A pocket-sized recipe for cooking up a scientific manuscript

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1 Preparation

1.1 Read me first

This booklet is intended to be read from cover to cover, in the order of writing. It is not so much a general guideline as a proven recipe to get your scientific manuscript accepted by a peer-reviewed journal. For a much better actual guidance on scientific writing, we recommend the work of Holst & Cham.

We do not differentiate between high-impact peer-reviewed journals and low-impact national conference proceedings. The principle of writing is the same. The recipe works for both.

Our experience lies in science, business, and popularised writing. Whether this recipe works in the arts, as well? Who knows? Do let us know!

1.2 Who is your audience?

Manuscripts come in many types. Editorials, technical notes, conference proceedings, full-blown research papers, review papers, book reviews, short correspondence, obituaries, and theses.

For journal papers, it is often assumed that the audience are scientific peers. For theses, it is often assumed that the audience are the examiners. Both as-

sumptions are wrong. You are writing for your successor to re-do your work. Your audience is, in fact, *you*. But younger, less knowledgeable you. Your audience is you, two or three years ago.

Understanding that makes writing life much easier. What did you know back then? You may presume that your journal readers and thesis examiners have that as background knowledge as well. But the skills and jargon that you picked up during your project are probably new to others, too. So those need enough explanation for *younger you* to understand.

1.3 Choice of journal

You really need to *trust* your supervisor to know best which journal is the best choice for your latest scientific finding. Nevertheless, be wary if your supervisor advises you to start writing first, and to worry about the journal later. That is a really bad plan. The journal of choice determines the format, the maximum number of words allowed, the maximum number of figures, and most importantly the field!

Consider a novel ultrasonic device that has applications in gelation processes. Research outcomes of this device may be presented in a journal on scientific instruments, electrical engineering, biomedical engineering, applied acoustics, ultrasonics, biomaterials, polymers, and gels.

The novel component in your research that should be highlighted depends heavily on the journal of choice.

For a thesis, a similar reasoning holds. If you are based at an electrical engineering department, the novel components that are to be highlighted are quite different from those in a thesis from the same project but submitted to a department of medicine.

1.4 LaTeX or WYSIWYG?

What you see is what you get (WYSIWIG) is the generic term used for MS Word and similar packages. Although suitable for writing a letter, WYSIWIG are less suitable for writing longer documents and completely unsuitable for writing books.

If you have a background in the exact sciences, you are probably already familiar with LaTeX. If you are not, it is worth investing the time to master the

art of writing in LaTeX. If you envision a scientific career, you may also want to learn to code in TeX itself.

Most publishers have templates available for downloading. The choice to use LaTeX or WYSIWIG relies on the format of the template. If a LaTeX template is available, use it. If not, use WYSIWIG. For your thesis, use LaTeX.

1.5 Data management

Writing a manuscript may take some time. Therefore, some data management is required. We recommend to create a separate directory per manuscript, with subdirectories `./submit1`, `./literature`, `./figs`, and `./old`. Subdirectory `submit1` comprises the latest source files intended for first submission. Subdirectory `literature` comprises all articles referred to in the manuscript, preferably renamed to "<*year*> <*first author*>.pdf". Subdirectory `figs` comprises the source files used to create the figures for the manuscript. The actual figures should be located in `submit1`. Subdirectory `old` comprises all previous raw versions of the manuscript.

The source file should have a unique format that is immediately recognised by coauthors and that has a version number in it. We used `JJAP21_CSC00.tex` for the first draft, *i.e.*, version 00, of a paper to be submitted to the Japanese Journal of Applied Physics in 2021, whose first author has the initials CSC.

Every day, *before* opening the document, copy the source to `old` and increase the version number by one. Create an offline backup of the whole directory at least once a week, preferably on a fixed day.

You would not build a new house by copying your previous house on a different spot and then refurbishing it. Yet, most students think that copying a previously submitted paper and modifying the text is a smart idea.

Do not ever use a previous paper as a template. That is not just a waste of time but actually catering for major disaster. As editors and reviewers, we have seen many a paper with entire sections from different papers on totally different topics that somehow made it through.

1.6 English, Murrican, or South African English?

The English language comes in several flavours. The location of the publishing house determines whether one should write a paper in the spelling preferred

in the United States or in the English used in the civilised world. It should be noted that the choice of either of these has some other consequences as well. American journals may have US Letter format as opposed to A4 paper. South African English follows UK English spelling, but uses a comma as decimal separator instead of a point. Furthermore, some common items have a different name: an American cell phone would be called a mobile phone in the United Kingdom and a cellular in South Africa.

As your study was done before you started writing, the entire manuscript is in the past tense.

Throughout your paper, be consequent in naming, itemising, and use of capitals. Whether you prefer "Materials and methods" or "Materials and Methods" does not matter. But in case of the latter, "Results and discussion" with a lowercase d does not make sense.

In all English-flavoured languages, adjectives coupled to nouns used as adjectives get a hyphen to couple them to the former noun. Thus, a high-speed camera operates at high speed, whilst a high speed camera is positioned at altitude and monitors speed.

More unexpectedly, this rule is also applied to numbers and units. It may not look so pretty, but it is grammatically correct to write, that with such a camera, up to eight frames of 0.23-μs exposure can be recorded within 2 μs.

1.7 Acronyms, abbreviations (and parentheses)

If you really don't want anyone to read your manuscript, please use as many acronyms as humanly possible.

Our ten commandments with regards to using acronyms and abbreviations:

1. Avoid the use of acronyms and abbreviations.

2. Under no circumstance may you ever use an acronym in the title.

3. Do use acronyms as keywords.

4. No matter how tempting, do not use acronyms in the abstract.

5. If you use a term less than five times in your manuscript, do no abbreviate it. For theses, make that ten times.

6. Do not ever abbreviate a single word. It is perfectly fine to use television rather than TV.

7. Be very careful with other, more common, meanings of the same acronym.

8. In case of doubt, don't abbreviate.

9. If you need to add a list of abbreviations, you did something wrong.

10. Abbreviate every Latin term. Latin abbreviations, *e.g.*, *et al.*, should be written in italics.

If you need to explain what you mean by adding something in parentheses behind it, we recommend you to replace your text by whatever you wrote between parentheses. Parentheses have no place in a scientific manuscript other than $f(x)$, where the parentheses stand for "as a function of". The same holds for bold text, italics, underscored text, and quotation marks. Unless you are quoting.

