Experiences, Reflections, Gripes and a Wish List:
Representing how Academic Clinicians relate to the Publishing Industry

Dr Philippa C. Matthews
MRCP FRCPath DPhil
Wellcome Trust Clinical Research Fellow,
Honorary Consultant in Clinical Infection
Disclaimer

This is a representation of my own views only.

I am an academic medic.
THE WISH LIST: why we want to publish

• To advance the field by sharing results and resources;
• To drive collaboration (and competition?) with other scientists / researchers / clinicians;
• To provide feedback and a portal for dialogue with patients, research participants, and collaborators;
• To promote medical/scientific education, including within schools;
• To demonstrate productivity, independence and progress to current and future funders.
“In the old days, journals were viewed as a means of disseminating ideas... I think that doesn’t apply any longer. The most important function that journals have these days is the certification of quality.”

Pinelopi Goldberg, Professor of Economics, Yale; Editor in Chief of the American Economic Review
What are the challenges in optimising the interface between academia and publishing?
Complicated lives
Social media and on-line publication

Researchers’ contractual obligations to their funders
‘Big Data’ – an understatement?

There was 5 exabytes* of information created between the dawn of civilization through 2003, but that much information is now created every 2 days.

Eric Schmidt, Google (2010)

*1 exabyte = 1 billion gigabytes = 1 quintillion bytes
Beware the Impact Factor
Nature Materials 12, 89 (2013) doi:10.1038/nmat3566

Figure 1: A journal's impact factor is a good predictor of its five-year median of citations to primary research articles.

The data and linear fit ($r^2 = 0.94$) correspond to a sample of 100 journals launched before 2008. The five-year median values are of citations (as of 5 January 2013) to research papers (that is, excluding reviews, news, editorial material and other non-primary research articles) published in 2008–2012. The specific median values and slope of the linear fit (here 1.04) depend on the citation time window (here 1 January 2008 to 5 January 2013), impact-factor year and data source (here Thomson Reuters Web of Science). Journals included in the sample span the physical and chemical sciences, the biological and medical sciences, the earth and environmental sciences, and engineering.
My learnt paradigm about publishing

- Conveyor belt – single direction of automated flow.
- No room for dialogue / negotiation (especially when you’re in the junior ranks).
- Anonymous; closed portal.
- Occasional interactions mostly around rejection / rebuttal / raising challenges.
The rocky road of publishing a paper: personal gripes and grouchesc

• ‘We don’t accept pre-submission enquiries’.
• Conflict of interest statement required at the point of first submission with original signatures from all authors.
• Submitted / reviewed / re-submitted with changes / rejected by editorial team because ‘not a randomised controlled trial’ (10 weeks).
• Review article submitted / reviewed / resubmitted with changes / re-reviewed by new reviewers who disagreed with the first ones / rejected.
• Submitted with all journal-specific requirements including bullet point synopsis, infographic, first author bio / reviewed with positive comments / rejected (generic rejection letter).
• Transposed columns in suppl. data table – spotted by a reader after publication but formal erratum not justified, and journal unwilling to update the record.
• Two case studies...
# On-line publication: time line

<table>
<thead>
<tr>
<th>ACTION</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection</td>
<td>2013-2014</td>
</tr>
<tr>
<td>Data analysis and manuscript preparation</td>
<td>2015</td>
</tr>
<tr>
<td>Article submitted to Journal 1</td>
<td>09-Dec-15</td>
</tr>
<tr>
<td>Detailed reviews and letter of rejection</td>
<td>18-Jan-16</td>
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<tr>
<td>Made changes and sent to Journal 2</td>
<td>04-Feb-16</td>
</tr>
<tr>
<td>Detailed reviews and invitation to resubmit</td>
<td>11-Apr-16</td>
</tr>
<tr>
<td>Made changes and resubmitted</td>
<td>02-May-16</td>
</tr>
<tr>
<td>Rejected!</td>
<td>06-Jun-16</td>
</tr>
<tr>
<td>Altered format and resubmitted to Journal 3</td>
<td>22-Jun-16</td>
</tr>
<tr>
<td>Detailed reviews and invitation to resubmit</td>
<td>08-Aug-16</td>
</tr>
<tr>
<td>Made changes and resubmitted</td>
<td>26-Aug-16</td>
</tr>
<tr>
<td>Still waiting....</td>
<td>15-Sep-16</td>
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Vision

- On-line data-base
- Live and evolving
- Searchable
- Allows generation of graphics
- Downloadable
- Promotes dialogue – researchers contribute new data, submit corrections, comment on uploads, add experimental details etc.
Challenges

- I don’t have the expertise to create this;
- Anxiety about curation of a live resource;
- The average journal doesn’t want to publish something that’s an idea or a work in progress;
- I need to retain ownership and be able to generate citations;
- Academics are often not good at dialogue with publishers, media, IT etc;
- How do I know who to ask?
Representation of wider views

10 questions via Surveymonkey™ to capture details of respondents, and their views on the relationship between academia and publishing, answered on-line over 10 days (31/8 to 9/9).

Distributed by email (professional mailing lists) and social media (Facebook / Twitter).

