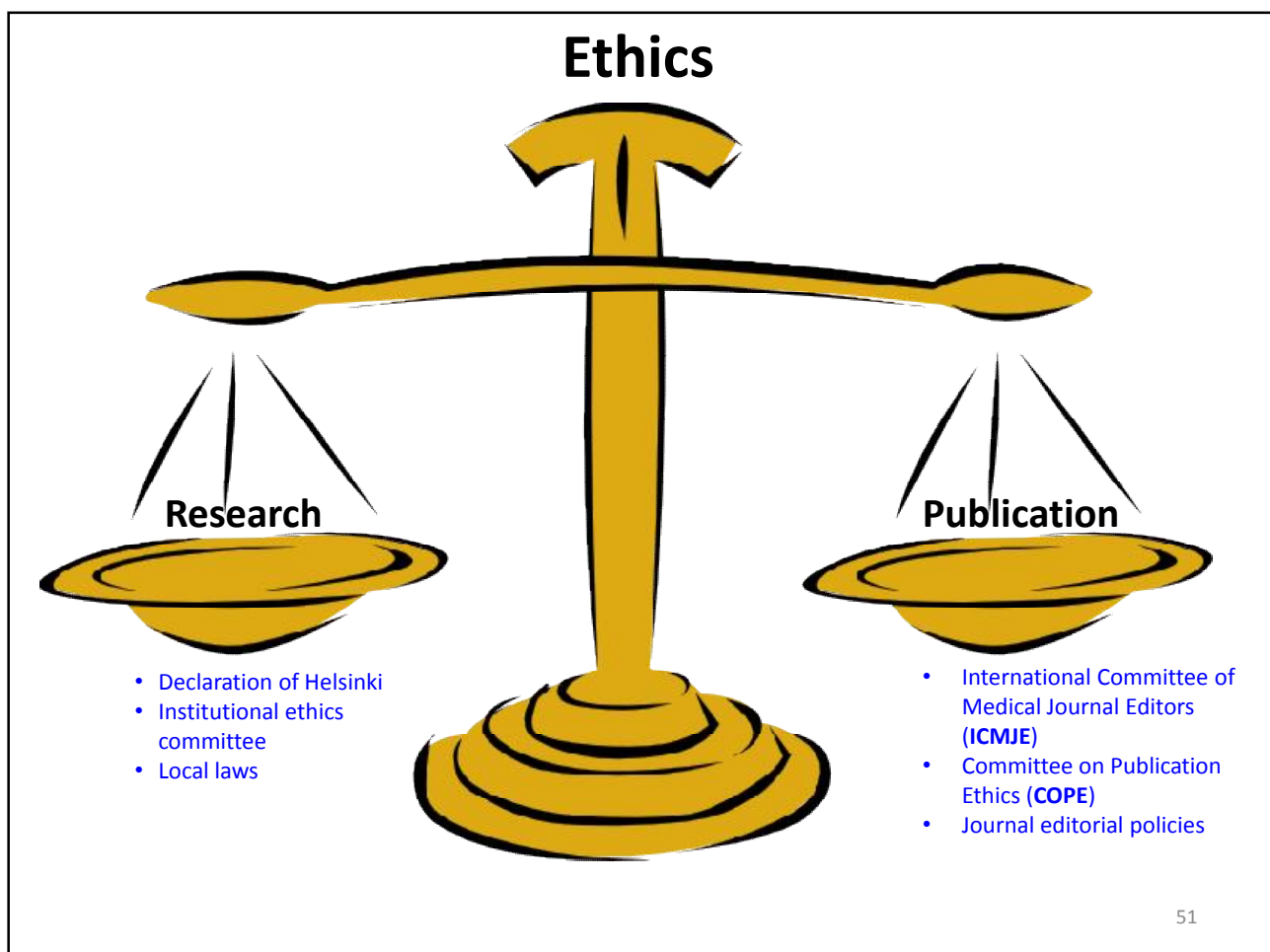
Where to submit your paper 向哪里投稿

What editors are looking for 编辑最看中什么

Submitting your manuscript 投稿的过程

Understanding and responding to peer review 理解并回应同行评审

Research and publication ethics 研究和出版中的伦理问题



Study designs & ethics



Many different study designs, therefore many ethical considerations:
不同实验设计，涉及不同的伦理问题：

