

# Reviewers' Update

## Elsevier editors share their top reviewing tips - Part 1

In this 3-part series published in [Reviewers' Update](#), seasoned editors highlight the ingredients required for a “great review”

By Lucy Goodchild

The wish of editors around the world, in every discipline, is to receive high-quality peer review reports, so we've asked our journal editors what advice they would offer reviewers.

In part 1 of this 3-part series, they outline the steps you should take when you receive a review request.

### Understand your position in the process

Good peer review can improve communication and propel knowledge; bad peer review can have a negative effect just as powerful. As a reviewer, understanding your position in the [peer review process](#) can help you write better review reports.

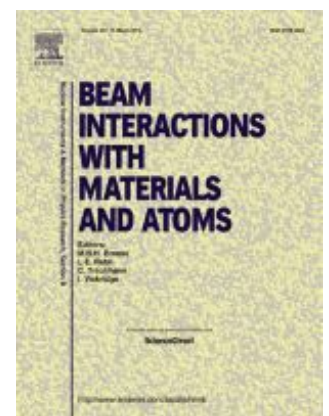
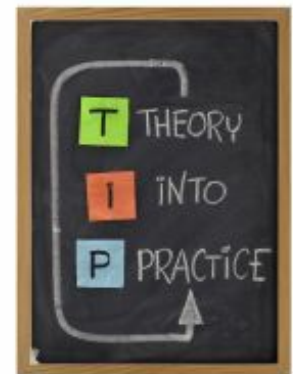
When manuscripts come in, editors first determine whether they are suitable to send for peer review, e.g. fit the aims and scope of the journal and contain all the expected elements. In most disciplines, reviewers can be hard to come by, so this desk rejection is an important way to avoid saturating the reviewers.

Professor Christina Trautmann, Editor of *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, describes the steps she takes: “Once I receive a new manuscript submission, I first read the letter from the authors, read the abstract and scan over the text and figures. I then check the manuscript via [iThenticate](#) to see if there are text sections overlapping with existing papers. After considering experts and checking the referees proposed by the authors, I send the manuscript to two referees.”

When the review reports come back, Professor Trautmann reads them carefully, sometimes revising the language before sending them on to the author. The authors then work on the revisions, and the revised version may be sent back to the reviewers, if major changes have been made. “Sometimes this process goes through several cycles until the reviewer recommends acceptance or finally rejection,” says Professor Trautmann.

This process is typical across the board, with some editors opting for fewer or more reviewers for each paper, depending on the journal and discipline.

### The purpose of a review



Together, the reviewers and editors act as a filter in the publication process. “Where to set the threshold line of this filter is difficult and requires great seriousness, instinct and expertise,” comments Professor Trautmann. “If the threshold of the filter is too low, a field may suffer from too many ‘garbage’ publications, and if the threshold is too high, small scientific advances that sometimes trigger big knowledge steps may be lost.”



So a key role of the reviewer is to help inform the editor and guide the process. “Reviews should help the editor decide if a paper makes a significant enough contribution and if we should publish it,” says Professor Urban Jermann, Co-Editor of the *Journal of Monetary Economics*. “If the reviewer’s evaluation is positive, we also see referee reports as a way to guide revisions of a paper.”

And there’s also another purpose, he says – one that’s important for reviewers to remember. “It’s a social contract that reviewers are willing to spend the time to review others’ work,” explains Professor Jermann. “Providing a forum for communicating about research, and in the process improving its quality, is a secondary objective of a journal, even for work that will end up being published elsewhere.”

## Are you the right reviewer?

That being said, it may not be wise to review a manuscript on a topic too far from home. When you receive an invitation to review, first check it’s in an area you’re comfortable evaluating – you should be sure you could contribute a high quality review. Editors appreciate it when you reply immediately, either accepting or declining with suggestions for alternative reviewers. This helps them in the time-consuming process of finding the right reviewers.



“It’s important to select reviewers carefully; this is something I spend a lot of time on,” says Professor Jermann. “Reviewers should be knowledgeable in the area. We usually only go for one referee report, and perhaps a second if the decision is unclear; this means that as editors we have to spend more time selecting the right referees. Reviewing is time intensive and requires that people are willing to write the reports.”

If you’re a willing and able reviewer, you could benefit greatly from taking part in the process, as Professor Marijn Janssen, Co-Editor-in-Chief of *Government Information Quarterly* explains: “Incentives are important – if reviewers do a good job, they can join the editorial board. If they’re really good, they might become an associate editor or an editor. It’s important to let people know that they can progress with the journal if they do good work.”

