



Writing Workshop

PLOS and *PLOS Neglected Tropical Diseases*

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PLOS NTDs Scope

Diseases of Poverty

The NTDs are a group of poverty-promoting chronic infectious diseases, which primarily occur in rural areas and poor urban areas of low-income and middle-income countries.

Diversity of Article Types

Publish on all aspects of NTDs research: pathology, epidemiology, prevention, treatment, control, public policy, global health

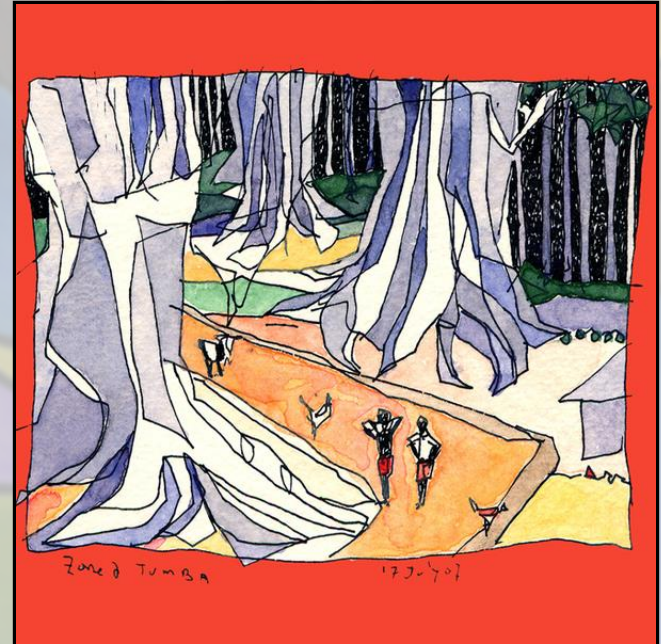
Defined by Neglect

WHO 17 NTDs:

Buruli Ulcer, Chagas Disease, Dengue, Guinea-worm, Echinococcosis, Foodborne trematodiasis, Human African Trypanosomiasis, Leishmaniasis, Leprosy, Lymphatic filariasis, Onchocerciasis, Rabies, Shistosomiasis, STH, Taeniasis/Cystercercosis, Trachoma, Yaws

Plus some more:

Mycetoma, Podoconiosis, Scabies, Snakebite, Strongyloidiasis, Loiasis, Toxocariasis, JEV, Yellow Fever, Rift Valley Fever, Viral hemorrhagic fevers (e.g. Ebola), Cholera, Leptospirosis, and **more on a case by case basis.**



5th Anniversary PLOS Neglected Tropical Diseases issue image

Image Credit: Matthew Cotten
doi:10.1371/image.pntd.v06.i06.g001

Mission-Driven Journal



Capacity, Representation, and Access:

- ❖ 50 % Acceptance Rate
- ❖ International Conference Attendance
- ❖ Specific Recruitment of Endemic Researchers to Ed Board
- ❖ Foreign Language Abstracts
- ❖ Large FM Section with Policy and Education Focus
- ❖ Broad Collections scope, from individual diseases to the Geopolitics of NTDs



**Let us look at ways to
make sure that your
results can be
successfully
published!**

How to Avoid a Rejection Letter from an Editor

Dear Sir,

Many thanks for asking whether we would like to publish your paper.

Your paper is **good** and **original**, but unfortunately we are simply not willing to publish it.

The trouble is that the **good bits were not original and the original bits were not good.**

Yours faithfully,

The Editors

Why Do Journals Reject Our Utterly Groundbreaking, Brilliant Work?

- The paper was so poorly written and so poorly structured that the editor simply couldn't fathom its meaning.
- Editors are human beings: impressed by papers that are short, easy to read, and contain a **clear message**.
 - What's yours?

Road Map

- **PREPARATION:** things to think about before you even put pen to paper
- **SELLING YOURSELF:** how to capture an editor's attention
- **STRUCTURE:** without a clear structure, you (and the editor) will be lost
- **EFFECTIVE WRITING:** there are some simple rules that can make a *huge* difference

Before You Start Writing, Ask:

What?

Where?

How?

What is My Message?