- **Retrospective studies:** permission has been sought to use patient details, participants will be kept anonymous.
回顾性研究：使用病人信息须得到许可，参与者须匿名
- **Prospective cohort studies and RCTs:** informed consent; participants kept safe at all times; patients know they can leave the study at any time, but still receive treatment.
前瞻性群组研究和RCT：知情同意书、保证参与者受到应有治疗
- **Animal models:** must comply with institutional, national, or international guidelines
动物模型：必须符合校级、国家级或国际级实验指南

Improper use of human subjects and animals can never be justified
切勿对人体和动物进行不当使用

Declaration of Helsinki

Ethical principles for medical
research involving human subjects.

www.wma.net

*“The health of the patient will be my **first** consideration”*

“病人的健康必须是我们首先考虑的事”

Ethics approval



Reputable journals will only publish ethically conducted research

高质量期刊只会发表符合伦理准则的研究

Research involving human subjects, human material, or human data, must have been performed in accordance with the Declaration of Helsinki

涉及人体、人体材料或与人有关数据的研究，必须符合赫尔辛基宣言

All manuscripts reporting studies involving human subjects, human material, or human data must have: 所有涉及人体的文章在投稿时须包含以下材料

- A statement on ethics, including:
- The name of the ethics committee
- The reference number where appropriate

一份关于伦理问题的声明，包含：

- 伦理委员会名称
- 伦理审核注册号



Consent

- Informed consent must be documented in all studies involving human participants 一切有人参与的研究都需要具备知情同意书
- This includes:
 - All prospective studies
 - Interviews (including of health professionals)
 - Focus groups
 - Samples (e.g. blood, sputum) taken prospectively
 - Parental consent for children <16



知情同意书的内容应包括所有准备进行的研究、访问、关注群里、预计要采集的样本、低于16岁的参与者须由家长签署

If ethics committee waived, should be documented
若伦理委员会不需要知情同意书，须提供相关证明文件

Consent to publish



- Required for: 以下情况须与病人签署知情同意书
 - Identifiable patient information 研究中包含病人身份信息
e.g. age, gender, diagnosis, occupation
 - Patient images (including photos, scans) 病人影像
 - Always if accompanied by identifiable information
e.g. **56 year old man** admitted to hospital x in **2012** with a **fractured femur**
 - Not required for completely anonymous images with no patient identifiable information in manuscript
若文章中未包含病人影像或身份信息则不需要提供
e.g. retrospective review of CT scans with no description of patients (but needs ethics approval)

Cannot be waived by the ethics committee
伦理审核委员会不可省去该步骤

Case 1

- Researchers recruit patients to a trial to test a new drug for rheumatoid arthritis
- 研究人员招募患者参与一项关于类风湿性关节炎新药的研究
- Patients are divided into two groups:
 - Group 1: receive standard treatment plus the new drug
 - Group 2: receive standard treatment plus placebo
- 患者分两组：1、接受标准疗法+新药；2、接受标准疗法+安慰剂
- Patients are not told they are part of a trial
- 患者未被告知已参与一项临床试验

Any ethical concerns?
有何伦理问题？

Case 2



- Researchers want to test a new, untested drug for treating *Helicobacter pylori*
科研人员试验一项未被试验过的新药，该药有可能被用于治疗幽门螺杆菌
- Patients provide informed consent
患者签署知情同意书
- Patients are divided into three groups:
 - Group 1 are treated with standard therapy plus new drug
 - Group 2 are treated with standard therapy plus placebo
 - Group 3 are treated with the new drug only患者分三组：1、标准疗法+新药；2、标准疗法+安慰剂；3、只给新药

Any ethical concerns?
有何伦理问题？

Trial Registration



- Required for all clinical trials
 - Prevents duplication of efforts and reduces publication bias
- 所有临床试验皆须注册，可避免重复工作

*"any research study that prospectively assigns human participants or groups of humans to one or more **health-related interventions** to evaluate the **effects on health outcomes**" - WHO*



