Setting up your own crowd preprint review activity - Toolkit

In 2021 ASAPbio coordinated an experiment to develop and share crowd reviews on cell biology preprints. Our **crowd preprint trial** resulted in public reviews for 14 preprints; you can read more about the trial outcomes in our blog post. We saw a high level of engagement in commenting on preprints and we believe that this review format can be used by journal clubs and communities to develop their own public reviews for preprints. We are thus sharing a toolkit to start and coordinate your own crowd preprint review activity. We are happy to assist any groups interested in trying this so feel free to contact us with any questions!

We outline information and resources for the five steps to cover when preparing to run crowd preprint review:

1. Scope & format

In the first instance, you should decide what the scope of the preprints to be reviewed will be, and how the running of the crowd preprint reviews will take place. You can use the checklist below to guide you through items to settle as you get started:

Item	Description
☐ **Preprints to review**	Will any preprint be included or only those with specific characteristics: • From any preprint server or only from a particular server? • Any preprint or only those in specific disciplines? If so, which one(s)? • Should preprints be in a specific language(s)? You should also decide whether you would like to only review preprints where the author has consented/requested comments, or any selected by the crowd coordinator(s) or crowd members.

☐ **Review frequency**	How often will preprints be circulated to the crowd - once a week, once a month? - and how long will the commenting period be for crowd members.
☐ **Crowd coordinator(s)**	Document who will coordinate the crowd i.e. who will recruit crowd members, who will review/decide who can be part of the crowd if you do an open call for participation, who will circulate the preprints to the group. These tasks may be handled by different people but it is important to settle who will be responsible for the different items.
☐ **Comment collection**	What mechanism or platform will you use to collect the comments? You could create a private Hypothes.is group for the crowd members which allows inline commenting on the preprint, alternatively, you could host a copy of the preprint PDF on Google Drive or Dropbox and use the commenting features of those platforms.
☐ **Review synthesis**	Will the different crowd comments be synthesised or just collected without any synthesis or editing? If the comments will be synthesized into a single review, what is the approach to this e.g. is there a template you'd like to use? Would you like to only focus on the major points or include a majority of the comments? Who will prepare the synthesis?
☐ **Posting the reviews**	How will the comments on the preprint be posted publicly? Will this be via the commenting feature, via PREreview, or via another platform? A couple of factors you may want to consider to make this decision is whether the platform you'll use allows anonymous commenting and whether you'd like the review to get a DOI (which PREreview provides). Consider whether you would like to notify the authors of your review (in addition to posting it publicly), and whether this would happen before posting the review (with any potential period for the authors to react to it), or in parallel to posting in publicly. If you would like the posted reviews to be incorporated into the aggregator of preprint reviews Sciety, contact the Sciety team to see if your group could be included on their site.

2. Recruiting the crowd

Once you have set the scope and initial workflow, you need to get started in developing the crowd of preprint reviewers. You may already be part of a group or a community (e.g. journal club) with whom you'd like to try the crowd approach, if so, you can invite the members of the group to

participate. If you need to develop or expand the crowd, you'll need to approach additional members. When doing so you should consider what type of papers you'll be reviewing, so that you can tailor the invitations to colleagues and/or researchers working in relevant fields.

You can also issue an open call for participation and solicit volunteers by posting about your initiative on Twitter and other social media platforms, and contact groups who may be able to help amplify your call for participation - e.g. groups at your institution or societies. We would be happy to help share any calls for participation in crowd preprint review, so feel free to contact ASAPbio and we'll share through our channels.

You should also consider what crowd size you are aiming for; we recommend a size in the range of at least 30-40 members, unless the group will include participants who are already part of an ongoing journal club or other joint activity, in which case a smaller group of 20-25 may be sufficient.

If you need to recruit crowd members, we provide in the Appendix some email templates below to approach potential crowd participants and to respond to those who agree to take part.

3. Finding the preprints

While you are recruiting crowd members, you can start preparing your strategy to find preprints to regularly circulate to the crowd for comments. You may want to review preprints suggested by crowd participants in a similar fashion to journal clubs; in that case, you can solicit preprint suggestions from the crowd at regular intervals. If you would like to develop your own selection of preprints to circulate or prioritize papers that are getting attention or where authors request feedback, here are a few ways in which you can look for potential preprints to review:

- If you are only including preprints from a particular server e.g. bioRxiv, sign up for alerts for content from the preprint server. bioRxiv allows you to sign up for alerts for content in different subject areas or to create personalized alerts based on keywords of interest.
- Sign up for the Front Matter Preprint newsletter: https://front-matter.io/newsletter, a weekly newsletter that delivers preprints from bioRxiv/medRxiv tweeted at least three times in the selected subject areas of interest.

