



YALE JOURNAL OF  
BIOLOGY AND MEDICINE

# **Guidelines for Reviewers**

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## Mission and Scope of *YJBM*

The *Yale Journal of Biology and Medicine (YJBM)* is a graduate and medical student run peer-reviewed, open-access journal dedicated to the publication of original research articles, scientific reviews, articles on medical history, personal perspectives on medicine, policy analyses, case reports, and symposia related to biomedical matters. It is published quarterly and aims to publish articles of interest to both physicians and scientists.

All manuscripts submitted to the Journal are first evaluated on the basis of scientific quality, originality, appropriateness, contribution to the field, and style. Suitable manuscripts are then subject to rigorous, fair, and rapid peer review.

## The Peer-Review Process at *YJBM*

When a manuscript is submitted to *YJBM*, it is first checked for plagiarism. If none is detected, our Editors will send out the manuscript for Peer Review. The Editors ask Reviewers to send back their comments within 1 to 2 weeks of receipt of the manuscript. Manuscripts and the reviews are discussed at the Editorial Board's monthly meetings. These discussions, along with the responses from our Reviewers, help the board make a final decision on each manuscript. Even if the Editorial Board chooses to deal with a specific manuscript in a way that was not recommended by the Reviewer, this does not mean that the Reviewer's comments were not taken into account, but it is the job of the Editorial Board to make the final decisions on publication.

The Editors will send each Reviewer a copy of the final decision letter for a given manuscript. *YJBM* Reviewers should know that the reviews passed onto Authors are anonymous, unless a specific Reviewer wishes to make himself or herself known to the Authors. The Editors do not edit reviews sent to the Authors unless the Editors feel that the language used is offensive and does not provide constructive criticism. Editors will contact the Reviewers if more information is required to make the review more comprehensive to the Author and to enable the Editors to make a final decision.

The aim of the Peer-Review process is to provide *YJBM* Editors with added insights into the articles received by the journal. Reviewers will help identify the following:

- Which articles are of interest to the readers of *YJBM*
- The strengths and weakness of a given manuscript
- How the Editors can work with the Authors to improve the submitted manuscripts, if the topic and scope of the manuscript is of interest to *YJBM* readers.

The Peer-Review process benefits not only the Editors, but also the Authors. Peer Review provides an essential way of educating Authors by helping them improve their writing and communications skills and enables them to better voice their opinions or improve the explanation of data or ideas being presented. When reviewing a manuscript, Reviewers should keep in mind the following questions:

- Is the writing clear and easily accessible to all readers of *YJBM*?
- If a reader of *YJBM* were approaching the topic of the manuscript for the first time, would he or she learn enough to enable him or her to better read more articles on the topic?
- If specific sections or points within the manuscript are unclear, how can the Author make his or her point clearer?
- Are there significant pieces of information missing from the manuscript?
- Are all the statements or claims made by the Author supported by original or published data? If published data is used or referred to, is this data cited accurately?

- If figures and tables are included, are these clear and do they help the reader understand the manuscript better?

## **Expectations of a Reviewer for *YJBM***

Reviewers are expected to provide a fair and balanced review of a specific manuscript. The reviews are to be clear and easy for the Author to understand how a Reviewer came to a particular conclusion. If specific manuscript changes are requested, the Reviewer must explicitly state where in the manuscript a change should be made by stating the page, section, and paragraph in which the change is requested. We ask that Reviewers be respectful to Authors for the time spent in preparing a manuscript, so the Reviewers should take the time to review each manuscript carefully. Many Authors' first language is not English and Reviewers should take this into account.

Reviewers for *YJBM* are asked to submit their reviews in a timely manner, preferably 1 to 2 weeks after receipt of the manuscript. If, for whatever reason, they are unable to review a manuscript within the given time, they are asked to contact the Editors before the deadline, so the Editors can re-assign the manuscript to alternative reviewers or communicate the delay to the Authors.

We hope Reviewers will be honest and make the Editors aware of any competing interests that affect their ability to review a given manuscript. *YJBM* considers a Reviewer to have a competing interest if he or she is a direct competitor, dislikes a specific Author or topic, or may profit from the publication of a specific manuscript. We ask that the Reviewers specifically state within the comments to the Editors whether they have a competing interest for a given manuscript.

