

Reviews in Computational Biology

3. Peer Reviewing



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What is Peer-Review?

- **Helps the authors improve their work**
- **Independent evaluation of an academic article, usually by an anonymous expert**
- **Helps the editor decide what to publish**

Why Peer-Review?

- **Be a good citizen**
- **Stay at forefront of research**
- **Sharpen your critical thinking skills**
- **Impress the editor**

Duties as Referee

- **Assess significance**
- **Verify accuracy**
- **Improve clarity**

Significance

- **Is the topic addressed important/interesting?** (Does the review say why?)
- **How original is the review?** (compared with existing reviews of field?)
- **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?**

Improve 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?**

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**

Example

Iteration Process

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

Normal Timescale

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

Anonymity

- **The rule not the exception**
- **But some journals provide reviewers' comments**