- You can check Twitter for the latest preprints shared there and see if the authors request feedback on their work; you can also post on Twitter asking for suggestions of preprints to share with the crowd. If you have decided to include author consent as part of your workflow, reach out to them for permission via email.

If you decide that the group will only review preprints where the authors have consented to the review and public posting of the comments, you can find a template to contact authors for permission to review their preprint in the Appendix.

4. Getting the crowd set up

We recommend that you develop a brief crowd participant handbook to share with the crowd members before the start of your review activities; this handbook should include brief information on items such as:

- Workflow outline: how the preprints will be circulated, review timelines, how the crowd will receive notifications from you, where will the public reviews be posted.
- Commenting platform: which platform will be used to contribute comments on the preprints, a guide on getting set up on the platform, and on how to add comments there, if needed.
- Contact details for any queries or concerns.

If you choose to use Google Docs to collect crowd comments, you can set up a Google group for the crowd reviewers, as well as a Google drive shared with the group where the PDF files for the preprints to review will be compiled. You can then set up a Google Doc to collect the crowd comments: this would allow collaborative comments by the group members, and to include the template for the review format/synthesis (if you use one). Whether to copy and paste the preprint content into the Google Doc can be guided by whether:

- you would like to allow inline annotation - in which case you can copy and paste the contents of the preprint into the Google Doc and invite annotations via the Google Doc comments tool.
- you would like to complete a review synthesis for the comments - if a synthesis will be developed, crowd members can provide their comments on a Google Doc separate from the preprint PDF; if the public review will contain the crowd comments as received, inline commenting on a Google Doc containing the preprint would provide the context for each of the comments, and the review can exported from the Google Doc into Word for posting.

During the ASAPbio trial, we used a private Hypothes.is group for commenting. If you choose to use this platform, you will need to create a private Hypothes.is group and share the group url with crowd members so that they join the group. The annotations made via this private group will only

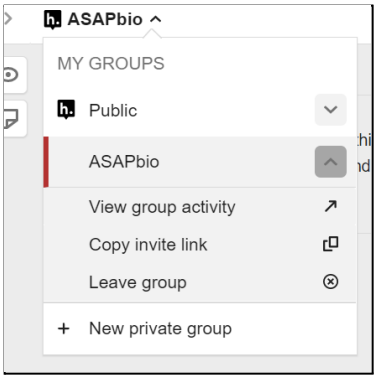
be visible to the group members, i.e. they are not public. We reproduce below our step-by-step guide on how to get set up on Hypothes.is for anyone who would like to use this platform.

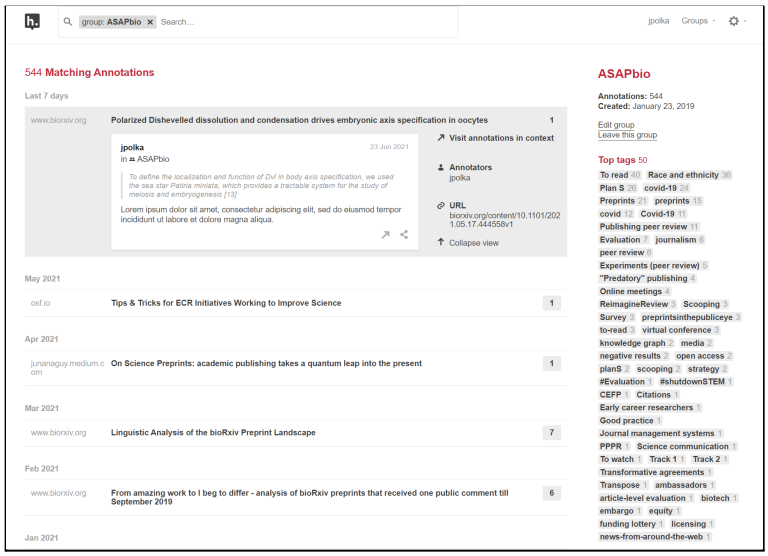
Getting set up via a Hypothes.is group

To install Hypothes.is, you need to create a free account and install the Hypothes.is extension on your browser (see https://web.hypothes.is/start/, or this video on how to install the Chrome extension for Hypothes.is: https://www.youtube.com/watch?v=MjSpol-oPm4). If you can't or don't want to install the Hypothes.is browser extension, you can add "https://via.hypothes.is/" ahead of any URL (e.g. https://via.hypothes.is/https://asapbio.org) to open the Hypothes.is panel.