Too successful (!): the full data-set is available on-line.
http://f1000research.com/slides/5-2286

An open science publishing platform for life scientists that offers immediate publication and transparent peer review.
Questionnaire Results

102 responses

**Q1** How would you describe your current role?

- Mainly or completely clinical (n=48)
- Mainly academic (n=32)
- Completely academic (n=16)
- None of the above (n=6)

**Q2** How would you describe your current grade?

- Student, including PhD / Masters (n=2)
- Post-Doc (n=12)
- Research or clinical medic below consultant grade (n=46)
- Consultant / professor / non-medic PI (n=34)
- Research assistant (n=2)
- None of the above (n=6)
Questionnaire Results

Q3: Overall, I think the peer-review process functions equitably and contributes to improving the quality of my work.

- **Strongly agree**: 2%
- **Agree**: 56%
- **Neither agree nor disagree**: 19%
- **Disagree**: 19%
- **Strongly disagree**: 4%

Percentage of respondents
Q3: If you have ideas for how peer-review could be improved, please offer them here:

“I think peer review is necessary but perhaps more involvement by the editors to weed out unhelpful comments / reviewers is necessary.”

“Another model to consider might be an open review process… in which the entire scientific community can comment on a manuscript.”

“Peer reviewing should be either double blinded (reviewers don't know who wrote article) or completely transparent (authors know reviewers).”

“There needs to be a better way perhaps of 'reimbursing' reviewers, not necessarily financially…”
Questionnaire Results

Q4: I am frustrated by the length of time it takes to publish my work.

- Strongly agree: 27%
- Agree: 49%
- Neither agree nor disagree: 18%
- Disagree: 4%
- Strongly disagree: 1%

Percentage of respondents: 76%
Questionnaire Results

Q5: I feel comfortable and confident contacting editors and publishers to discuss my work before submitting for publication.

- Strongly agree: 2%
- Agree: 21%
- Neither agree nor disagree: 31%
- Disagree: 41%
- Strongly disagree: 5%

Percentage of respondents
My personal favourite

“"I have more than 80 published papers. I have never contacted an editor/publisher to discuss a paper in advance. Should I? Do people do that???
It would feel like coercion to do that.
How come I didn't know to do that?...
Are some people getting unfair advantage by developing relationships with editors?
I've clearly been missing a trick…”"
Questionnaire Results

Q7: The process of publication is flexible, supports innovation, and allows me to be creative.

- Strongly agree: 0%
- Agree: 9%
- Neither agree nor disagree: 25%
- Disagree: 47%
- Strongly disagree: 19%

66%
Questionnaire Results

Q8: I have interacted with Society publishers to disseminate my work (e.g. Royal College of Physicians, Royal Society of Chemistry).

Free text responses offering three contrasting views:

- “I worked with the Royal Society to publish and found the experience beneficial and educational.”
- “No, insufficient impact factor.”
- “Not sure, am writing [an educational module for a professional body] at the moment, does that count?”
Q9: What (if any) suggestions do you have for publishers to help them enhance your experience of academic publication?

“More proof of concept / exploratory studies should be accepted to help innovation.”

“Peer-review needs to be more methodical.”

“More recognition for peer reviewers.”

“Research groups are still fixed on the notion of publishing in high impact only journals, which delays work being published in general.”

“The impact factor model is broken”

“Please publish accepted manuscripts in full quickly”

“Faster turnaround.”

“Funding of publication is a problem for me. Both in terms of being open access and also having to pay to publish”

“More flexibility with formats, including word length and also writing style.”

“Standardised formatting between publications.”

“Have a designated person at the journal with whom an author can speak in person.”
Potential morbidity associated with publishing

**AGEING**
We’re all quite a lot older by the end of a project.

**IRRITATION**
Everyone is cross.

**DECAY**
The data deteriorate rapidly and there is no room for updates.

**PARALYSIS**
We can’t move on with the next project.

The sick child, Edvard Munch (1907)
THE WISH LIST: *how we want to publish*

- Either standardise or abolish formatting requirements;
- Undertake prompt and equitable peer review (open access);
- Make results timely - data can change practice;
- Intervene with sensible Editorial input when reviewers disagree or author/review disagree;
- Produce something ‘live’ with real time updates;
- Promote transparent discussion with editors / publishers (*not* coercion!) via clear communication channels; dialogue should not be seen as ‘cheating’.
- Improve relations with society publishing – this may offer new/different options, which many academic clinicians do not (knowingly) engage with.
- Reduce anxieties around cost;
- Create and promote more flexible, interesting, diverse, creative options for publishing.
Q10: How would you describe academic medics?
(pick up to 5 answers from the list provided)

Hierarchical
Independent
Collaborative
Competitive
Acquisitive
Adventurous
Institutionalised
Self-opinionated
Inspiring
Imaginative
Pioneering

Answers are represented here with size representing the frequency of the word choice. The colour of the word is not significant.
Reasons to be optimistic

Personal experiences
Strengths & qualities
Willingness to discuss...
...from all parties
New models
Funding commitment

Thank you
p.matthews@doctors.org.uk
@pippa_matt

Philippa Matthews, Sept 2016
Inviting your responses

https://www.surveymonkey.co.uk/r/academicpublishing

p.matthews@doctors.org.uk
@pippa_matt

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