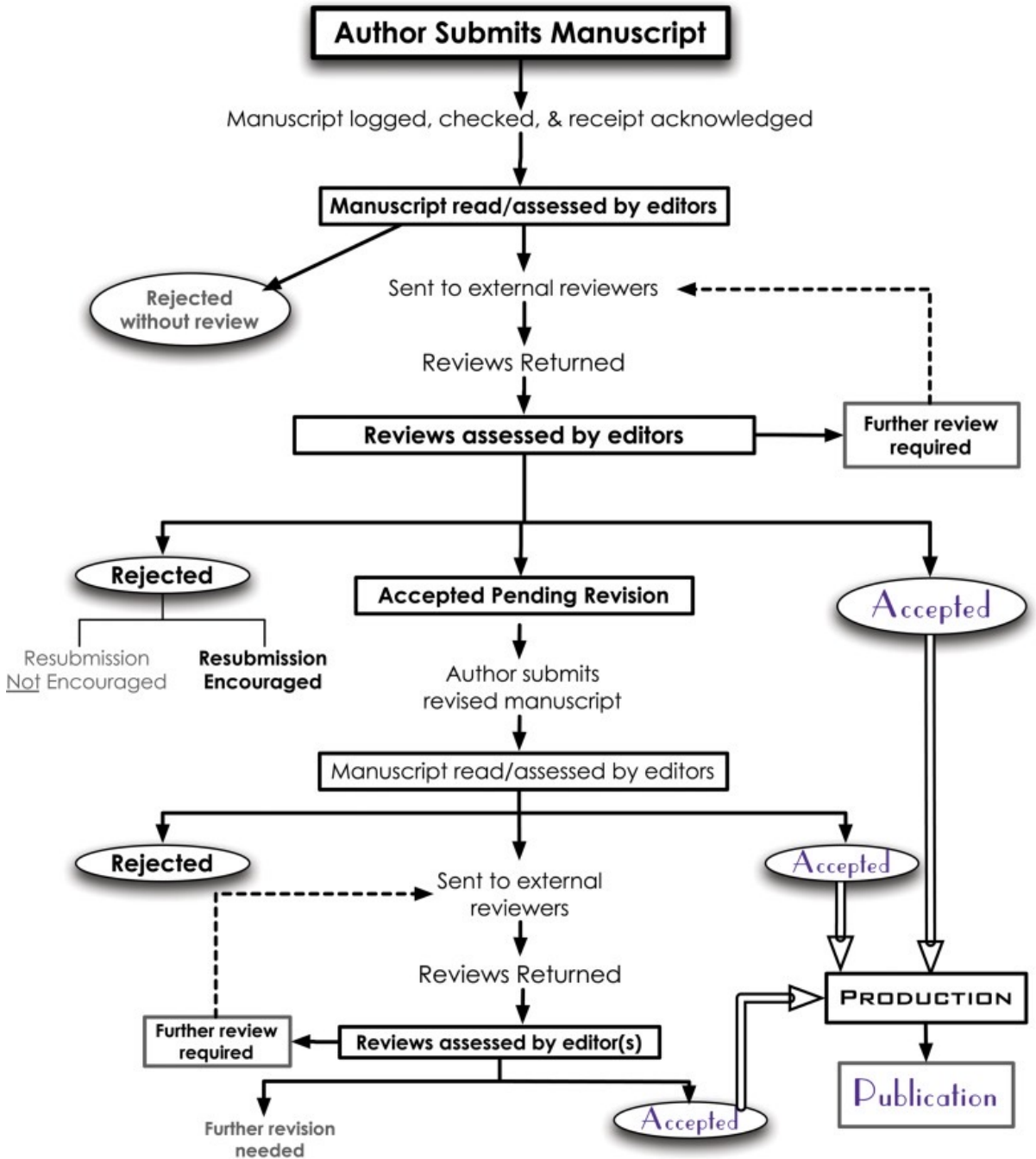