We expect our Reviewers to keep the contents of any manuscript confidential and if they wish to review a given manuscript with a fellow colleague that they consult with the Editors before sharing the contents of the manuscript.

## **Points to Consider When Reviewing Articles**

YJBM will ask Reviewers to Peer Review the following types of submissions:

- Original Research
- Case Reports
- Reviews
- Perspectives
- Analyses
- Profiles
- Interviews
- Focus Topic Articles

General questions that Reviewers should keep in mind when reviewing articles are the following:

- Is the article of interest to the readers of *YJBM*?
- What are the strengths and weakness of the manuscript?
- How can the Editors work with the Authors to improve the submitted manuscripts, if the topic and scope of the manuscript is of interest to *YJBM* readers?

The following contains detailed descriptions as to what should be included in each particular type of article as well as points that Reviewers should keep in mind when specifically reviewing each type of article.

## Original Research Articles

These manuscripts should present well-rounded studies reporting innovative advances that further knowledge about a topic of importance to the fields of biology or medicine. The conclusions of the Original Research Article should clearly be supported by the results. These can be submitted as either a full-length article (no more than 6,000 words) or a brief communication (no more than 2,500 words). Original Research Articles contain five sections: abstract, introduction, materials and methods, results and discussion.

Reviewers should consider the following questions:

- What is the overall aim of the research being presented? Is this clearly stated?
- Have the Authors clearly stated what they have identified in their research?
- Are the aims of the manuscript and the results of the data clearly and concisely stated in the abstract?
- Does the introduction provide sufficient background information to enable readers to better understand the problem being identified by the Authors?
- Have the Authors provided sufficient evidence for the claims they are making? If not, what further experiments or data needs to be included?
- Are similar claims published elsewhere? Have the Authors acknowledged these other publications? Have the Authors made it clear how the data presented in the Author's manuscript is different or builds upon previously published data?
- Is the data presented of high quality and has it been analyzed correctly? If the analysis is incorrect, what should the Authors do to correct this?
- Do all the figures and tables help the reader better understand the manuscript? If not, which figures or tables should be removed and should anything be presented in their place?
- Is the methodology used presented in a clear and concise manner so that someone else can repeat the same experiments? If not, what further information needs to be provided?
- Do the conclusions match the data being presented?
- Have the Authors discussed the implications of their research in the discussion? Have they presented a balanced survey of the literature and information so their data is put into context?
- Is the manuscript accessible to readers who are not familiar with the topic? If not, what further information should the Authors include to improve the accessibility of their manuscript?
- Are all abbreviations used explained? Does the Author use standard scientific abbreviations?

## Case Reports

Case reports describe an unusual disease presentation, a new treatment, an unexpected drug interaction, a new diagnostic method, or a difficult diagnosis. Case reports should include relevant positive and negative findings from history, examination and investigation, and can include clinical photographs. Additionally, the Author must make it clear what the case adds to the field of medicine and include an up-to-date review of all previous cases. These articles should be no more than 5,000 words, with no more than 6 figures and 3 tables. Case Reports contain five sections: abstract; introduction; case presentation that includes clinical presentation, observations, test results, and accompanying figures; discussion; and conclusions.

Reviewers should consider the following questions:

- Does the abstract clearly and concisely state the aim of the case report, the findings of the report, and its implications?

- Does the introduction provide enough details for readers who are not familiar with a particular disease/treatment/drug/diagnostic method to make the report accessible to them?
- Does the manuscript clearly state what the case presentation is and what was observed so that someone can use this description to identify similar symptoms or presentations in another patient?
- Are the figures and tables presented clearly explained and annotated? Do they provide useful information to the reader or can specific figures/tables be omitted and/or replaced by another figure/table?
- Are the data presented accurately analyzed and reported in the text? If not, how can the Author improve on this?
- Do the conclusions match the data presented?
- Does the discussion include information of similar case reports and how this current report will help with treatment of a disease/presentation/use of a particular drug?