To avoid confusion, we recommend square brackets for units behind parameters, *e.g.*, $x(t)$ [m].

As for bullet points and numbered lists: don't. Ever. Not even in numbered commandments.

1.8 Starting your day

Students mention that forcing oneself to start is often an issue. Starting means that you actually have to get up first. The earlier the better. People tend to be more productive in the morning and more creative at later times.

Scientific writing is primarily a production process, with just a handful of creative elements in it. For example, the creative process involved in writing this recipe was done over afternoon milkshakes, whilst the production took place during mornings.

Production is much easier if you are in a production rhythm. Do your laundry or your dishes first. That gets you in a production setting. Start you computer and do a backup first. Then read every sentence you've written so far, including the title page. Make changes to sentences that are not smooth enough. Then continue writing where you left the previous session.

1.9 Order of writing

In our humble opinions, the order of writing a scientific work should be exactly the same order as the chapters that follow. That means that you should complete writing the title page before proceeding to writing the abstract. Believe us, it will save you a lot of trouble if your supervisors and you agree on coauthors beforehand.

1.10 Informing your coauthors

It is actually quite handy that coauthors know as soon as possible that they are involved in your paper. Either your supervisor or you should inform them with an official message:

> <*header*>
>
> <*date*>
>
> Dear Dr <*coauthor name*>,
>
> This message serves to inform you that we would like you to be a coauthor on the paper with the preliminary title <*title*>, to be written by <*all author names*> and to be submitted to <*journal*>.
>
> Your role in the project was <*coauthor role*>. We would be most thankful if you would also like to provide us with your expert opinion during the writing process.
>
> Please confirm if you agree to be a coauthor.
>
> Thank you for you consideration.
>
> Kind regards,
>
> <signature>

After each section has been completed, you may provide your coauthors with the most recent version. Make sure to have the version number and date visible on the title page.

Do not, under any circumstance, give coauthors permission to make changes in your master document. Before you know it your line spacing and default document language have been changed. Instead, copy corrections by hand, one by one, into your master documents. This may sound time-consuming. It is not at all. You'll thank us later.

1.11 Making decisions

Take your coauthors seriously. They do not want to make a paper with their own name on worse. Every suggestion increases the chance of acceptance.

However, it may happen that a suggestion is not a good idea. Maybe the coauthor did not fully understand part of the paper? But whose fault is that? If a paragraph is apparently hard to understand, it clearly needs rewriting. How is a reviewer supposed to judge your paper if your own coauthors misunderstand it?

And then there's always a chance a suggestion is a really bad idea. A common mistake is to suggest reasoning in the materials and methods section, which should be reserved for the discussion section. To prevent alienating coauthors, maintain a list of suggestions you did not incorporate, and the reason why the decision was made.

If push comes to shove, the corresponding author has the last say in changes made.

1.12 As long as you have not submitted...

As long as you have not submitted the manuscript, use double line spacing, number lines and pages, and have the date and version clearly visible on the title page. It is not a pleasant experience for coauthors to have to scribble text between lines or to have to refer to "the third page of the discussion section".

1.13 Dealing with writer's dip

Progress may be slow at times. To prevent progress coming to a halt, talk to your supervisor *weekly*. Not *even* when there is no progress. But *especially* when there is no progress. It is in the best interest of your supervisor that you submit your paper. You may be positively surprised how much experience your supervisor has with getting manuscripts back on track.

Agent Mulder believes we are not alone. We agree with agent Mulder.

2 Title page

The title page of your draft may look a bit like the title page of this recipe. But it should include some more items.

2.1 Title

By far the most important part of your manuscript is the title. It determines if anyone bothers to have a look at your abstract. It should be self-explanatory, clear, appealing, covering the topic of your manuscript, and unique.

It is very hard to come up with a good title. That's why you need to rethink the title every time you open the document.

But there are some guidelines.

You would not consider using the word "thesis" in your thesis title or "article" in your article title. Still, many scientists use forbidden words. Forbidden words include study, analysis, characterisation, method, research, theory. Do not consider using any of these.

Avoid the use of subtitles. If a subtitle is required to explain the title, replace the title by the subtitle. An example is *Evaluation of the effects of clinical diagnostic ultrasound in combination with ultrasound contrast agents on cell stress: single cell analysis of intracellular phospho-signaling pathways in blood*

cancer cells and normal blood leukocytes. In our opinion, the subtitle itself would have been a much better title for this paper. The subtitle of *Permeation of probe molecules into alginate microbeads: effect of salt and processing* could have been avoided by changing the title to *Effect of salt and processing on the permeation of probe molecules into alginate microbeads*.

A very long and detailed title tells the subliminal message to the reader, that the paper is not to the point. Which may be true. The German patent *Vorrichtung und Verfahren zur Identifikation, Separation und/oder zelltypspezifischen Manipulation wenigstens einer Zelle eines Zellsystems sowie von Mikroorganismen* makes us cringe. No wonder it has not been cited.

The reverse sometimes happens, too. The not so lengthy title *Facilitating understanding, modeling and simulation of infectious disease epidemics in the age of COVID-19* was not clear at all. We corrected this flaw by calling our follow-up paper *Extracting transmission and recovery parameters for an adaptive global system dynamics model of the COVID-19 pandemic*, which is longer, yet clearer.

A very short title sets expectations high, that this paper applies to every situation even remotely associated with the title. Tim Leighton's masterpiece *The Acoustic Bubble* has a perfect title, as it covers every physical aspect of bubble acoustics. One of our own works, *The physics of nanoshelled microbubbles*, has not got such an appropriate title, as the paper only treats a specific type of dynamics, under very limited conditions.

If a title sounds funny, it's probably funny only once. If at all. Google Scholar shows over 300 000 results for the search term `FISH and chips`. On closer inspection, the scientific papers and textbooks concerned are about a project or methodology with the acronym FISH, involving an *in-silico* component. We guess that the FISH acronyms had been constructed with the purpose of publishing a paper with the title *FISH and chips*. Hilarious.

2.2 Authors

On your title page, write the names of all contributors in one line, clearly marking the corresponding author. The corresponding author is responsible for the whole submission process, which requires precision and dedication. If you are a sloppy person, do not volunteer to be the corresponding author. And consider a different line of work.

The order of authors is very important. Forgetting to include a coauthor

is embarrassing enough, but do not underestimate the life-long animosities that come into existence from adding a coauthor in the wrong position.