Trial Registration.. continued



- There are a number of different suitable registries; these need to be publicly accessible. Most are free to register. 免费的注册途径如下
 - Chinese clinical trial register (ChiCTR) www.chictr.org
 - www.clinicaltrials.gov
 - www.ISRCTN.org
 - www.umin.ac.jp/ctr/index/htm
 - Primary registries that participate in the WHO International Clinical Trials Portal
(<http://www.who.int/ictrp/network/primary/en/index.html>)
- Systematic reviews - [PROSPERO](#)

Trial Registration.. continued



- Trial registration number and date of registration should be included as the last line of the abstract in BioMed Central journals.
BioMed Central期刊要求在摘要的最后一行提供临床试验注册号
- Trials should be registered **before** the first participant has been recruited 临床试验须在招募第一位病人**前**注册
- Trial registers should be kept updated!
须实时更新注册信息



Trials: Primary outcomes



- Primary outcomes of trials are determined when the study protocol is being designed.
临床试验的首要结果须在设计研究方案时确定
- Primary outcomes should be specified in the trial registry and study protocol.
首要结果须在临床试验的注册和研究方案中具体说明

Primary outcomes cannot be determined after data analysis has been conducted
首要结果不能在已对数据进行分析后得出

Publication ethics - misconduct



- Plagiarism 抄袭
- Duplicate submission/publication 一稿多投
- Undeclared competing interests 未注明竞争关系
- Unethical research involving humans or animals
对人或动物进行违背伦理的实验
- Data falsification/fabrication 数据造假
- Image manipulation 图片PS
- Gift/ghost authorship 夹带无关作者
- Review of 2,047 retractions indexed in PubMed (Fang et al. 2012)
 - 67.4% of retractions due to misconduct
 - Fraud 43.3%
 - Duplicate publication 14.2%
 - Plagiarism 9.8%

Reference: Fang F, Steen R, Casadevall A. *PNAS*. 2012 ⁶³109:42

Plagiarism



Duplication of text (or figures) from someone else's work

How much overlap with someone else's work is acceptable?

从别人的文章中复制多少内容（文字和图片）是被允许的？

- A. 30%
- B. None
- C. 10%

Plagiarism



Duplication of text (or figures) from someone else's work

How much overlap with someone else's work is acceptable?

从别人的文章中复制多少内容（文字和图片）是被允许的？

- A. 30%
- B. **None**
- C. 10%

How do Editors deal with plagiarism?



Follow COPE guidelines

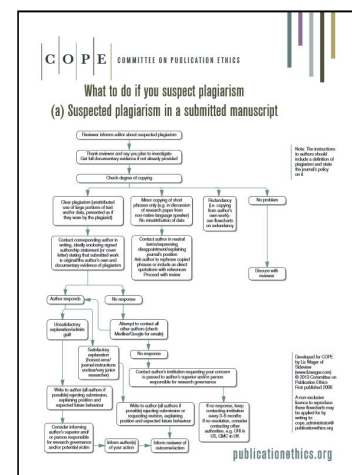
Use plagiarism detection software 使用抄袭检查软件

During submission 投稿过程中发现抄袭

- Ask authors for explanation 要求作者解释
- Authors may be allowed to re-write 重写
- Manuscript may be rejected 拒稿
- Editor may contact authors' institution 报告学校

After publication 发表后发现抄袭

- May publish **retraction or correction** 撤稿或修正



What is a retraction?



- The intention is to remove the article from the scientific record
撤稿的目的是将该文章从科学界抹掉
- BUT the article does not disappear
但是该文章并没有消失
- Instead a retraction notice is published and is permanently associated with the article
撤稿说明会永远伴随该文章
- The notice also explains why the article was retracted
该说明也会解释该文章为何被撤稿

Example of a retraction

The screenshot shows the BMC Genomics website interface. At the top, there is a search bar and navigation links. The article title is "MicroRNA expression profiling during the life cycle of the silkworm (*Bombyx mori*)". A red oval highlights a retraction notice: "A [retraction](#) for this article has been published in *BMC Genomics* 2011, 12:284". The authors listed are Shiping Liu¹, Liang Zhang², Qibin Li^{3,4}, Ping Zhao¹, Jun Duan⁵, Daojun Cheng¹, Zhonghuai Xiang¹ and Qingyou Xia^{1,5*}.

