Ten tips to improve your scientific writing

Tutor: Kali Tal, PhD, Medical Library & BIHAM

Research Support Service, Medical Library
Contact: kali.tal@ub.unibe.ch
Ten tips to improve your scientific writing

1. Evidence-based preparation (nobody writes a paper!)

Know your target journal(s)

- Read the author guidelines
- Read journals regularly
  - Type of articles
  - Length
  - Sections, etc.
2. Prepare an outline

- The basic outline of most scientific papers is the same: IMRaD
- MS Word has an outline function that makes organization easy (take my course!)

- Follow your journal structure
  - Paragraphing
  - Section subheaders
  - Tables & Figures

- Integrate references into your outline
Ten tips to improve your scientific writing

3. Start writing with the research question

Last paragraph of the Introduction:

Research question + study design + outcome = “Our goal was to...”
Ten tips to improve your scientific writing

4. Methods & Results: Write as you work

- Keep a detailed lab notebook
- Write down the process (kitchen recipe)
- A result for every method and a method for every result
- Paste into your outline, under appropriate subheadings
Ten tips to improve your scientific writing

5. Your message: the heart of your paper

Main finding(s) + implication(s) = Message

- Finish your analysis
- Identify your main finding(s)
- Decide on their implications (research, methodological, policy, etc.)
- The message should be refined to a single, powerful sentence that ends your paper
Ten tips to improve your scientific writing

6. Choose appropriate tables & figures

- Identify the take-away from the graphic
- Reduce or remove non-data ink
- Check the lie-factor for figures
- Design for the colorblind
Ten tips to improve your scientific writing

7. Your message is your guide

• Selection of target journal
  • General or specialist audience
  • Higher or lower impact journal?
  • Highest impact appropriate journal — avoid multiple rejections
Ten tips to improve your scientific writing

8. Choose references carefully

- Does your journal have a limit?
- Divide background references from research references
- Research references often belong in both the Introduction and the Discussion
- Check references again and again
10 tips to improve your scientific writing

9. Write your Introduction last

- Start from where your audience starts (background references)
- State of current research (studies you brought up in your Discussion)
- Create the problem
- Propose the solution to the problem (“Our goal was to…”)
Ten tips to improve your scientific writing

10. Writing a good cover letter

- We are pleased to submit our paper, “Title,” to X journal as an original research article…

- Start with the message

- Follow with background

- Include all requested materials (statements, forms)
How to become a better medical writer in 5 easy steps…

The Medical Library’s Research Support Services department is here to help….

- Free courses
  - Academic writing
  - Systematic searching

- Comprehensive searching
  (fee service)

- One-on-one sessions to develop strategic searches
  - Consultation and support
  - Library-assisted searches: up to 2 hours of free advice & help

Visit us at unibe.ch/ub/medresearch
Or write to us at med_support@unibe.ch