Always discuss the coauthors and their order with your supervisor. Do not include or exclude people without prior consultation. If your coauthors are students themselves, they may want to involve their supervisors.

Despite the political side to this, the standard order is straightforward. The first author is typically the person doing the writing and also the one doing the work towards an academic title. The second author is closely involved. Most universities allow second-author papers to be included in a thesis. After that follows a list of scientists who were somehow involved in the project. The last author is responsible for having secured the primary funding for the project. Typically this is your supervisor. Or the line manager of your supervisor. If multiple supervisors are involved, they will tell you the correct order. They may choose to have the best-known professor in this scientific field in the most prominent position, even if the role of this person was rather limited.

Do not get personally involved in discussions on who is and who isn't on the paper. If you are good at what you do, you will create enough enemies already, so there's no need to make sure to create even more. In case of doubt, include. If you are afraid that a coauthor is going to present your work as their own, which happens a lot, you should not have involved that coauthor in the project in the first place.

We are hesitant to include too many authors, as we think that all coauthors should be able to explain their specific scientific role during an audit. However, some groups have the habit even to include technicians and administrative personnel as coauthors. Make sure that you familiarise yourself with and adapt to the publishing culture of your group.

Whatever the order of the authors, their spelling should be flawless. Make sure that you make clear what is part of the first name and what part of the last name. We may use capitals to emphasise the last name: Odd Helge GILJA, Emmet MC CORMACK. Or we may choose to reverse last and first names, using commas and semicolons as seperators: Poortinga, Albert T.; Shimizu, Ri-ichiru. Exclude academic titles in the list of authors. Note that first names only apply to commoners. Lord Rayleigh is considered a last name. Good luck asking him to be a coauthor.

2.3 Keywords

Keywords would be the search terms that you'd use to find your own paper, excluding all words in the title. Choose your keywords wisely. They determine if your paper is found in the first place.

Unlike the term might suggest, they do not have to be individual words. Short phrases are fine. These count as one keyword.

Consider a thesis on comparing the novel use of magnetic resonance imaging for dose planning in radiation therapy to computed tomography data. Assuming that "magnetic resonance imaging for dose planning in radiation therapy" is part of the thesis title, a good keyword would be "MRI-based dose planning". Both "CT" and "CT data" would be weak keywords for obvious reasons.

3 Abstract

A decent abstract is exactly seven sentences long.

3.1 Motivation

The motivation for your research may be somewhat general. But it should also be an indicator of how relevant and timely your manuscript is.

Consider a study on an algorithm to detect compressible structures in artery walls. The overall relevance may be obvious, but how to write that in one sentence? "Heart disease is the primary death cause in the Western world" may be true. But unless you've got exceptional research outcomes to present, that does not change because of your paper. A sentence closer to your project is preferable: "As vulnerable plaques may cause a heart attack or stroke, early detection of such unstable structures is of major interest". Voilà!

3.2 Problem statement

The problem statement is a single sentence connected to the motivation that indicates why there is a lack of progress in this important field. It may refer to

a hiatus in our knowledge: "The speed of sound in most cryofluids, however, is unknown". Or a technical issue: "But all commonly used anode materials melt at temperatures greater than 3000 K". The sentence needs to be formulated such that the reader immediately understands how solving the problem would benefit the field indicated in the motivation.

3.3 Purpose

"The purpose of this study was..." not necessarily to solve the problem in the problem statement. That would be nice, of course, but most studies tackle a minute part of the problem. Or only quantify the extent of the problem. It is totally fine to study if a supposed problem really is a problem. Or to study if the occurrence of a problem can be modelled without actually solving it.

"The purpose of this study was to build an experimental setup for the ultrasonic fractionation of whole blood in flow conditions" may sound like a decent purpose. But the actual purpose of the study was nonmechanical fractionation of whole blood in flow conditions. The setup building and use of ultrasonics should have been part of the next sentence on methodology. The purpose of a study is preferably not an activity. Analysing should not be a purpose. Neither observing. Nor building.

Some projects investigate a novel tool as an alternative to an existing tool. The problem statement may mention that the existing tool has major disadvantages. Then the purpose is to demonstrate the feasibility of using the novel tool for the same application. We studied torsion rheometry as a means to determine acoustic properties of viscoelastic materials. Although the paper was a nice read, the purpose had been formulated so poorly, that it took us a while to find it back in our own paper.

"The purpose of this study was to quantify the influence of skeletal friction on the damping of a pulsating antibubble and the pulsation phase of an antibubble relative to the incident sound wave" and "The purpose of this study was to quantify transient and steady-state behavior of black tattoo ink under sonication" are examples of well-formulated purposes. Both have been modified from the published papers.

A purpose may include a hypothesis: "The purpose of this study was to evaluate the hypothesis that black tattoo ink demonstrates transient dynamic activity in an ultrasound field." Research questions in a PhD project are commonly formulated in the form of a hypothesis.

3.4 Methodology

In the abstract, you should not include details about the materials used. The methods should be quantified if possible. For example, "Six samples of artificial and pork skin were tattooed, attached to phantom material, and sonicated with a 13–6-MHz probe, after which the speed of sound and the refraction angles of these materials were determined" is a good sentence. It does leave many questions. What ink was used? What phantom material? What pulse scheme? How often were the experiments repeated? But that's what the actual paper is for.

A common mistake is to add too many details. Or to leave out the actual activity done by the researcher: "We analyzed optical recordings of insonified compressible particles" says nothing and contains a forbidden word. Make sure that the sentence answers the question what did you actually do yourself in this project?

3.5 Main result

An abstract does not require you to sum up all outcomes. Just write down the most important finding. Be as concise and quantitative as possible. Your results are dead numbers. So emotional outbursts are left out: "The linear acoustic attenuation coefficient of pure black ink was measured to be $0.15 \pm 0.01\,\mathrm{dB\,cm^{-1}\,MHz^{-1}}$."

Results are not good, bad, or promising. The interpretation of what is high and low, great and small should not be made in the results sentence. Thus, "A dynamic contrast-enhanced recording showed the nonlinear signal of the agent to much greater than for the control and much less than the commercial agent at a high concentration" is an abomination.

3.6 Discussion

Explain why the result happened and what the implication of this is. For example: "These results were explained by a 16-dB device compensation between the two interfaces, indicating that the scattering from nucleation was not just taking place in the distal part of the well cross section, but over the whole cross section" or "As the incisions from the sonicated blade were visibly sharper than those from

the unsonicated blade, and at least as sharp as those from the industrially cut paper edge, the acoustic amplitude must have influenced the sharpness of the blade".