- If the editors cannot work out your single take-home **message**, they will reject your paper.
- They will also reject it if you haven't convinced them of your study's **importance**.

Where Will the Paper End Up? (Audience)

- You **MUST** choose a journal and write for that journal's audience.
- Make sure the journal publishes your type of study.
- **What does this audience already know about this topic and what do they want to know now?**
- Read the author guidelines for the journal you are submitting to.

How Will I Write It? (Style)

- Read and follow the journal's **author guidelines** and **style guide**.
- You must make sure that you've followed the guidelines for specific **types of studies**
 - RCTs: CONSORT
 - Systematic reviews: PRISMA
 - Observational epi: STROBE
 - Studies of diagnostic accuracy: STARD
 - Microarray data: MIAME

There are many resources that provide technical and editorial help to new authors especially from DEC settings.

TAKE ADVANTAGE !

EQUATOR

“The EQUATOR Network is a new initiative that seeks to improve the quality of scientific publications by promoting transparent and accurate reporting of health research.”

<http://www.equator-network.org>



The screenshot shows the EQUATOR Network website. At the top, the logo features a green globe icon next to the text "equator network". To the right is a search bar with a "Go" button. Below the logo, a navigation menu includes links for Home, About EQUATOR, Resource Centre, Courses Events, Research Projects, Links, Contact, and News. The main content area has a heading "Welcome to the EQUATOR Network website – the resource centre for good research reporting" and a large image of a green globe. To the right of the globe, text explains the network's purpose: "Too often, good research evidence is undermined by poor quality reporting. The EQUATOR Network is a new initiative that seeks to improve the quality of scientific publications by promoting transparent and accurate reporting of health research." Below this is a link: "Find out how, or [get involved.](#)". On the right side, there are three boxes: "Reporting guidelines" with a book icon and a link "Go straight to the [reporting guidelines](#)"; "Authors" with a quill icon and a link "Information for [authors of research reports](#)"; and "Editors" with a book icon and a link "Resources for [journal editors and peer reviewers](#)". At the bottom left, a "Latest news" section with a "more news" link shows a headline "CONSORT extended".

AuthorAID

Junior scientists will get a mentor (often a retired academic) who mentors them through the writing process.

<http://www.authoraid.info/about/>

The website also features a Resource Library with lectures on a variety of topics.

<http://www.authoraid.info/resource-library>



The screenshot shows the AuthorAID website homepage. At the top, there is a red navigation bar with links for English and Spanish. Below this is the AuthorAID logo and tagline: "Supporting Developing Country Researchers in Publishing Their Work". A dark grey navigation bar contains links for Home, About, News, Mentoring and Collaboration, E-learning, Funding, Training & Events, and Resources. The main content area features a large green box with the text: "AuthorAID is global online network that provides support, mentoring, resources, and training for researchers in developing countries". It also states "Registering is free and easy. Find out more about the benefits of AuthorAID" and includes a "Join now" button. Below this, it mentions "AuthorAID is coordinated by INASP." To the right of the green box is a portrait of a man. Below the green box is a "Latest News" section with three items: "Guest Post: 'Scientific Writing Made Easy'—A Workshop in Sri Lanka", "Resource of the Week #144: A Handout on Punctuation", and "Tip of the Week #163". To the right of the news section is a "Featured Researchers" section with two entries: "Lenny Rhine" and "Michelle Yeoman", each with a portrait and a "Looking for a mentee" link.

English | Spanish

AUTHOR AID
Supporting Developing Country Researchers in Publishing Their Work

Home About News Mentoring and Collaboration E-learning Funding Training & Events Resources


AuthorAID is global online network that provides support, mentoring, resources, and training for researchers in developing countries

Registering is free and easy. Find out more about [the benefits of AuthorAID](#)

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AuthorAID is coordinated by [INASP](#).