"After publication of article [1], we became aware of the fact that Figures one C (let-7a and let-7a#), four B (bmo-let-7a and bmo-let-7a#) and five B (let-7a and let-7a#) **were duplicated from another published article [2]**. In light of these problems, the authors in consultation with the journal's Editors, have decided to retract article [1] from *BMC Genomics*. The authors are currently preparing a new manuscript clarifying the role of let-7a during the life cycle of the silkworm."

And how it looks on PubMed...



NCBI Resources ☒ How To ☒

PubMed.gov PubMed [Advanced](#)

US National Library of Medicine
National Institutes of Health

[Display Settings:](#) ☒ Abstract [Send to:](#)

[BMC Genomics](#), 2009 Sep 28;10:455. doi: 10.1186/1471-2164-10-455.

MicroRNA expression profiling during the life cycle of the silkworm (*Bombyx mori*).

[Liu S¹](#), [Zhang L](#), [Li Q](#), [Zhao P](#), [Duan J](#), [Cheng D](#), [Xiang Z](#), [Xia Q](#).

[+ Author information](#)

Retraction in [BMC Genomics](#), 2011;12:284. [Open/close author information list](#)

Text recycling (self-plagiarism)

- Duplication of text from authors' own previous publication
复制作者之前发表的文章
- Usually without attribution
通常未注明来源
- Acceptability depends on journals' policy
是否被接受取决于期刊政策
- Try to avoid repeating your previously published text, but if it is unavoidable:
尽量避免重复使用自己之前发表过的文字

- Be transparent
- Tell the editor
- Cite the original article

How to deal with text recycling

These guidelines are intended to guide editors when dealing with cases of text recycling.

Text recycling, also known as self-plagiarism, occurs when sections of the same text appear literally or substantially in more than one of an author's own publications. The term 'text recycling' has been chosen to differentiate from 'text duplication', i.e. when another author's words or ideas have been used, usually without attribution.

A separate issue, not to be confused with text recycling, is redundant (duplicate) publication. Redundant publication is the often avoidable practice of publishing the same or similar data or ideas, often without full attribution to previous work. This is outside the scope of these guidelines and is covered elsewhere.

Journals should also ensure that they have a clear policy on duplicate publication, detailing what is considered a previous publication and the terms of authors of the need to declare any potentially overlapping publications and cite them.

How can editors deal with text recycling?

Editors should consider each case of text recycling on an individual basis as the 'significance' of the overlap, and therefore the most appropriate course of action, will depend on a number of factors. These factors will be discussed in more detail below and include:

- How much text is recycled
- Where in the article the text recycling occurs
- Whether the source of the recycled text has been acknowledged
- Whether the article is a research or non-research article
- Whether there is a breach of copyright
- In some circumstances, related norms at the time and place of publication

When should action be considered?

Text recycling can occur in submitted manuscripts or published articles. It can occur in different article types (e.g. research articles, review articles) and in different sections within the article. When significant overlap is identified between two or more articles, editors should consider asking for clarification and/or taking action. What is considered 'significant overlap' will depend on a number of factors including where in the article the text recycling occurs. This will be discussed in more detail below.

In general terms, editors should consider how much text is recycled. The more of an article's content is recycled, the more likely it is that the text is recycled in a way that is not appropriate.

When deciding whether to take action, editors should consider whether there is significant overlap with a previous publication and how significantly the degree of overlap impacts on the originality of the content for the journal's audience. While the factors discussed below should be taken into consideration when deciding on the significance of the overlap, editors need to decide whether the author has used text legitimately or has misrepresented previously published data or data as new.

Research articles

Introduction and background
Some degree of text recycling in the background introduction section of an article may be unavoidable, particularly if an article is one of several on an unrelated topic. Duplication of background information may be considered less significant or more contextualised data. Editors should consider how much text is repeated verbatim, and whether the repeated text is cited through editors should note that citing the source is not a justification per se.