Do not introduce new results. Do not mention any future work.

3.7 Main conclusion

The last sentence should answer whether the goal was reached, whether the problem was solved, and what the consequence is for the greater good in the motivation.

Now the abstract is complete. But it is still a draft. Throughout the writing process, check if the abstract is still representative of the storyline of the manuscript. Feel free to modify it at will. A strong abstract makes a strong paper.

4 Introduction

Contrary to popular belief, introductions should not be long. If the introduction exceeds the methodology section, it is most definitely too long.

The first paragraph builds on to the motivation and problem statement as mentioned in the abstract, but now accompanied by references to peer-reviewed papers of different groups. The last sentence of the paragraph should build a bridge to the purpose.

The second paragraph states the purpose of the manuscript. Even if the background is not thoroughly clear, do not postpone mentioning the purpose of the paper. If the purpose requires additional background information, still mention it in general terms here, and repeat it in more detail later.

The bulk of the introduction is the background, which is not some random blabbering about similar research, but a very precise formulation of the boundaries of your own project. Your project deals with a specific area, because others have already dealt with adjacent areas. If you know your field and the novelty of your research, you can keep the background very concise.

Try to avoid referring to material not directly touching your research area. For example, consider a project on the first use of hydrophobic particles in wood pulp permeation. Say that a prior study has shown permeation of wood pulp with hydrophilic particles. Then it is not needed to also refer to a different study investigating permeation of blue-green algae with those hydrophilic particles, as

the latter study is a step farther away than the former. However, if the blue-green algae study had been performed with hydrophobic particles, that should be referred to.

This is the part of your paper with most references. If you've got less than eighteen references here, your field is new (improbable) or you didn't do your homework (more probable).

The last paragraph of the introduction is reserved for outlining the remainder of the paper. It builds a bridge to the methodology and may mention some of the reasoning to choose a certain setup, reserving the full reasoning for the discussion section. Avoid future tense in this part.

5 Theory

Including a theory section is certainly not standard procedure. If there is no novel component in the theoretical part, you may want to avoid a full section and mention existing theory, including equations, in the background part of the introduction. Avoid mentioning equations that are not actually used by you to obtain the results in this manuscript.

Equations that you do use are stated in full with every single parameter explained. Derivations may be stated, typically from the point where a prior paper mentioned boundary conditions under which the proto-equation holds. Discussion on the relevance of the boundary conditions is reserved for the discussion section.

Derivations for first principles should be moved to an appendix. But the final equation should be included in the main part of the paper.

Special attention needs to be paid to roman and italics in parameters, especially in subscripts. Note the difference between parameter m and the unit m. In a_i, i can be substituted by a number, whilst a_i might be the initial condition of a. LaTeX users, please familiarise yourself with the `\mathrm` and `\textsubscript` commands. Greek lower case is always slanted, but Greek upper case never. So ψ versus Ψ.

Avoid double divisions in equations: not $\frac{\frac{a}{b}}{\frac{c}{d}}$ but $\frac{a\,d}{b\,c}$; and in units: not [dB/cm/MHz] but [$\mathrm{dB\,cm^{-1}\,MHz^{-1}}$]. We have a strong dislike with regard to slashes in fractions.

6 Materials and methods

See this section as a detailed recipe, but only expressed in full sentences and absolutely no lists. If your materials and methods section is handed to a fourth year BSc student in your field, the student should be able to generate exactly the same results as you are presenting in your manuscript. The level of detail needed in this section is therefore very high. That is why this section should be long. Almost as long as the discussion section, in fact.

The materials and methods are described without explanation why. This is reserved for the discussion section.

There is no need for subsections. But there are very clear parts that need to be addressed.

6.1 Static part

In case of experiments, one should start with the static part of the experimental setup. Each peace of equipment is stated as `<device type or number> <generic device name> (<official manufacturing company name>, <location>, <state>, <country>)` as part of a full sentence in which it is mentioned to what it is connected and what specific conditions or consumables apply.

For example: "Either an HFL38 13–6-MHz linear probe or a C60 5–2-MHz curvilinear probe of a SonoSite M-Turbo sonography device (FUJIFILM SonoSite, Inc., Bothell, WA, USA) was clamped in the length direction of a Perpex container of inner dimensions $580 \times 235 \times 65\,\mathrm{mm}^3$" or "Bright-field microscopy images were captured of a 0.01% dilution of Zuper Black pigment dispersion (INTENZE Products, Inc., Rochelle Park, NJ, USA) using the bright-field component of a ZEISS LSM 780 confocal laser scanning microscope with an alpha Plan-Apochromat $63\times/1.40$ NA Oil CorrM27 objective lens (Carl Zeiss AG, Oberkochen, Germany)".

Conditions may include room temperature and machine settings.

Do not start by referring to a figure of the experimental setup. The text should be fully self-explanatory. At the end of this part, a figure may be included. This figure needs to be fully explained in the caption.

6.2 Dynamic part

More complicated is the description of the dynamic parts. You may choose an entity to follow: waves, particles, electrical current, or data. Describe whatever entity covers the whole dynamic. In the case of microscopy, you would describe light generated by your light source to go through an optical fibre, illuminate a biological sample, scatter into the objective of a microscope, and hit a charge-coupled device.

6.3 Preparation

Storing, defrosting, and preparing samples is just as much part of an experiment as manipulating samples with dedicated machines. If you are in doubt if an item or procedure should be included, include it. Everything that might influence the outcome of an experiment should be mentioned. Especially when stirring and shaking is involved.

Example: "A quantity of 5 mg of freeze-dried Aerosil R 972 hydrophobised silica particles (Evonik Industries AG, Essen, Germany) was deposited into a FALCON 15 ml High-Clarity Polypropylene Conical Tube (Corning Science México S.A. de C.V., Reynosa, Tamaulipas, Mexico), after which 5.0 ml of 049-16787 Distilled Water (FUJIFILM Wako Pure Chemical Corporation, Chuo-Ku, Osaka, Japan) was added. The emulsion was shaken gently by hand for 1 min."

6.4 Procedure

Do not write the procedure in chronological order. Always start with the description of the main experiment before describing the controls.

Make sure that the experimental procedure is described in such detail, that any reader skilled in the art can repeat the experiments. That also means that all quantities are mentioned and every consumable is specified.