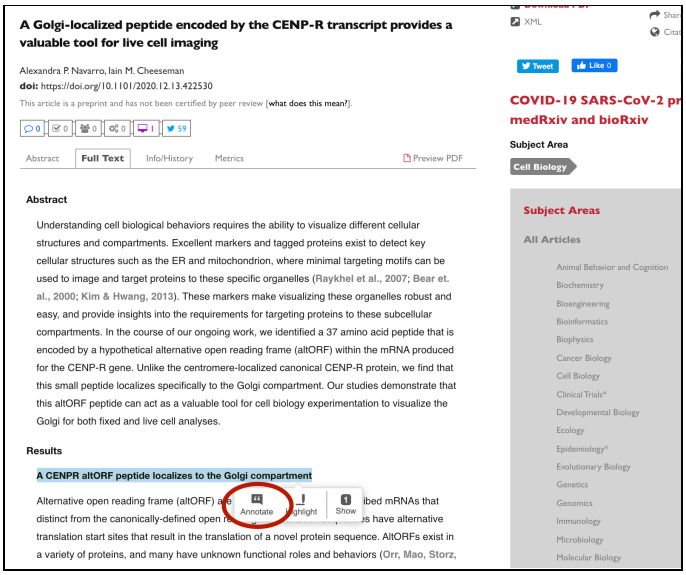
You will need to be signed into your Hypothes.is account when you access the private group for the crowd - you can use a pseudonym for this purpose, if you do so, inform the crowd coordinator of your Hypothes.is username.

The Hypothes.is group page (accessible from a link beneath its name in the browser extension) will list all the annotations made in the group. Below is an example of the annotation summary for an existing Hypothes.is group:

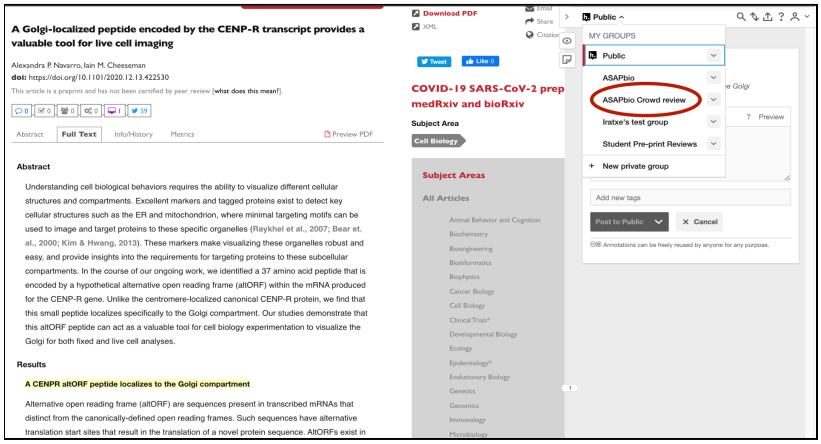




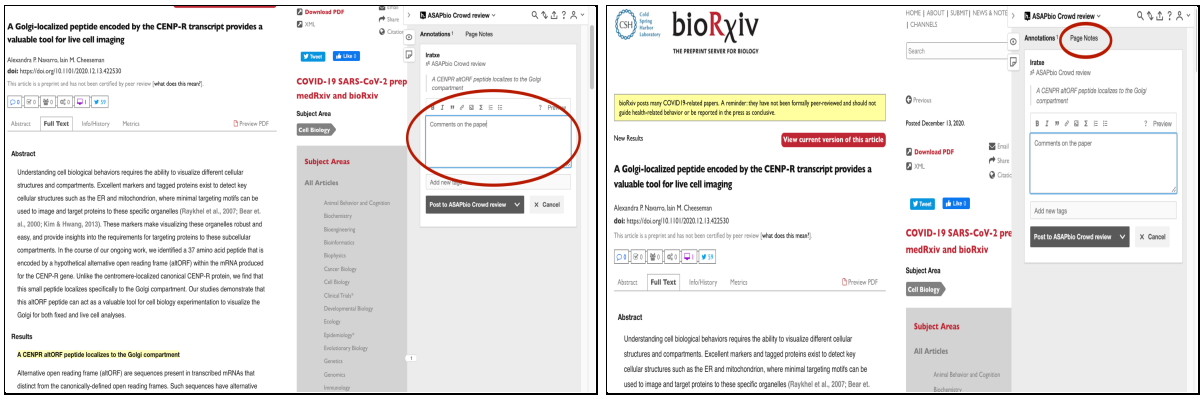
To add comments, make sure that the Hypothes.is extension is running (you may need to click on its icon in your browser toolbar), go to the preprint record online, highlight the section you are commenting on, and click 'Annotate':



A Hypothes.is annotation side bar will open, on the sidebar, select the relevant crowd preprint review group from the menu at the top:



You can then add your comments in the field provided. If you have completed a report for the full paper, you can add this as a single annotation as a Page Note.