Text recycling - example



Researchers have published an article reporting the primary outcomes of a large RCT. They now want to publish another article reporting the secondary outcomes. The methods used are the same.

How can they report the methods in their new paper?

Original published article methods:

This study was a randomised controlled trial (RCT) conducted in four teaching hospitals in London. Patients were recruited between January 2007 and December 2008. Patients were eligible for inclusion in the study if they were over the age of 18 and had undergone an elective laparoscopic cholecystectomy..... (the methods would then be described in detail)

Text recycling - example



Transparently!

Methods (new article):

The full methods of this study have already been reported in our previous article [6]. Briefly, we conducted a randomised control trial involving patients over the age of 18 who had undergone and elective laparoscopic cholecystectomy in 2007/8 in one of four London teaching hospitals.

There is no need to repeat the description of the methods as the authors provide a citation for the details. This clarifies that the results reported in the new article are secondary outcomes from the previous study rather than misleading the reader into believing this was another study.

不需要重复全部的方法，只需简要描述和引用原文为参考文献。这样做是为了将本次研究作为上次实验的后续，而不会让读者误以为这是个全新的试验。

Duplicate submission



Is it ok to submit to more than one journal at once?
是否可以将一篇文章同时投给多个期刊

Consequences of duplicate submission: 一稿多投的后果

- Rejection of both manuscripts 被双方期刊拒稿
- Editor may contact the authors' institution 编辑会告知作者学校
- Duplicate publication 重复发表
- May lead to retraction (14.2% of all retractions) 被撤稿
- Wastes editors' and reviewers' time 浪费编辑和审稿人时间

Competing interests



Competing interests can be: 竞争关系体现在涉及钱和不涉及钱两方面

- Financial
- Non-financial

Importance of declaring competing interests on submission

投稿时注明竞争关系的重要性

- Editor is aware during manuscript assessments 在处理稿件时提醒编辑
- Editor will not invite reviewers with the same CI 不邀请有竞争关系的审稿人
- Reviewers are aware when assessing manuscript 提醒审稿人
- Readers are aware once published 在文章发表时提醒读者

Declaring a CI does not mean that an article will not be published

注明竞争关系并不意味着文章无法发表

Question

In your paper you report that a commercial sequencing technology works very well; you have shares in the company that makes the technology.

文章中指出一种商用的测序技术效果很好，同时该作者持有销售该测序技术公司的股票

Is this a competing interest?

Question

In your paper you report that a commercial sequencing technology works very well; you have shares in the company that makes the technology.

文章中指出一种商用的测序技术效果很好，同时该作者持有销售该测序技术公司的股票

Is this a competing interest?

Answer: yes. It is a competing financial interest.

Question

In your paper, you report that there are no adverse effects of smoking on fertility; your husband works in the cigarette industry.

文章中指出吸烟对生育没有负面影响，同时该作者的丈夫在烟草行业工作。

Is this a competing interest?

Question

In your paper, you report that there are no adverse effects of smoking on fertility; your husband works in the cigarette industry.

文章中指出吸烟对生育没有负面影响，同时该作者的丈夫在烟草行业工作。

Answer: yes, a non-financial competing interest.

· Authorship problems can slow down publication

- -there can be time-consuming disputes if someone is excluded who feels that they should be an author.

如果有未被列为作者的人认为自己应该是作者之一，由此产生的纠纷将耗费大量时间

- -there can be delays if information about one or more authors is missing or incorrect.

作者信息缺失或错误会造成审稿时间被拖延

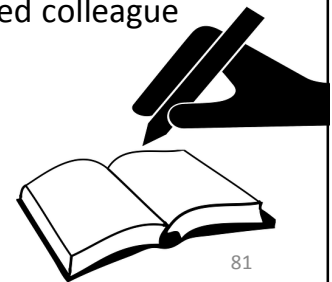
Who should be the first author on a paper?