Latest News

-  **Guest Post: "Scientific Writing Made Easy"—A Workshop in Sri Lanka**
Read here about a recent 1-day workshop organized in Sri Lanka with AuthorAID collaboration.
By Barbara Gastel | Jan. 13, 2014
-  **Resource of the Week #144: A Handout on Punctuation**
Guidance on using various punctuation marks, plus examples
By Barbara Gastel | Jan. 12, 2014
-  **Tip of the Week #163**
OK to repeat
By Bernard Appiah | Jan. 8, 2014

Featured Researchers

-  **Lenny Rhine**
Research interests: he information technology, related internet resource
[Looking for a mentee](#)
-  **Michelle Yeoman**
Research interests: B RNA, microbiology, evolution, education, epidemiology
[Looking for a mentee](#)

Writing Your Paper

The First Step: Editorial Triage

•Criteria:

- Is the scope within our journal's interest?
- Does this article have a clear message?
- Is it original?
- Is it important?
- Is it true?
- Is it relevant to our readers?

*** You have to “sell yourself” to get through triage.**

What Is the First Thing That an Editor Looks At?

The Cover Letter is Crucial

Don't waste the opportunity to “sell” your work

Don't write something dull or derivative (i.e. “Please consider this manuscript for publication in your esteemed journal”)

Do tell the editor why they should take your work seriously

Pre-submission Inquiry

Saves time if you are not sure about the **suitability** of your research for the journal's interests

Evaluated based on your **abstract**

What is the Second Thing That an Editor Looks At?

The Title: Make It Compelling

Concise and informative

Should contain the most important words
related to the topic

Entices the reader without giving away the
punch-line

Not overly-sensationalized

Some journals now insist on including
information on study design

Sample Research Article Titles

Bad Title:

The amazing effect of bednets on malaria

Good Title:

A randomized controlled trial of efficacy of insecticide treated bednet use for malaria control

Titles of News Stories/ Editorials/Commentaries

Bad Titles:

- Doctor in fraud case
- Stress in doctors

Better Titles:

- Doctor convicted in \$4m fraud case
- Stress levels in doctors soar to a new high

*** GOOD PRACTICE POINT (GPP):**

Editorials/commentaries/news: put a verb in the title

What is the Third Thing an Editor Looks At?

The Abstract

MANY JOURNALS NOW BASE THEIR DECISIONS ON THE ABSTRACT ALONE

- Sadly, many authors write the abstract in a great rush, almost as an afterthought.
- It should be a concise, “standalone” piece with a very clear message.
- It must accurately reflect the full text of the paper.
- Why did you do the study? What did you do? What did you find? What did you conclude?

A Structured Abstract:

It can help organize your ideas – try it!

Background Abstract	<i>Glossina fuscipes fuscipes</i> is the major vector of human African trypanosomiasis, commonly referred to as sleeping sickness, in Uganda. In western and eastern Africa the disease has distinct clinical manifestations and is caused by two different parasites: <i>Trypanosoma brucei rhodesiense</i> and <i>T. b. gambiense</i> . Uganda is exceptional in that it harbors both parasites, which are separated by a narrow 160-km belt. This separation is puzzling considering there are no restrictions on the movement of people and animals across this region.
Methodology/Principal Findings Abstract	We investigated whether genetic heterogeneity of <i>G. f. fuscipes</i> vector populations can provide an explanation for this disjunct distribution of the <i>Trypanosoma</i> parasites. Therefore, we examined genetic structuring of <i>G. f. fuscipes</i> populations across Uganda using newly developed microsatellite markers, as well as mtDNA. Our data show that <i>G. f. fuscipes</i> populations are highly structured, with two clearly defined clusters that are separated by Lake Kyoga, located in central Uganda. Interestingly, we did not find a correlation between genetic heterogeneity and the type of <i>Trypanosoma</i> parasite transmitted.
Conclusions/Significance Abstract	This lack of a correlation between genetic structuring of <i>G. f. fuscipes</i> populations and the distribution of <i>T. b. gambiense</i> and <i>T. b. rhodesiense</i> indicates that it is unlikely that genetic heterogeneity of <i>G. f. fuscipes</i> populations explains the disjunct distribution of the parasites. These results have important epidemiological implications, suggesting that a fusion of the two disease distributions is unlikely to be prevented by an incompatibility between vector populations and parasite.

