

Scientific publishing

Reputation building : Publish or perish

Not a narrative → laboratory notebook

Summary of research (advertisement of scholarship)

Writing as a thinking tool

Collaboration

Order: 1. Do research + write manuscript

2 Internal review: collaborators, advisor, lab mates, friends

3. Revise manuscript; May repeat review cycle

4. Select journal and submit paper for peer review

5. Peer review: 2-4 reviewers

6. Editor: Returns reviews to author

7. Revise + resubmit

8. Acceptance or rejection

9. Submit for production (typesetting). Transfer copyright
+ bill

10. Proofs \Rightarrow minor changes

11. Published online: PDF + HTML DOI

Peer review

17th century: Committee on papers

Rules of review: critical, objective and fair

No ad hominem arguments; no conflicts of interest

Reviewing is free

Changes in Scientific Publishing System

Open access movement

- preprint archives arXiv
- postpublication review
- search engines
- DOI

Practical aspects:

lab notebook

How-to of scientific writing:

- ① Write outline with key ideas; Develop line of arguments
- ② Create figures and tables
- ③ Write first draft of text
- ④ Revise

Writing techniques:

- ① Start early before deadline
- ② Write regularly
- ③ Isolate yourself
- ④ Just write
- ⑤ Do ~~the~~ something else

Structure of paper/thesis

- ① Abstract
- ② Introduction — literature review
hypotheses
- ③ Materials & Methods
- ④ Results
- ⑤ Discussion
- ⑥ Conclusion
- ⑦ References
- ⑧ Supp. Material