- This should be the person who made the greatest contribution
对文章做出最大贡献的人
- BUT conflicts can arise when one person devised the concept for the study, but someone else did most of the work.
但是如果主要设计该实验的人并不是干活最多的人，矛盾就会出现
- Issues are becoming more common with the increase in 'big data' studies that involve many collaborators
越来越多的问题出现在合作者众多的“大数据”研究中

Authorship



- Choose collaborators you have a good relationship with
选择关系密切的合作者
- Agree on authorship early and keep agreements in writing
提早确定作者及排序并进行书面协议
- Provide author contributions in manuscript
在文章中写明作者贡献比例
- Provide correct email addresses for all authors
提供每个作者的正确邮件地址
- If disagreements happen, take into account everyone's point of view
如果纠纷出现，综合考虑每个人的意见
- If you can't agree, ask advice of your supervisor or a trusted colleague
如果存有异议，向导师或可信的同事征求意见
- Tell the Editor about any changes
有任何更改都需要让编辑知情



Consequences of unethical behavior: 违反伦理道德投稿的后果

- Studies without ethical approval (where needed) are rejected
文章因没有得到相关许可而被拒稿
- Unable to publish in the future 以后的文章均无法发表
- (some) journals ban authors 一些期刊设有作者黑名单
- Loss of reputation 名声受损
- Loss of employment 丢掉工作

Open access vs subscription



Open access

Submission → Peer review → **Publication**



- High visibility
- Everyone can read
- Free to read
- Free reuse
- Author keeps copyright

Both permanent and indexed (SCI)

Subscription

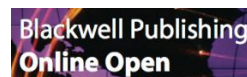
- Subscription barriers
- Limited readership
- Publisher has copyright

The changing landscape of open access publishing

2000



2015



And many more...⁸⁴

Article-publishing charge (APC)



文章发表的各个阶段都的成本均由文章出版费（APC）支付

- **Editorial:** peer review, administrative support, commissioning, journal development etc.
- **Technical:** development, maintenance and operation of online journal system. Web technology keeps costs low
- **Production:** formatting and mark-up of articles, inclusion in indexing services
- **Marketing:** making sure readers and authors know about the journal
- **Customer service:** responding to authors/readers



Funders have OA mandates



- Wellcome Trust
- US National Institutes of Health
- Howard Hughes Medical Institute
- European Research Council
- National Natural Science Foundation of China
国家自然科学基金委
- Chinese Academy of Sciences 中国科学院
国家自然科学基金委和中国科学院均在实行强制OA政策



CHINESE ACADEMY OF SCIENCES

Advantages of open access

BioMed Central
The Open Access Publisher

Springer

Continuous publication – not limited by print deadlines 连续出版

No limits on size, number of colour figures, videos, additional files – not limited by page numbers

长度内容皆不受限制（无额外版面费）

Very focused on author satisfaction – happy authors submit again

注重作者投稿体验

High-quality peer review 严格同行评审

Focus on increasing visibility of articles through blogs, blurbs, tweets

专注提高文章能见度

Articles can be widely reused

Allows text mining of data and literature



About BioMed Central



- **First open access publisher** 最早的开放获取出版社
- >150,000 articles published in
>280 open access journals
- **Every research article is:** 每篇文章都符合以下要求
 - Peer reviewed 通过同行评审
 - Freely and immediately accessible to everyone
立即对所有人免费开放
 - Archived in PubMed Central and other archives
永久存储于PubMed Central及其他数据库
- **Many journals are:**
 - Indexed in MEDLINE, Biosis (all biology titles)
 - Tracked by Thomson-Reuters for Impact Factors
大部分期刊被SCI收录，有影响因子





Our journals



 **BioMed Central**
The Open Access Publisher

 **Springer**

 **Genome Biology**

 **Genome Medicine**

 **BMC Biology** 

 **BMC Medicine** 

 **Epigenetics
& Chromatin**

 **CLINICAL
EPIGENETICS**

 **BIOLOGY DIRECT**

 **Mobile
DNA**

 **VETERINARY RESEARCH**

 **VIROLOGY JOURNAL**

 **BMC
Genomics**

 **BMC
Bioinformatics**

 **BMC
Research Notes**

 **SpringerPlus**

High visibility



- Over 1.5 million registrants
(15,000 new registrants each month)