## Reviews

Reviews provide a reasoned survey and examination of a particular subject of research in biology or medicine. These can be submitted as a mini-review (less than 2,500 words, 3 figures, and 1 table) or a long review (no more than 6,000 words, 6 figures, and 3 tables). They should include critical assessment of the works cited, explanations of conflicts in the literature, and analysis of the field. The conclusion must discuss in detail the limitations of current knowledge, future directions to be pursued in research, and the overall importance of the topic in medicine or biology. Reviews contain four sections: abstract, introduction, topics (with headings and subheadings), and conclusions and outlook.

Reviewers should consider the following questions:

- Is the review accessible to readers of *YJBM* who are not familiar with the topic presented?
- Does the abstract accurately summarize the contents of the review?
- Does the introduction clearly state what the focus of the review will be?
- Are the facts reported in the review accurate?
- Does the Author use the most recent literature available to put together this review?
- Is the review split up under relevant subheadings to make it easier for the readers to access the article?
- Does the Author provide balanced viewpoints on a specific topic if there is debate over the topic in the literature?
- Are the figures or tables included relevant to the review and enable the readers to better understand the manuscript? Are there further figures/tables that could be included?
- Do the conclusions and outlooks outline where further research can be done on the topic?

## Perspectives

Perspectives provide a personal view on medical or biomedical topics in a clear narrative voice. Articles can relate personal experiences, historical perspective, or profile people or topics important to medicine and biology. These articles should be no more than 6,000 words. Perspectives contain four sections: abstract, introduction, topics (with headings and subheadings), and conclusions and outlook.

Reviewers should consider the following questions:

- Does the abstract accurately and concisely summarize the main points provided in the manuscript?
- Does the introduction provide enough information so that the reader can understand the article if he or she were not familiar with the topic?
- Are there specific areas in which the Author can provide more detail to help the reader better understand the manuscript? Or are there places where the Author has provided too much detail that detracts from the main point?
- If necessary, does the Author divide the article into specific topics to help the reader better access the article? If not, how should the Author break up the article under specific topics?
- Do the conclusions follow from the information provided by the Author?
- Does the Author reflect and provide lessons learned from a specific personal experience/historical event/work of a specific person?

### **Analyses**

Analyses provide an in-depth prospective and informed analysis of a policy, major advance, or historical description of a topic related to biology or medicine. These articles should be no more than 6,000 words with no more than three figures and one table. Analyses contain four sections: abstract, introduction, topics (with headings and subheadings), and conclusions and outlook.

Reviewers should consider the following questions:

- Does the abstract accurately summarize the contents of the manuscript?
- Does the introduction provide enough information if the readers are not familiar with the topic being addressed?
- Are there specific areas in which the Author can provide more detail to help the reader better understand the manuscript? Or are there places where the Author has provided too much detail that detracts from the main point?
- Does the Author provide balanced viewpoints on a specific topic if there is debate over the topic in the literature?
- If necessary, does the Author divide the article into specific topics to help the reader better access the article? If not, how should the Author break up the article under specific topics?
- Do the conclusions follow from the information provided by the Author?

### **Profiles**

Profiles describe a notable person in the fields of science or medicine. These articles should contextualize the individual's contributions to the field at large as well as provide some personal and historical background on the person being described. More specifically, this should be done by describing what was known at the time of the individual's discovery/contribution and how that finding contributes to the field as it stands today. These pieces should be no more than 6,000 words, with up to six figures and three tables. The article should include the following: abstract, introduction, topics (with headings and subheadings), and conclusions.

Reviewers should consider the following questions:

- Does the abstract accurately summarize the contents of the manuscript?
- Does the Author provide information about the person of interest's background, i.e., where they are from, where they were educated, etc.?

- Does the Author indicate how the person focused on became interested or involved in the subject that he or she became famous for?
- Does the Author provide information on other people who may have helped the person in his or her achievements?
- Does the Author provide information on the history of the topic before the person became involved?
- Does the Author provide information on how the person's findings affected the field being discussed?
- Does the introduction provide enough information to the readers, should they not be familiar with the topic being addressed?
- Are there specific areas in which the Author can provide more detail to help the reader better understand the manuscript? Or are there places where the Author has provided too much detail that detracts from the main point?
- Does the Author provide balanced viewpoints on a specific topic if there is debate over the topic in the literature?
- If necessary, does the Author divide the article into specific topics to help the reader better access the article? If not, how should the Author break up the article under specific topics?
- Do the conclusions follow from the information provided by the Author?