When simulating and modelling, the equations used are to be referred to here. The software used is indicated in the same format as the equipment used.

Data processing is part of the experimental procedure. Commercial packages and self-written code are mentioned. It is not uncommon to include programming code in theses, but not in journal articles. We prefer code to be moved to an Appendix. If code is included, it should be commented thoroughly.

The final part of the procedure is the selection of data for presentation and conversion to graphs and tables. Obviously, the removal of outliers should be mentioned. Data massaging is allowed, provided that it is repeatable and clearly indicated in this section.

Do not forget to mention how often the procedure was repeated, *i.e.*, how many experiments were done.

Beyond this point, no new references can be cited in your manuscript.

7 Results

The results section does not need to include every single outcome of the study. One could start with a typical result compared to a typical control. Detailed and objective. State values, not trends. Do not interpret the result. The result may be accompanied by an graphical illustration. But the figure should never replace the text. The caption of the figure should be clear without further context – guide the reader to what you want them to see.

Then follows an overview of the bulk of the outcomes. Preferably with an error analysis. A table or figure may be added as support. If many tables are to be presented, move them to an Appendix.

Finally, it might be interesting to show an outlier or a result that that is beyond the original scope of the study.

The result section is short in comparison to the previous and next sections.

A good figure takes about a day to create. Line drawings are preferred over photographs. Grey-scale over colour. Simplicity over chaos. The caption should be elaborate. Avoid acronyms.

A table is easy to create, but the caption is often ignored. It should be just as elaborate as the caption of a figure. Again, guide the reader to what they should take from the table.

8 Discussion

The discussion section is even longer than the methodology. This is where measurements become science.

The discussion section is rarely divided into subsections. The items to be discussed fall into the following four categories.

8.1 Interpretations

The interpolation and extrapolation of results lead to the observation of trends. Such observations are not a result in itself, but a subjective interpretation of results and therefore belong in the discussion section. Derivative values of vital statistics fall in this category. So do cross-correlations.

8.2 Explanations

Why did the outcomes happen? Can the results be explained or refuted by theory? Are there alternative explanations? Can their likelihood be estimated?

You are allowed to add uncertainty here. Even mild speculation is not frowned upon here. As opposed to the other sections, the discussion section may be

subjective. So long as emotional adjectives are avoided.

8.3 Implications

Now that we know why results happened, what does this imply? Does the finding mean that the research question has been answered? In how far? Are there potential applications of this research? Is the outcome sufficient to make a drastic change to the field of study mentioned in the motivation?

In addition, are the findings that were beyond the original scope of interest to scientific or other communities?

This is also the opportune moment to mention any negative implications from results, *e.g.*, "As scattering from ink particles inside these receptacles was not observed, the influence of dilution on the transient nature and the quantity of acoustic scatterers could not be established."

8.4 Justifications

So far we have completed the most exciting part of the discussion section. But we're not there yet. Now comes the part that most students hate to write.

For every single sentence of the theory and methodology sections, we may discuss whether the boundary conditions, assumptions, equations, devices, configurations, and settings used were actually justified, given the outcomes of this study.

The importance of this part is often underestimated. But ignoring it may lead to disaster. Or the opposite thereof: A famous group used an equation that only holds under strict adiabatic conditions to compute the temperature inside a collapsing cavity. They concluded that they had discovered a way to cause nuclear fusion, instead of wondering whether their micron-sized bubble in water was really that adiabatic.

This part of the discussion section creates some limitations to the implications. Where the implications may have an optimistic sound to it, the justification may come across as slightly pessimistic.

9 Conclusions

The conclusions take up only a few sentences. They are typically three statements without additional explanation.

The first sentence summarises the most important result.

The second sentence states the most important implication.

The third sentence answers the research question.

You may have already encountered journal articles with page-long conclusions. Those tend to have pieces of reasoning and even discussion in them. So they are not really conclusions now are they?

> In conclusion, keep your conclusions as brief as possible.

10 Acknowledgements

The acknowledgements are written as one paragraph. The order of sentences is straightforward. The first sentence starts with "This research has been supported by" followed by all funding organisations, including grant numbers that are supporting you or any of your coauthors. Grant titles and other details are left out. The next sentence is a statement on conflict of interest. This applies to all authors who have received any type of support from parties that may benefit from your research. The next sentence is a statement of informed consent, if applicable. Next, all ethical clearance certificates need to be mentioned in detail.

If none of the above apply, you can use the following standard text:

> Conflict of interest: Authors state no conflict of interest. Informed consent: Authors state that informed consent is not applicable. Ethical approval: Authors state that no ethical approval was required for this research as no human or animal samples or data were used.

In addition to the previous statements, technical and administrative support from individuals may be mentioned, without emotional adjectives. Avoid thanking spouses and deities.

Occasionally, scientists are thanked for "valuable discussions". Please leave such insults out. If you do not want to include someone as a coauthor, that is fine, but you don't have to let the whole world know that you don't want them on your paper. Instead have the decency to add a reference to one of their papers.

11 References

It is hard to check for referees if you actually did all experiments correctly, if you checked your settings every time, and if you copied your numbers correctly into your lab book and processing software. Hard, but not impossible.

Out secret is that we check the references instead. If there are sloppy errors in your references, you make sloppy mistakes when measuring and programming. If you did not check the spelling of all the author names in your references, you cannot be bothered to check the declaration of all variables in all subroutines you were supposed to code. If your references are in different styles, you are a person who changes settings during experiments and forgets to change them back.

In other words, your references should be flawless.

Never include a reference if you do not have access to the source. A Pubmed abstract is not a source.

Assume that citation tools make mistakes and check every reference you add. Make sure that double last names do not end up as part of the author initials.

Avoid references to proceedings and book chapters if there are peer-reviewed journal sources available.

Some journals require references in alphabetical order. It is handy to remember that in Nordic alphabets, multiple letters come after Z. The full alphabet, which includes Danish, Norwegian, Swedish, and Finnish letters, is A–Z, Æ, Ø, Å, Ä, Ö. In this order.

12 Appendices

Welcome to the part of your work that did not make it to the main text. This is not the part that attracts a lot of readership. It is there because you wanted to share full derivations, programming code, and additional results with the readers.

Appendices are becoming increasingly uncommon. The reason is that journals nowadays offer you the option to upload supporting material and multimedia files with your manuscript.

Consequently, appendices are mostly found in dissertations and theses.