超过150万注册用户 (每月新增1.5万)

- 405,000 BioMed Central email update recipients

40.5万人定期收到介绍最新进展的邮件

- Over 8 million user sessions each month

每月超过800万人次访问

- 27 million page views per month

每月超过2700万次页面点击



Institutional Membership Program



- Convenient and cost-effective
- Increased exposure for an organization
机构会员可为科研人员节省文章出版费用，还可增加机构的曝光度

500+ members in 50+ countries and regions

Members in China

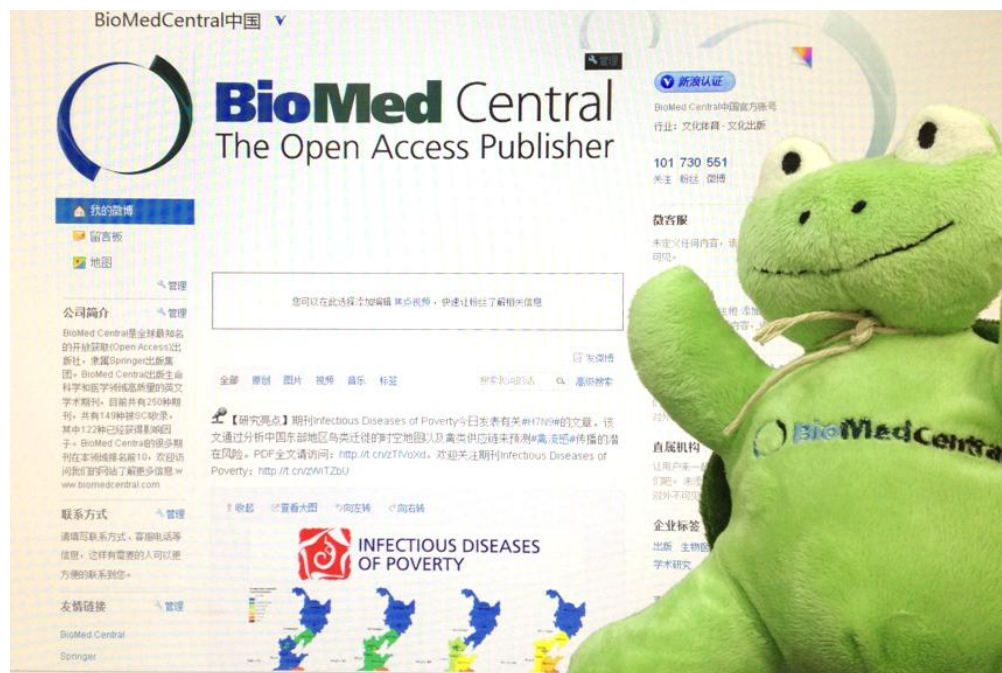
- ✓ Chinese Academy of Medical Sciences
- ✓ Chinese Academy of Sciences
- ✓ Academy of Military Medical Sciences
- ✓ Fudan University
- ✓ Shanghai Jiaotong University
- ✓ Southeast University
- ✓ National Institute of Parasitic Diseases, China CDC – Prepay Membership

BioMed Central官方微博

BioMed Central
The Open Access Publisher

Springer

- <http://weibo.com/biomedcentral> @BioMedCentral中国





如果手机上已有新浪微博app

请打开并点击页面右上角按钮，找到扫一扫功能，扫描问卷上的二维码，进入页面并点击左下角关注按钮即可。

如果没有客户端，请打开浏览器输入
<http://www.weibo.com/biomedcentral>
 进入页面并点击上方关注按钮即可。



谢谢！

- **程熹**
- **Tel :** 010-82670211-813
- **Fax:** 010-8267022
- **Email:** xi.cheng@biomedcentral.com
- **徐白露**
- **Tel :** 010-82670211-806
- **Fax:** 010-8267022
- **Email:** bailu.xu@biomedcentral.com



欢迎访问
BioMed Central中国站

<http://www.biomedcentral.com/china>



关注官方微博 
@BioMedCentral中国

<http://weibo.com/biomedcentral>