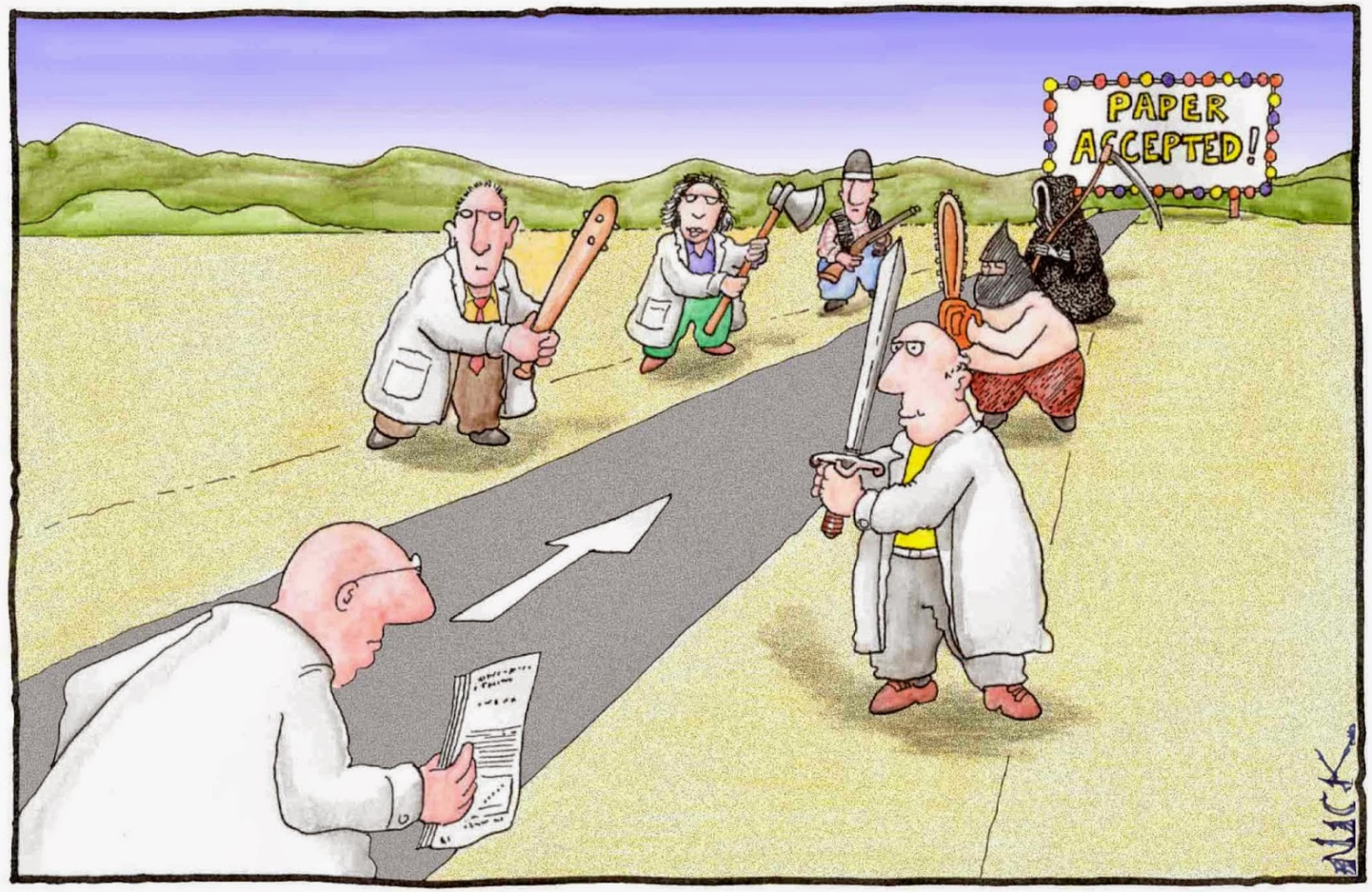
Peer Reviewing