Abstract-writing tips

- Many students and researchers use search engines to look for information.
- In search engine terms, the title of your article is the most interesting element.
- Reiterate **key words or phrases** from the title in your abstract.
- Best to focus on a maximum of 3-4 different keyword phrases in the abstract.

Structure : the most crucial element

Readers should know throughout the piece:

Where they've come from

Where they are now

Where they are heading

Structure: IMRAD

Title page

Abstract

Introduction

Materials & Methods

Results and

Discussion

Acknowledgements

References

Figures

Figure Legends

Tables

Introduction

Grab the reader, drawing them immediately to the **crucial** issue that your paper addresses.

Keep it **short**: 2-3 paragraphs.

Avoid the temptation to describe everything known on the topic: just **set the scene** and give the “state of the art”.

Introduction Tips

Tell the reader:

- Why your research was needed
- Why did it matter to doctors, patients, policymakers, or researchers
- Were there any controversies you were trying to address?
- What did you do that was new/innovative?

*** but don't give away any results or conclusions**

Introduction: Good Practice Points

- Opening sentence takes you straight to the issue
- Contains the most important details of the issue
- Contains a brief summary of the controversies and the best evidence
- Ends in a crisp and clear research question and how you set out to answer it
- Keeps with the rules of good writing and is written using active tense rather than passive tense

Methods

Crucial in the triage process!

- Extremely common for editors to reject a paper because authors used the **wrong method** to answer their question.
- Give enough **detail** so that a qualified reader could repeat the study.
- If your methods section is “thin on details,” editors worry that you are hiding something.

Methods: Quantitative Studies

The editor will focus on 6 things:

- Design
- Sample
- Intervention
- Outcomes Measures
- Data Analysis
- Ethics: informed consent & IRB approval

*** You can walk the editor through by dividing your Methods section with 6 sub-headings.**

Design

State clearly the design you used

- Observational or interventional?
- Prospective or retrospective?
- Controlled or uncontrolled?
- If controlled, was it randomized or not?
- For randomized controlled studies, exactly how was the randomization done ?
- How was the randomization done? What was the unit of randomization?
- A cohort study, cross-sectional survey, or case-controlled study?

Biological Sample

How did you choose your sample?

- How did you determine your sample size? (include the power calculation)
- How did you recruit participants?
- How did you ensure that your sample was representative of the population you wanted to study?
- What measures did you use to reduce bias in the way you chose your sample?
- What were your inclusion and exclusion criteria?

Outcome Measures

- Which outcomes did you decide to measure when you designed your study? Specify your **primary** and **secondary** outcomes.
- Did you use a validated **tool** to measure these?
- What steps did you use to **reduce bias** in the recording of outcomes?

Data Analysis

What statistical methods did you use to analyze your data?

Ethical Considerations

Informed consent

Institutional review board approval

IRB approval from DEC countries needed as well

- **Studies involving human participants must include IRB approval information and that participants gave their written informed consent to be entered in the trial.**
- **Paper will be held up from review if Ethical considerations are not sufficiently described**

Methods: Qualitative Studies

The editor will focus on 5 things:

- Was a qualitative approach appropriate?
 - **Quantitative:** What proportion of people in Tanzania use bednets?
 - **Qualitative:** What stops people from using bednets?
- How were the setting and the subjects selected?
- Have the authors been explicit about their own views on the issue being studied?
- What methods did the researcher use for collecting data—and are these described in enough detail?
- What methods did the researcher use to analyze the data—and what quality control measures were implemented?

Figures and Tables

- Each figure/table should have **one stand-alone message**.
- Don't overload figures/tables with numbers or ink.
- Data presented in Figures/Tables should be entirely understandable on their own without looking at the whole paper or reading the Methods or Results sections. However, do not discuss what your findings mean in Figure legends !

Results: The Facts and Nothing But the Facts

- Should be ordered around primary and secondary outcomes in the same order as listed in the Methods section.
- State clearly and simply what you found using words and numbers.
- Use tables and figures for the main numbers.
- Don't duplicate information in text and tables.

Discussion

- Don't write an expansive essay that extrapolates widely from what you found.
- Start discussion with a **single sentence** that states your main findings.
- Discuss both **strengths** and **weaknesses**.