## Reviewing - the basics

- Understand your position in the process: you can improve scientific knowledge through review
- Do a good job as a reviewer and you could progress with the journal
- Respond to the invitation immediately
- If you decline to review, suggest alternative reviewers
- If you accept, do your homework: get to know the journal first
- Invest time in the review: read, sleep, write, sleep, recommend

## Prepare to write the report

So you’ve received the invitation to review, you understand your position in the process and you’ve decided to accept, replying immediately. What now?

First, get to know the journal. What are its aims and scope? Who reads it, and what sort of papers are the editors interested in? “When I read a review report, I look for indications that the manuscript contains valuable and new information which is of interest for the readers of my journal,” says Professor Trautmann. Knowing the journal helps you highlight this information in your report.

Read through any reviewing guidelines the journal has, as well as Elsevier’s [general guidance for reviewers](#). If there is a template or list of questions, have a copy handy before you get started. Then grab a coffee and make time for the review.

“Read the paper, not just the day you want to write the report; read it before you plan to write, and think about it,” advises Professor Jermann. “This is a tip I got when I was a reviewer myself – take time to absorb what’s in a paper and develop your own perspective on it. Read it first, write up later and decide your recommendation last.”

## Elsevier editors share their top reviewing tips – Part 2

### Why you should take your time when reviewing, and how your review can help to improve the quality of research in your field

By Lucy Goodchild

Time is of the essence when it comes to academic publishing – as an author you want to publish your paper as fast as possible, and as a reviewer you want to avoid holding up the process. Editors set deadlines to give authors the quickest possible publication times, but one of their most common complaints is that reviewers don't stick to those deadlines.

“People are busy, so only a few reviewers meet the deadline,” says Professor Marijn Janssen, Co-Editor-in-Chief of *Government Information Quarterly*. “A good review takes time – it's almost like writing a paper yourself. But authors expect a quick turnaround so there is some conflict there.”

But the answer is not to shortcut the review, according to Professor Cynthia Baldwin, Co-Editor-in-Chief of *Veterinary Immunology and Immunopathology*: “Poor reviews are ones when they just write a few sentences saying it's not a good paper, just to get it off their to do list. That's not helpful for anyone involved.”

If you decide that you're unable to meet the editor's deadline, then decline as soon as possible so they can approach an alternative reviewer and be sure to recommend someone suitable. If you can review by the deadline, be prepared with any specific guidelines, and set aside time to read the paper properly.

Even if you consider the manuscript to be low quality, your review still has to be good quality. “It's not enough for me to get a report with a paragraph saying it's not good,” says Professor Urban Jermann, Editor of the *Journal of Monetary Economics*. “There has to be some substance – if it's not a good paper, it's always best to suggest how it can be made better, or what related area it could be moved into. Reviewers have already spent time reading, so it's low-cost for them to take just a little more time and give useful recommendations.”

### Your overall opinion helps the editor

“When you read the paper, you have to master the domain before you can provide a good review,” explains Professor



Janssen.

Summarizing the paper at the start of your review is one way to show your understanding to the editor, and also to the author – if your summary suggests that you have misinterpreted their research in some way, the author can go back and make sure their manuscript is clear.

After reading and summarizing the research, you will be able to comment on the manuscript in general. Does the research fit with the journal's scope? Is it within the journal's remit? For example, if the journal has a policy focus, does the research have a policy angle? This is where some journal-specific guidance will come in handy: Journals have guidelines available online for authors, which can also be helpful for you as a reviewer. Some have even more detailed instructions, for example, the *Journal of Ethnopharmacology* (*JEP*) has a 'Rules of 5' document that describes top-level considerations for research to be publishable. "It makes reviewing easier – if a paper isn't for the journal, you can just say it's out of scope and refer the author to the guidelines," says *JEP* Editor-in-Chief, Professor Dr. Rob Verpoorte.

The next step is to look at the research itself and determine its value for the journal and the people who read the journal. Does it have enough of an impact? Is the research relevant, and does it add sufficiently to our collective knowledge? This is where your interpretation may differ to that of the authors, so it's important to look at the validity of the results.

According to Professor Dr. Verpoorte: "As long as the experimental design and results are correct, they will be correct forever. The result always has a meaning; you can adjust the interpretation of the results as the knowledge base builds, but the results themselves don't change. The value lies in whether the work was done properly."