We encourage you to spend the time that you could have used to write an appendix on writing a next paper instead.

13 Submitting

There is a pleasant side effect of writing a manuscript in the order we just did: it is obvious when it is finished. When a manuscript is finished, and your supervisor agrees that it is finished, it is submission time.

13.1 Last checks

Please allow your coauthors seven full days to suggest cosmetic or more substantial changes. Mention the intended date of submission very explicitly.

Do not automatically assume that you know the affiliations of your coauthors, so ask and make sure that you include all their affiliations correctly, with full addresses. Ask their ORCID. And ask if it is appropriate to include an acknowledgement to any of their grants.

Convert the manuscript to the submission format required, typically with a separate list of figures and a list of tables, followed by the figures and tables each on a separate page.

Then print a hardcopy of the paper, invite your friends over, and start looking for errors. Spelling errors that were missed by your processing package such as "form" where it should be "from", but also cross-references to the wrong figure, or using a term a few paragraphs prior to the paragraph in which this term is

first explained. Do the references together. One of you checks if all references have a period at the end. Another checks if the page numbers are correct. And someone clicks on each DOI to check if that leads to the appropriate reference.

When all of that is done, you go to sleep. Submissions should never be done at the end of a long working day.

13.2 Accompanying letter

Journal websites greatly differ. But most of them require an accompanying letter. Please read this example:

> <*sender*>
>
> To: <*journal address*>
>
> <*date*>
>
> Dear Editor-in-Charge,
>
> Please find attached the manuscript <*title*>, written by <*all author names*>, for consideration to be published in the journal <*journal*> as *an original article* | *a technical note* | *correspondence* | *a review paper* | *a special issue paper*.
>
> We think that the manuscript would fit best in the section <*section name*>.
> Thank you for handling this manuscript.
>
> Kind regards,
>
> <signature>
>
> Corresponding author

We have seen the most baffling prose in accompanying letters. The longest we have seen was eight full pages. Clearly, not all authors understand what is the purpose of such a letter. It is to help the editor-in-charge make a decision who

should be the associate editor to which the paper is forwarded. If your paper is intended for a special issue, you need to explicitly say so. If the journal has distinct topics or sections, mention your preference. Nothing else should be in an accompanying letter.

13.3 Waiting

After filling in all relevant fields, filling out copyright transfer forms, and uploading all source files required, you may press the submit button. Directly after submission, copy the source and PDF of your submitted manuscript into a new subdirectory `./official`. Do not touch this directory. Print the PDF, put it on your desk with a pencil on it. Then create a full backup of your directory. Finally, create a new subdirectory `./submit2` and copy the submitted source file there, but increase the version number to the next round number. For example `JJAP21_CSC30_MARKED.tex`. Notice the word `MARKED` that has been added. We'll get to that.

And then you wait. There are a few rules to waiting.

The first rule of waiting is never to reply to the email, automatic or otherwise, from the publishing house confirming receipt. A well-known author once replied "Thank you!" to the confirmation email, after which an automatic email followed with the text "The handing of your manuscript has been put on hold until your query has been resolved."

The second rule of waiting is harder: No post-submission proofreading. The minute after submission, you will discover a prominent error on the first page. If you do commit this cardinal sin and find errors, you are allowed to mark them with the pencil on the one manuscript on your desk. But do not touch any of the digital files. Really, don't.

The third rule of waiting is to not actively wait for a decision. That will come in time. To prevent a post-submission dip, which is a real thing, divert your energy into writing the next paper.

The fourth rule of waiting is to let your supervisor handle any contact with the associate editor, when many a moon has passed since submission.

The fifth rule of waiting is not to read the verdict alone, but send it out to your coauthors first. Then read it together with your supervisor. If this is your first submission, you may seriously misinterpret the language in your verdict letter.

14
Dealing with the verdict

14.1 The verdict itself

Publishing houses do not like to be sued by universities. As a consequence, all correspondence from publishing houses is written in such a format, that you cannot claim any rights from it.

The first sentence often reads, "Your manuscript has not been accepted for publication". That sentence has no meaning, other than that you cannot claim that your paper has been accepted.

The magic words that indicate the real verdict are in the part stating when the revised manuscript needs to be resubmitted. If that part is absent, your paper has been rejected.

Rejection can be a desk-reject. That means that the handing editor does not think that your paper is suitable for this journal. You may resubmit elsewhere.

Rejection after review means that at least one of the reviewers thinks that the science is not convincing enough to be admitted for publication. Do not submit an unmodified rejected paper elsewhere. Incorporate all changes suggested by all reviewers first. They will make the paper stronger.

A rather rare first verdict is accepted as is. This is often called preliminary acceptance by publishing houses. None of the reviewers has any suggestions.

The verdict minor changes does not mean that a few changes need to be made. This verdict means that it is up to the handling editor whether your second submission is redistributed to the reviewers. If all suggestions by the reviewers have been incorporated into the resubmission, the handling editor may decide to accept without further review. If one or a number of suggestions has been omitted, your resubmission is sent to the reviewers again.

The verdict major changes means that the rewriting or restructuring is so substantial that another review round is required. Sometimes additional measurements have to be done as part of the suggested changes.

14.2 Writing a rebuttal

Now that you know the verdict, it is time for a rebuttal.

That's right. You are still not going to edit the digital version of your manuscript. But you may draw nearer the hardcopy with pencil markings and, by now, several coffee stains.

Your first task is to create a rebuttal document, very similar to the one on the next page.

Copy in, literally, all comments from the reviewers and from the editor in the left column. Make sure to number all comments. In the right column, only add the text **The authors agree** behind each comment, in bold.

Do not, we repeat, do not answer any of the questions!

Then you are going to add numbers in the side margins of your manuscript, each representing a reviewer comment. $\mathcal{E}.1$ is the first comment of the editor; $\mathcal{R}2.5$ is the fifth comment of reviewer 2.

After going through the suggested changes once, it's time to modify and add text in the hardcopy, with pencil. Now is the time that you realise why double line spacing wasn't such a bad idea, after all.

After a comment has been addressed in the hardcopy, write a sentence that looks like this: **The authors agree**. The following text was `added` | `modified` in section *n*: "`<text in red colour>`".

<Journal Name> <Reference Number>

Rebuttal to the review of
"<Article title>"
by <Authors>.

