The challenge of publishing your most important work

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Journal categories

• Subscription, open access or hybrid

• Print format with online access or online only

• Private commercial, public profit-generating or not-for-profit

• Professional editors, academic editors or both
Growth of OA

Publications
BMC
PLoS
Hindawi
% OA in the life science literature

%PubMed available as open access in PMC
How does peer review work?
Is peer review broken?

http://the-political-ear.com/?p=595
Reform peer review!

End the wasteful tyranny of reviewer experiments

Peer review of scientific papers in top journals is bogged down by unnecessary demands for extra lab work, argues Hidde Ploegh.

“\textit{The stress associated with publishing experimental results...can drain much of the joy from practicing science.}”

Martin Raff, Alexander Johnson and Peter Walter
The evil referee #3

Scientific Peer Review, ca. 1945

It's always the third goddamn reviewer that screws us over!!

http://youtu.be/-VRBWLpYCPY
Limitations of the print model

- Presentation of new research often limited by the print edition
- Time to put digital first

http://www.fhybridphotos.com/objects_stock_photo_1130183.html
Greek scientists lose access to digital journals

The country's economic crisis is hitting researchers hard.

Alison Abbott
02 July 2015

The Internet portal (HEAL-Link) has cut access to electronic journals, because the government has run out of funding. Despite the threat of a third bailout, scientists are not expecting rescue funds to become available this time around.

Greece’s stormy economy is far from the only problem plaguing the country. In recent years, the country has also struggled with the threat of a third bailout. As a result, scientists are not expecting rescue funds to become available this time around.
Citation data are a blunt instrument, at best

In every case, the medians are far lower than the means, reinforcing the point that JIF is almost useless as a predictor of likely citations for an individual paper.

关于调整研究所科技绩效奖励方案的通知

所属研究组：

经所学术委员会研究，第九届所长第15次所务会讨论通过，决定对我所“科技绩效奖励”方案进行如下调整：

1. 研究论文奖励等级分为：一等奖、二等奖和鼓励奖。奖励范围和金额如下：

<table>
<thead>
<tr>
<th>奖励等级</th>
<th>奖励范围</th>
<th>单篇奖金</th>
</tr>
</thead>
<tbody>
<tr>
<td>一等奖</td>
<td>《Cell》，《Nature》，《Science》</td>
<td>20万元</td>
</tr>
<tr>
<td>二等奖</td>
<td>《PNAS》以上及相当</td>
<td>5万元</td>
</tr>
<tr>
<td>鼓励奖</td>
<td>《生物化学与生物物理进展》、《生物物理学报》、《Protein Cell》</td>
<td>500元</td>
</tr>
</tbody>
</table>

“PNAS 以上及相当”：原则上为当年 IF ≥ PNAS 的期刊。特殊情况需重点实验室提交所学术委员会审议。

2. 增加对联合培养学生发表论文的奖励。对于联合培养的研究生，科研工作在我所完成，以我所为共同的第一作者单位和通讯作者单位的研究成果（其中学生资格以单位签订的联合培养学生协议为依据）。

• General recommendations
  – Move away from impact factors
  – Assess outputs on their own merits
  – Exploit new tools and approaches
• And specific recommendations for publishers, funders, institutions, metrics suppliers, and researchers
• >6000 signatories
Huge news. We won negotiations with Macmillan. All #Nature journals to be re-branded TRUMP. All will be IF > 50 in 2016! Suck it, Schekman!
Ground-breaking science, selected by experts, published without delay, open to the world

elifesciences.org
Consultative review process

- Streamlined submission process prior to triage
- Limit submissions entering peer review
- Source files plus information important for peer review
- Consultation amongst reviewers before decision
- Single set of instructions – focused revision
- Limit rounds of revision

The end result

> A constructive process
> Reduced times from submission to acceptance
<table>
<thead>
<tr>
<th>REVIEWER</th>
<th>COMMENT</th>
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<tbody>
<tr>
<td>[BRE; Reviewer 1]</td>
<td>I don't think the incremental part was a uniform view. I was not in a position to judge, but I am not sure that [Reviewer 2] would agree. Maybe he would. [Reviewer 2] if you concur, I will reject. I would like your input on my difficulties following the paper. You both have interests that overlap the contents of the paper.</td>
</tr>
<tr>
<td>[Reviewer 3]</td>
<td>[BRE/Reviewer 1], I suggest that you re-read [a previously published] paper before making any decisions on this paper.</td>
</tr>
<tr>
<td>[BRE; Reviewer 1]</td>
<td>Actually, I will have to read it for the first time, not re-read it. I have not taken any position on the derivative nature of the paper yet. I had other problems with the manuscript – problems of the naive reader. I am waiting to see if [Reviewer 2] wants to defend the paper from either of our (yours or my) concerns.</td>
</tr>
<tr>
<td>[Reviewer 2]</td>
<td>I thought the paper was well written and was able to follow it. As I mentioned in my review, I do think it mirrors much of [previously published] work, but in my opinion, the work presented here is cleaner and even more compelling. However, one thing that was not clearly articulated in this paper is how this work advances (and distinguishes itself from) [previously published] work. My instinct would be to accept it: the movies themselves are absolutely wonderful and the paper will be highly cited. One idea is to let the authors respond to the reviews, with the understanding that there were some concerns about the novelty of the work.</td>
</tr>
<tr>
<td>[BRE; Reviewer 1]</td>
<td>I was just about to commence with rejecting the manuscript. And then I paused. I want to raise the issue of the &quot;synapses&quot;, which I think might carry the manuscript over the hump. Showing these connections is very important for a couple of reasons. It provides mechanism for cell-cell transfer. Is this a new finding and is it of general interest?</td>
</tr>
<tr>
<td>[Reviewer 2]</td>
<td>I favor acceptance after looking at the paper again last night. I do think the &quot;bells and whistles&quot; make this a significant contribution. In addition, providing the images to support the model is important and challenging. Again, the movies are simply fantastic.</td>
</tr>
<tr>
<td>[Reviewer 3]</td>
<td>I have no objection to accepting the paper as I feel that the quality is high. I think this is more of an editorial decision rather than a scientific one.</td>
</tr>
<tr>
<td>[BRE; Reviewer 1]</td>
<td>It is a close call. My thinking now is that if they can be more clear about their advances that this can be accepted. I will try to make it clear to them that contributions vs confirmations and speculations should be clear.</td>
</tr>
<tr>
<td>[Reviewer 2]</td>
<td>Thanks [all]. [This] is a great review process.</td>
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Submissions and publications

Earlier this year eLife published our 1000\textsuperscript{th} research article and is now receiving more than 500 submissions per month.
Volume of publishing

Number of research papers published in the life sciences, January to June 2015

- eLife
- Nature
- Science
- Cell
- PLOS Biology
Quality of service

Submission to Publication Time

Days

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Institutions with the most papers accepted by *eLife*, up to March 2015

<table>
<thead>
<tr>
<th>Institution</th>
<th>Papers</th>
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<tbody>
<tr>
<td>University of California, Berkeley</td>
<td>50</td>
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<tr>
<td>UT Southwestern</td>
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<tr>
<td>University of California, San Francisco</td>
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<tr>
<td>University of Oxford</td>
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<td>Stanford University</td>
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<td>Harvard Medical School</td>
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<td>University of Cambridge</td>
<td>17</td>
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<tr>
<td>Yale University</td>
<td>17</td>
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<tr>
<td>Medical Research Council Laboratory of Molecular Biology</td>
<td>14</td>
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</tbody>
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I hate the editors of these journals more than I hate Republicans.

—James Watson, of double-helix fame, speaking about recent rejections from several journals