## Positivity's a plus: looking on the bright side helps authors

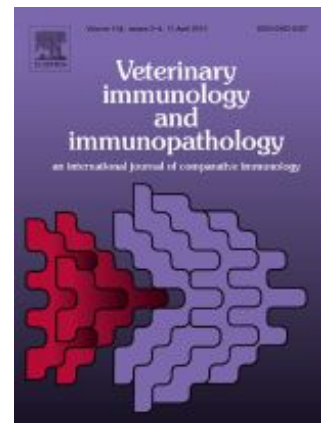
If you don't think the paper is good enough to be published, your review is still valuable: don't dismiss its importance. "There are some hostile reviewers, and some just say 'this is a terrible paper, I'm not wasting my time reviewing it'," says Professor Baldwin. "That's not helpful to anyone involved. Try to be constructive - your review can be really helpful to the authors as well as to us as editors."

While it's important to be honest when sharing your opinions about the paper, you have to stay positive, says Professor Janssen: "Reviewers are trained to focus on the negative, but what really helps is to highlight the strengths. Your view on the paper and the research may be different from that of the authors; if you encourage the authors, it motivates them to improve their research."

## What makes a good reviewer?

According to Elsevier's *Get Published Quick Guide* a good reviewer:

- Provides a thorough and comprehensive report
- Submits the report on time
- Provides well-founded comments for authors
- Gives constructive criticism



- Demonstrates objectivity
- Provides a clear recommendation to the editor

Go easy on the suggestions, though. “Sometimes you get the impression that reviewers want to become co-authors – take over the paper and tell the authors what to do,” comments Professor Jermann. “If a paper is really not good, the review report doesn’t have to be very long but it should explain the reviewer’s opinion. If the paper looks promising, the reviewer’s suggestions for improvement become even more valuable.”

In the end, it’s the authors – and, ultimately, the published research – that will benefit most from your review. “Reviewers should be respectful of people trying to do a good job – we’re here to help each other, and reviewers can help improve authors’ skills,” explains Professor Dr. Verpoorte. “You are not only reviewers, but at the same time teachers. People don’t make mistakes on purpose, so if you teach them, the next time they will submit a better paper.”

He adds: “It’s for everybody’s benefit; everything you do contributes to the strength of the field.”

## Elsevier editors share their top reviewing tips – Part 3

In the final article in this series, we learn about the anatomy of a good review report

By Lucy Goodchild

Although the structure of your peer review report may depend on the journal for which you're reviewing, to a large extent it will follow a standard structure, just like research articles do.

“There is a good standard way to set up a review, and if people stick to that it tends to result in a good review,” says Professor Cynthia Baldwin, Co-Editor-in-Chief of *Veterinary Immunology and Immunopathology*. “It starts with a small paragraph – a few sentences summarizing the paper – then moves on to address major points like experimental design and the interpretation of data, and finally minor points (for example, highlighting an incorrect figure number).”



### Learn more about this article series

- In [Part 1](#) we highlighted the steps you should take when you receive a review request.
- In [Part 2](#) we looked at the importance of taking your time when reviewing and how your review can help to improve the quality of research in your field.

With this in mind, a review report can be structured into three main sections:

1. Summary and overall evaluation
2. Specific comments and improvement points
3. Recommendation

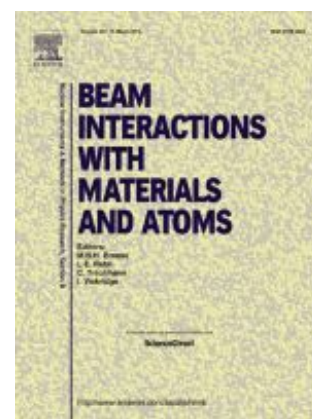
### Summary and overall evaluation

Your review report should start with a short summary of the research – a few sentences, in your words, describing the main results. This will help you determine whether the paper falls within the scope of the journal – one of the first things to consider when you’re reviewing, explains Professor Dr. Rob Verpoorte, Editor-in-Chief of the *Journal of Ethnopharmacology*. “We get 4,000 submissions a year, so if it’s possible to reduce these quickly by judging against criteria everyone can see, such as scope, that improves the process.”



After summarizing the research, you should include your general impressions of the paper, as Professor Baldwin explains: “The reviewer should talk about why it’s new or important, whether it’s a move forward in the literature, and whether it’s an incremental step or a new paradigm. I need to be confident in, and reliant on, what a reviewer is saying and, first and foremost, this shows that the reviewer understands the point of the paper.”

You should comment on the general quality of the manuscript. Is the research sound? Is the paper well put together? If you have criticisms at this stage, be honest about them, and share your feedback with the authors too. According to Professor Christina Trautmann, Editor of *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, this is one of the main things reviewers could improve on: “Reviewers often provide severe criticism directly to the editor, simultaneously being soft in the comments to the authors. It’s much more helpful to the authors if they get honest feedback from reviewers – that way, they can improve.”