Dear Editor-in-Charge,

The authors are most grateful for the highly useful comments made! Please find below a detailed reply to each comment. The changes made have been highlighted in the revised manuscript in red font. Text changes have been copied from the LaTeX source code. Therefore, in this rebuttal, references appear with different formatting than in the manuscript itself. In addition, the order of the text and the references has been restructured. For the convenience of the reviewers, the renumbered references have been added to this rebuttal.

REVIEWER 1:	
1. Copy each of the reviewers comments verbatim into this document.	**The authors agree.** The reviewer is always right, acknowledge it and explain why you agree by detailing what changes were made in the manuscript that addresses the comment.
2. Treat each sentence as a separate comment.	**The authors agree.** If you made text modifications, it is beneficial to indicate "exactly what text was ~~deleted~~ removed and what was added/changed in red."
REVIEWER 2:	
1. Repeat for each reviewer.	**The authors agree.** Even if there are overlapping comments, repeat the same changes that were made to show that you have addressed their particular comment.
2. If there are extra references added, it is beneficial to include the full reference list as part of the rebuttal letter to save the reviewer from skipping forward and backward.	**The authors agree.** You are trying to make their lives as easy as possible with the rebuttal letter. Give them everything they want in this letter and they will look favourably on your resubmission.
EDITORIAL COMMENTS:	
1. Don't forget to include any comments from the editor that may also be included.	**The authors agree.** You want to give the editor confidence that you have addressed everything carefully and fully.
2. You should write the rebuttal letter first before you even think about touching the newly created version of your working manuscript.	**The authors agree.** This way you will be able to take the time to digest what the reviewers are actually asking for, and plan out how you will make the changes in the clearest possible way.
3. Make the updates as soon as possible. You want to get it back to the editor (and reviewers) while it is still fresh in their memory.	**The authors agree.** Again, it is a quality of life hack. If they remember your manuscript, they will need less time to re-review the changes that you have made.

References

[1] Include the full reference list here, in the journal required format, indicating any new references added in red.

Treat every comment as stand-alone. Even if you think that you already addressed the comment elsewhere.

Take the reviewers and the editor seriously. We apply two simple rules:

1. The reviewer is always right.

2. Should the reviewer ever be wrong, see rule number 1.

Try to really understand what this means. If your reviewer thinks that your paper is about 1-MHz HIFU, although it is about 10-MHz LIFU, you should make it more clear and more explicit in several parts of the manuscript. If your reviewer mentions experiments while you are presenting simulations, you should probably update the title and mention simulated data "that had not been derived from experiments" at some point.

We all have colleagues who claim that their papers were rejected because the reviewers did not understand anything. Well, who's fault is that? We all have a couple of less fortunate experiences with reviewers. But if this is structural, it may have something to do with poor writing by the authors, and less so with poor judgement of the reviewers.

Only once the rebuttal letter is complete, and all suggestions have been incorporated in pencil writing in the hardcopy, can you edit the source file. So in our case the file `JJAP21_CSC30_MARKED.tex`. Strike all text to be removed out and dye all text added red. To this purpose, LaTeX users should learn to use the commands `\sout` and `\textcolor{red}`.

The supervisor-approved marked version is distributed to the coauthors, accompanied by the proposed rebuttal. Again, a deadline of seven full days is appropriate.

The day before submission, another round of proofreading may be required, especially if major changes had been suggested.

After proofreading is done, copy your source file and replace the addendum `MARKED` by `CLEAN`. Comment out all struck-out text, and do a replace-all of `\textcolor{red}` by `\textcolor{black}`. Both the marked and the clean version need to be uploaded to the editorial system. Do not forget to upload the rebuttal.

Treat every subsequent verdict as if it is the first. Create a new rebuttal according to the same recipe. Never refer to prior rebuttals or prior manuscripts. A rebuttal always deals with the current version.

You may feel that after resubmitting your paper, you deserve a holiday. Don't forget to bring a hardcopy of the clean version. And a pencil.

15
After acceptance

Once you receive a letter of final acceptance, please move a PDF of the clean version of your accepted manuscript to the subdirectory `./official`. We'll tell you why later. Following final acceptance, the manuscript is moved out of the editorial system that is handled by volunteering scientists in your field to the typesetting and printing facility of the publisher that is handled by low-waged professionals working under extreme pressure. Your manuscript is assigned a new number. Your dealings with the editorial office are over. Whatever happens to your paper, do not contact the editorial office. They do not have access to your paper. Plus, they don't work for the publishing house. If, for some reason, you have an issue that requires contact, initiate an enquiry through the helpdesk of the publishing house, making sure that you are mentioning the correct manuscript numbers. Never call up a printing facility itself.

At some point, always unexpected, typically during a long vacation, you receive proofprints. Your publisher expects them back within 48 hours. So, you drop whatever you are working on. If you are on holiday, inform your loved ones that something urgent has come up. Time to find a printer to print out the proofs and get one sheet of A4 paper, get your clean hardcopy out of your briefcase, and find a quiet spot to sit and concentrate. Good that you brought a pencil. Forward the proofs to your supervisor. You supervisor will show the same dedication in proofreading as you. No need to do the proofreading with all coauthors. But it

doesn't hurt to send the proofs around. During the proofreading, you will find the strangest errors and omissions. Don't get emotional. Just mark the page and line number on your empty sheet, what it says now, and what it should be. Pay special attention to figure captions, figure numbers in the text, line thicknesses, and exotic symbols. Don't forget to read the title one last time.

Do not make changes other than unwanted differences between accepted version and proof. Adding a sentence for improved clarity actually changes the contents of the paper, and requires re-reviewing. So do not consider this. When submitting your changes, also answer all queries to the author from the publisher. Even if the answer is "not applicable", still answer.

15.1 Uploading to a repository

The copyright of the proof and the published versions of your paper are owned by the publisher. Remember those copyright transfer forms your signed? That's when it happened. Nevertheless, you do own the first submission and the accepted version. In fact, they are in the subdirectory `./official`. Most publishing houses allow you to share your first submission, *i.e.*, the version without modifications following review, with the rest of the world through a repository. A common repository for submitted versions is Cornell University's arXiv.

Most scientists prefer to share the accepted version. This is allowed as well, but typically after an embargo period. The embargo period is determined by the publisher and may differ for journals of the same publisher. Typical embargo periods are 12 months and 24 months. After the embargo, the accepted manuscript can be shared through a repository such as HAL open science. Some funding agencies require you to share your publications through repositories. Your supervisor may have actually chosen the journal based on its self-archiving or open-access policy.