Discussion: In-Depth

- **Relate your study to what has been already found**
 - How do your results fit in with what is already known?
 - What are the strengths and weaknesses of your study compared to previous studies?
 - Why does your paper offer a different conclusion?
- **Discuss what your study means**
 - Be careful not to overstate the importance of your findings since readers will probably come to their own conclusions on this issue.
- **Unanswered questions**
 - What did your research not address? Avoid using the cliché “more research is needed.”

Solving the problem of a long, rambling Discussion section

Organize the Discussion: Pyramid structure

- **First Paragraph:**
 - Interpretation/Answer based on key findings
 - Supporting evidence
- **Subsequent paragraphs:**
 - Comparison/Contrasts to previous studies
 - Strengths and weaknesses (limitations) of the study
 - Unexpected findings
 - Hypothesis or models
- **Last paragraph:**
 - Summary
 - Significance/Implication
 - Unanswered questions and future research

EXTRAS

- References: cite them accurately, restrict yourself to the key ones, check the journal's house style
- Acknowledgements
- Author Contributions (who did what)
- Competing interests
- Funding
- Statement regarding ethics committee approval.

The Rules of Writing

- Do not use long words, long sentences, or passive tense and do not stuff several complex ideas into one sentence
- Use short and simple words
- Short sentences (average 20 words; never write a sentence >50 words).
- Cut out unnecessary words (e.g. adjectives)
- **Active** tense (“We concluded” and not “It can be concluded that”)
- Avoid jargon
- Avoid double negatives (“Malaria is not uncommon”)

Clear Writing Techniques

- Signal the research question
- Keep a consistent order
- Repeat key terms
- Keep a consistent point of view
- Put parallel ideas in a parallel form
- Use topic sentences with transitions and key terms

Zieger, M. (2000) Essentials of Writing Biomedical Research Papers, 2nd Ed

Signal the Question

- Lets the reader know explicitly what the research question being addressed is.
- Sets up an expectation for the rest of the paper/grant.

WHY?

Signal the Question (cont'd.)

- Use explicit phrases
- Use question words (“whether” or “which”)
- State the hypothesized effect
- Identify the type of variables and study design

How to?

Keep a Consistent Order

- Paragraph structure
 - Ideas must be well organized.
 - Make sure **each sentence** has just one idea.
 - Make sure **each paragraph** captures just one topic.
 - Make sure **the first sentence** of each paragraph captures the main message.
 - Topic sentence should be followed by supporting sentences.
 - Explicit relationship must exist between sentences.
 - Explicit relationship must also exist between paragraphs and sections of papers.

Repeat Key Terms

- Key terms are words or phrases that describe important concepts, variables, research methods, or study groups.
- This is the strongest technique for providing continuity.
- Key terms link sentences, paragraphs, and sections together unmistakably.

Use Topic Sentences with Transitions and Key Terms

- Use a topic sentence at the beginning of each section.
- Use another topic sentence at the beginning of each paragraph within the section.
- Use transition words, phrases, and/or clauses that contain key terms in the topic sentences.

SETTING ASIDE TIME TO WRITE

Can I squeeze it in between other work?

It can be a major challenge to find time to write.

Most professional writers would recommend:

- Setting aside 20 minutes every day to write.
- Make writing easier by planning before you write.

*** Writing is “not a test of personal worth but a tool for achieving a particular objective. When your writing achieves what you set out to do, then you can consider it a good piece of writing and get on with your life.”**

[Tim Albert, trainer in medical writing.]

What should I start writing first?

- Methods
- Figures
- Results
- Discussion
- Introduction
- Abstract and Title

Reviewers Request Revisions

Next Steps:

- Fully incorporate reviewers' suggestions into a revised manuscript.
- Address all reviewer concerns in your rebuttal letter addressed to the editor.

PAPER REJECTED!

Next Steps:

If you genuinely think that your research was important, well done, well-written, and deserves to reach the journal's audience, you can write an appeal letter to the editor.

The Bottom Line: You *Will* Get Published if...

- You picked an **important research question**.
- You used the **right method** to answer it.
- You wrote a **short, clear** account of the study that followed a **tight structure** and used effective writing to convey your message clearly.