### **Interviews**

Interviews may be presented as either a transcript of an interview with questions and answers or as a personal reflection. If the latter, the Author must indicate that the article is based on an interview given. These pieces should be no more than 5,000 words. The articles should include: abstract, introduction, questions and answers clearly indicated by subheadings or topics (with heading and subheadings), and conclusions.

Reviewers should consider the following questions:

- Does the abstract accurately summarize the contents of the manuscript?
- Does the Author provide relevant information to describe who the person is whom they have chosen to interview?
- Does the Author explain why he or she has chosen the person being interviewed?
- Does the Author explain why he or she has decided to focus on a specific topic in the interview?
- Are the questions relevant? Are there more questions that the Author should have asked? Are there questions that the Author has asked that are not necessary?
- If necessary, does the Author divide the article into specific topics to help the reader better access the article? If not, how should the Author break up the article under specific topics?
- Does the Author accurately summarize the contents of the interview as well as specific lesson learned, if relevant, in the conclusions?

### **Focus Topic Articles**

*YJBM* regularly publishes sections featuring articles that are of exceptional significance to the fields in biology and medicine. The Editors solicit articles according to the topic chosen for each issue. Reviewers should note that since these articles are generally solicited, so *YJBM* aims to work with the Authors to publish these articles. These articles will generally fall in to the following types of articles:

- Reviews
- Perspectives
- Analyses
- Profiles
- Interviews

## **Writing and Submitting a Review**

Reviewers are asked to use the online form that can be accessed from the main website. Reviewers must write their reviews in Microsoft Word and copy and paste the reviews into the online form. Please ensure that all characters are copied over accurately into the online form.

Reviewers must fill out the following sections when submitting an online review:

1. Full name (first and last name) and e-mail address in order to contact you to inform you of the final decision, if more information is required, or to re-review a specific manuscript
2. The manuscript number
  - a. This will be sent along with the relevant manuscript
  - b. Please remember to fill this in as it enables us to match a review with a given manuscript more easily.
3. Full name (first and last name) of the first Author of the manuscript.
  - a. This is a precaution should the manuscript number be entered incorrectly.
4. Comments for the Author(s) Please note that this will be sent to the Author directly, but the identity of the Reviewer will be kept confidential:
  - a. Include a brief summary of the manuscript, including a statement about the importance of the manuscript to the scientific community as well as the overall strength and weaknesses of the manuscript.
  - b. List all the changes/suggestions that you have for the Author in a numbered list. Be sure to explicitly state where in the article a specific change/suggestion is referring to in order to better guide the Author where to look in his/her manuscript. This can be done by referencing a specific page number, section or paragraph, and/or by including a quote from the text.
  - c. Ensure that all suggestions are explained fully to help the Author better understand what is expected of him or her. Please do not include vague statements.
  - d. Do not include grammatical or syntax corrections, as all of these will be corrected by our Editorial Coordinator.
  - e. Please do not include comments of a personal nature.
  - f. Please do not include your recommendation for publication in this section of the review form as the Editorial Board may decide differently.
5. Comments to the Editor:
  - a. Use this section to state whether you have any competing interests; if you do not have any, please state: No competing interests.
  - b. Use this section to let the Editor know if you have any concerns regarding the submitted manuscript or your ability to review the manuscript.
6. Recommendation:
  - a. Select one of the following options:
    - i. Minor revision

- ii. Major revision
- iii. Reject
- iv. Reject, but encourage re-submission

### **Articles of Interest to Assist with Writing Reviews**

Below are two articles that the Reviewer may want to consult to help with writing a review if this is the Reviewer's first time doing so:

1. Seals DR, Tanaka H. Manuscript Peer Review: A Helpful Checklist for Students and Novice Referees. *Advances in Physiology Education*. 2000;21(1):52-8.
2. Lovejoy TI, Revenson TA, France CR. Reviewing Manuscripts for Peer-Review Journals: A