15.2 Obligation to review

Every peer-reviewed manuscript you write is handled by at least one editor and three volunteers to review the paper. Those reviewers are your peers. They are other authors for the same or a similar journal. Now that your paper is out there, you will be asked to review papers yourself. And the answer is yes. You have a moral obligation to review at least three papers per manuscript that you submit.

16 Post-publication conflicts

16.1 Withdrawing your paper

Don't.

16.2 Errata

Not long after your paper is published, you might discover that some reasoning was flawed. Some numbers were in the wrong order. A plus in an equation should have been a minus. A term that was neglected was not that negligible after all.

Renewed insights do not mean that you should send a *corrigendum* paper for every *erratum*.

The standard rule is here: if the error in your paper would lead to a different conclusion, a *corrigendum* paper may be considered. Discuss with all your coauthors first. There might be alternative ways to address the error. One is to mention the error in a follow-up paper in the same journal.

If a parameter of a commercial product is incorrectly copied from the product specification into your paper, the manufacturer may demand a *corrigendum* paper

from you. This type of *corrigendum* paper is considered embarrassing, as it is just caused by sloppy craftsmanship.

Still, a *corrigendum* paper is to be preferred over withdrawing a paper. The latter is associated with foul play, most commonly plagiarism.

16.3 Plagiarism

If you suspect that your work is being plagiarised, consult with the coauthors on how to address this. You may assume that the journal and other party will not take the accusation lightly. Proof provided by you might not be seen as such. And sometimes coincidence really is just that.

In the past thirty years of working in science, we have been several times on the mediating, a few times on the accusing and one time on the accused site. In all cases, we managed to resolve the unpleasant situation in a satisfying way for both sides. Our advise is to think of an elegant way to deal with your case, without turning the other party into the opposition.

17
Bibliography

Throughout this recipe, examples were used from existing publications, often with a few modifications to highlight the good or exaggerate the bad. Given the fact that we are coauthors on all of the bad examples, it should be obvious that there's nothing wrong with making mistakes.

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A Rebuttal template

```
\documentclass{article}

\usepackage{fancyhdr}
\usepackage[margin=2cm]{geometry}
\usepackage{ifthen}
\usepackage{longtable}
\usepackage{ulem}
\usepackage{xcolor}

\pagestyle{fancy}
\lhead{}
\chead{}
\rhead{\ifthenelse{\value{page}=1}{\bfseries $<$Journal Name$>$ $<$Reference Number$>$}{Rebuttal --- $<$Reference Number$>$}}

\renewcommand{\headrulewidth}{0pt}
\renewcommand{\footrulewidth}{0pt}

\bibliographystyle{aipnum4-1}
\renewcommand\thefootnote{\textcolor{white}{\arabic{footnote}}}
\begin{document}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\begin{center}
Rebuttal to the review of \\
``$<$Article title$>$'' \\
by $<$Authors$>$.
\end{center}
\mbox{}
\\
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\\
Dear Editor-in-Charge,\\
\mbox{} \\
The authors are most grateful for the highly useful comments made!
Please find below a detailed reply to each comment. The changes made have been highlighted  in the revised manuscript in \textcolor{red}{red} font. Text changes have been copied from the  \LaTeX\ source code. Therefore, in this rebuttal, references appear with different formatting than in the manuscript itself. In addition, the order of the text and the references has been restructured.
For the convenience of the reviewers, the renumbered references have been added to this rebuttal.
```

```
\begin{longtable}{l|l}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\hline\\
\textbf{REVIEWER 1:}\\
\mbox{}\\
\parbox[t]{0.5\linewidth}{1. Copy each of the reviewers comments verbatim into this document.}
&
\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} The reviewer is always right, acknowledge it
      and explain why you agree by detailing what changes were made in the manuscript that addresses
      the comment.}
\\

\mbox{}\\
\parbox[t]{0.5\linewidth}{2. Treat each sentence as a separate comment.}
&
\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} If you made text modifications, it is
      beneficial to indicate ``exactly what text was \sout{deleted} \textcolor{red}{removed and what
      was added/changed in red}.''}
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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\hline\\
\textbf{REVIEWER 2:}\\
\mbox{}\\
\parbox[t]{0.5\linewidth}{1. Repeat for each reviewer.}
&
\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} Even if there are overlapping comments, repeat
      the same changes that were made to show that you have addressed their particular comment.}
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\mbox{}\\
\parbox[t]{0.5\linewidth}{2. If there are extra references added, it is beneficial to include the
      full reference list as part of the rebuttal letter to save the reviewer from skipping forward
      and backward.}
&
\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} You are trying to make their lives as easy as
      possible with the rebuttal letter. Give them everything they want in this letter and they will
      look favourably on your resubmission.}
\\
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\\ \mbox{}\\
\hline\\
\textbf{EDITORIAL COMMENTS:}\\
\mbox{}\\
\parbox[t]{0.5\linewidth}{1. Don't forget to include any comments from the editor that may also be
      included.}
&
\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} You want to give the editor confidence that you
       have addressed everything carefully and fully.}
\\

\mbox{}\\
\parbox[t]{0.5\linewidth}{2. You should write the rebuttal letter first before you even think about
      touching the newly created version of your working manuscript.}
&
\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} This way you will be able to take the time to
      digest what the reviewers are actually asking for, and plan out how you will make the changes in
       the clearest possible way.}
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\mbox{}\\
\parbox[t]{0.5\linewidth}{3. Make the updates as soon as possible. You want to get it back to the
      editor (and reviewers) while it is still fresh in their memory.}
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\parbox[t]{0.5\linewidth}{\textbf{The authors agree.} Again, it is a quality of life hack. If they
      remember your manuscript, they will need less time to re-review the changes that you have made.}
\\
\end{longtable}
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
\begin{thebibliography}{9}
\bibitem{ExampleRef}
Include the full reference list here, in the journal required format, indicating any new references
      added in red.

\end{thebibliography}
\end{document}
```

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Biographies

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One more thing

When using any other recipe for cooking, you are going to use it only a couple of times. After that, you are going to adjust the recipe to match your flavour.

This recipe is intended for the same purpose. Follow it get get your first papers and your thesis accepted. After that, start changing it so that you can produce manuscripts about which you feel more comfortable.

Learning to write is like learning to play a musical instrument. The more you practice, the better you will get at it. And the learning curve is very steep.

Now that you've made it this far, it is time to sit down and write that manuscript.

> Have fun. And remember: you are not alone.