The Peer Review Process



Voight ML, Hoogenboom BJ. Publishing your work in a journal: understanding the peer review process. *Int J Sports Phys Ther*. 2012;7(5):452–460.



Most scientists regarded the new streamlined peer-review process as ‘quite an improvement.’

Duties as Referee

Specifically for reviewing review papers:

- Assess significance
- Verify accuracy
- Improve clarity

An example of a good peer review

Reviews and Comments

Review 1	
PC member	Francesca Mattioli
Time	Nov 23, 10:39
Overall evaluation	**2**: (accept) This review describes the present knowledge of the CSMD proteins in neurodevelopment. Overall, it is well written and clear, presenting the main understanding of the role of these proteins in neurodevelopment to a broad audience. However, it could benefit of a better organization of the content and the addition of more studies. For instance, the organization from the paragraph "Two new members of the CSMD" family until the conclusions makes the reading difficult. The reading flow would improve if each CSMD protein is described separately with each paragraph grouping its information, including its disease association and its role in neurodevelopment. Some studies should also be added in these sections. For examples, some animal models should be described (PMID: 37037606; 24244513) and novel disease association with CSMD1 (PMID: 37549685, 36854624). In the section "CSMD3 in benign adult familial myoclonic epilepsy" it is not described how the myoclonic epilepsy of type 1 has been mapped to this chromosomic region. Since "This study did not show a link between CSMD3 mutations and benign adult familial myoclonic epilepsy" it would be relevant to cite the previous linkage analyses. The conclusion in the paragraph "CSMD2 in adult ADHD" should be better explained: how there is an association with CSMD2 but that doesn't influence the risk of ADHD? Another study of CSMD2 and ADHD (PMID: 28332277) could also be reported. In the section "A possible association of CSMD1 and CSMD2 and schizophrenia" is described that markers of CSMD2 were the most represented ones associated with schizophrenia. Please, also explain how the study showed an association between CSMD1 and schizophrenia. Of note, two recent studies have been published about CSMD1 and schizophrenia (PMID: 37748985, 37511534). The genetic origin of intellectual disability (ID) in the introduction is not exhaustive: i.e. it's missing the introduction of next-generation sequencing technologies and its implication, the different inheritance mode, ... MINOR COMMENTS: Gene name abbreviations should be italicized while proteins should not. Please, correct them throughout the text. The sentence in the introduction "Most of the affected individuals have mild intellectual disability" is missing a reference. The acronym ADHD should be spelled at the first appearance in the text. It would be interesting to have examples of proteins with a known function and CUB and sushi domains. Also, while this review focuses on neurodevelopment, it would still be worthy to briefly mention the putative roles of CSMD proteins in other cells and/or disease.
Reviewer's confidence	**3**: (medium)
Confidential remarks for the program committee	

Significance

- Is the topic addressed important/interesting? (Does the review say why?)
- How original is the review? (Compared with existing reviews of field?)
  - Considers the topic from a different angle
  - Different interpretation of the same results
  - Writing for a different audience
- Are the results reported significant?

Accuracy

- Are all claims backed by evidence?
- Are the evidences relevant/reliable/sufficient?
- Are methods/results appropriate and well-described?
- Is important relevant work omitted?
- Does the review suffer from any bias?
- Is the review balanced?

Accuracy

- Are the concepts explained correctly according to the current understanding in the field?
- Is terminology defined and used in a consistent and accepted way?
- Does the manuscript cite important recent research? Are the data and conclusions from the cited publications faithfully represented? Does the manuscript cite any disputed or discredited studies?
- Are author hypothesis vs. prevailing opinion vs. undisputed fact accurately delineated?
- **Would a non-expert reader come away with a correct understanding of the topic?**

https://researcheracademy.elsevier.com/navigating-peer-review/certified-peer-reviewer-course/33-peer-review-review-article

Clarity

- Is the review well-organised?
- Do title/abstract accurately reflect content?
- Is there the right level of detail?
- Are there language issues or typos?
  - It’s crucial that language and phrasing is clear and unambiguous to avoid confusion or misinterpretation.

https://thenode.biologists.com/another-look-at-peer-review-reviewing-review-articles/resources/

Clarity

Figures

- Are the figures well designed, well presented and intuitive?
  - Would additional figures, boxes or tables help to clarify text and illustrate important key points?
- Schematic/abstraction vs. reproduction of research results
- Legibility of small text

Courtesy

- Criticise the work, not the authors
- Mention also positive aspects
- Offer constructive criticism
- Don’t write things that you would not say in person

Be specific

- Try to be specific – refer to line or page numbers if you have concerns with a particular statement.

Iteration Process (in real life)

- Reviewers' comments sent to the Editor
- Authors make changes and respond to comments
- Revision with comments sent back to the reviewers
- Editor asks reviewers if they are happy?...
- If not repeat...

Normal Timescale to do a peer review

- Normally from 1 week to 1 month
- Repeated duration if iterated
- If delayed, the Editor might decide instead

Expectation for peer-review

- Do a careful read of the paper
- Please look at the document “How to peer review” and use as a check-sheet
- Be specific on points (quote sentences and pages)
- You can submit either a text or document