## Specific comments and improvement points

The second section of the report should highlight issues the author needs to address in the paper to make it publishable. This section can be divided into two parts, says Professor Baldwin: “A review should include a combination of major and minor points. Some people focus on the minutiae – typos and grammar – but I want to know if the paper is worth publishing.”

Starting with major comments, work through the manuscript, commenting on each section of the paper. As you make comments, be sure to provide possible improvements. “Distinguish between general, factual and preference errors,” advises Professor Marijn Janssen, Co-Editor-in-Chief of *Government Information Quarterly*. “If it’s your subjective opinion, then say that. If it’s a factual mistake, be clear about it.”



Once you have provided all of your major comments and suggestions, move on to more specific, minor points, like spelling and grammar. “We really don’t like sloppy papers – ones that contain a lot of mistakes,” says Professor Janssen. If there are substantial errors in the paper, mention this as a point about quality in your summary. For small mistakes, specify them as minor corrections in this section.

Finally, take a look at the list of references. Reviewing references can be a cause for concern for editors – while a good review points to missing literature, a bad one provides a list of the reviewer’s own references. “It’s not good practice for a reviewer to take advantage of their role and push the authors to cite their own publications,” comments Professor Trautmann.

She adds: “Provide clear and structured statements that help us navigate the manuscript.” Wherever possible, refer to line numbers, paragraphs and figure or table numbers when you make comments. It’s also useful to number your comments, helping the editor keep track and the author respond in a structured way.



## Recommendation

“One of the biggest mistakes reviewers make is being too vague in their recommendation,” says Professor Trautmann. “We value your opinion, so be clear and direct about what you recommend.”

## Editors’ tips in a nutshell

### Summary and overall evaluation

- Summarize the research in your own words
- Give your general impressions of the paper
- Be honest with the author

### Specific comments and improvement points

- Provide major comments first, then minor comments
- Include suggestions for improvement
- Don’t push your own publications into the references
- Be specific and precise – refer to line numbers

### Recommendation

- Make a clear recommendation

For more guidelines on navigating the peer-review process, visit the [Elsevier Publishing Campus](#)

## Contributor biographies

Cynthia Baldwin is a Professor at the [University of Massachusetts Amherst](#) and has been an investigator in that area of immunology for over 30 years, receiving her PhD from [Cornell University](#). Her research has focused on cellular responses to bacterial and protozoan pathogens of humans and livestock. Cynthia is a long-serving Editor-in-Chief of *Veterinary Immunology and Immunopathology*, a journal for comparative immunology. She also serves as a Jefferson Science Fellow at the US Department of State in Washington, DC. She is currently the Principal Investigator on federally-funded grants including one from the [National Institute of Food and Agriculture](#) (NIFA) and the National Institutes of Health that has the goal of using large animal models of disease for the benefit of humans and livestock.



[Professor Marijn Janssen](#) is full Professor in ICT & Governance and head of the Information and Communication Technology section of the Technology, Policy and Management Faculty of [Delft University of Technology](#). His research interests are in the field of orchestration, (shared) services, open data and infrastructures within constellations of public and private organizations. He serves on several editorial boards, is Co-Editor-in-Chief of *Government Information Quarterly* and is involved in the organization of a number of conferences. He has published over 300 refereed publications.



Professor Christina Trautmann is head of the Materials Research Department at the [GSI Helmholtz Center for Heavy Ion Research](#) in Darmstadt (Germany) and holds a professorship at the Department of Materials Sciences of the [University of Darmstadt](#) (Germany). She graduated from the [Technical University Munich](#) and received her PhD degree from the [Johann-Goethe Universität](#) in Frankfurt. She is an internationally recognized expert in the field of ion-beam induced material modifications and ion-beam nanotechnology and has more than 260

publications in refereed scientific journals. Since 2004, she is Editor of the Journal *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*.



Professor Dr. Rob Verpoorte is Professor Emeritus at [Leiden University](#). He holds a Pharmacists degree and a PhD from Leiden University, and was lecturer there from 1976-1987. Since then he has been Professor and Head of the Department of Pharmacognosy. He was a guest professor in London (UK), Uppsala (Sweden), Amiens (France) and Reims (France). From 1992-1998 he was Vice-Chairman and Chairman of the committee of the [Phytochemical Society of Europe](#) (PSE). He has authored 725+ scientific papers, four books and six patent applications, and is Editor-in-Chief of *Journal of Ethnopharmacology*. He supervised 65 PhD-theses, and 150+ MSc theses. He received an Honorary Doctorate from the University of Amiens ([Université de Picardie - Jules Verne](#)), France (2004) and [Uppsala University](#), Sweden (2012). In 2007 he received the PSE Medal.