Then click on 'Post to {group name}', your comments will then be available to anyone in this group.

Note that the url for the private Hypothes.is group is not password protected, and thus, if the url for the group is shared, it would be possible for others to see activity in the group. With this in mind, we recommend that you write your comments in a format where you'd be comfortable being seen by others.

If a crowd member finds a comment that is disrespectful or unprofessional, they can report it to moderators by clicking the flag icon in the bottom right corner of the annotation. The group moderator will then be able to evaluate the comment and potentially hide it from view.

5. Coordinating & posting the reviews

Once you have recruited your crowd members and have selected an initial preprint or group of preprints, you can get ready to start the review activities.

You will need to decide how the notifications to the crowd will be sent. Will you use email or some other format? During the ASAPbio trial, we circulated preprints to the crowd by posting notifications as Page Notes on the Hypothes.is group as well as by email notification (our template for email notifications is in the Appendix).

We recommend checking on the commenting platform a few days before the deadline to see how the reviewing activity is progressing. If you feel that additional comments are needed on the preprint, you can approach specific crowd members with relevant expertise to ask if they are available to contribute comments on the paper (our template for this is also in the Appendix).

After the deadline for comments on the preprint, you will need to coordinate the posting of the review publicly. During the ASAPbio trial, we developed a synthesis of all the comments received into a single review prior to posting; if you take this approach, the person responsible for the synthesis should check all comments and develop the synthesis. You can choose to have a

synthesis that includes all comments received, or rather focus only on the summary of the study and any major points raised about rationale, methodology or the support for the conclusions.

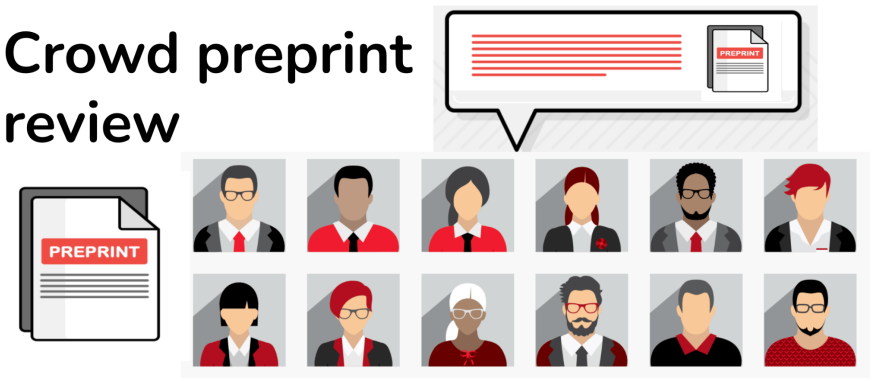
You should also consider whether the contributors to the review will be named individually as part of the synthesis. If the contributors are not comfortable having their names shared, you can post the review under the group name or use a pseudonym if the platform provides that option. If the contributors are happy to be named, add a byline to the review with the names of all the contributors.

Once the review is ready, you can choose to share this with the authors prior to posting the review publicly, if you would like to take this approach, we provide a possible email template below.

You can then proceed to post the review publicly on the platform of your choice. This will ensure the comments are available to readers, and if you list the contributors to the review, that the crowd members can claim the review as their contribution, for example for consideration in the Preprint Reviewer Recruitment Network. Once you have posted the review, you can also share the review on Twitter or encourage crowd members to do so and discuss their experience with crowd preprint review.

We hope you enjoy commenting on preprints via the crowd preprint review approach. If you try this format with your colleagues or your journal club, we would like to hear from you - How did it go? Anything you would add or change? Please contact us over email or Twitter (@ASAPbio_).

Thank you for supporting preprints and preprint review, and happy commenting!



Appendix: Email templates

Template to approach potential crowd members

Dear xxx,

I am writing to ask if you would be interested in participating in the crowd preprint review activity which we will be starting soon.

We are … {{a little bit about you/the group coordinating crowd preprint reviews}}. The activity will involve a group of researchers (the crowd) who will contribute comments on preprints. The crowd members will be invited to provide comments via {{a private Hypothes.is group/Google Doc/relevant platform}}, and can comment on the full paper or annotate only on parts of it, according to their expertise and interest. The comments will then be synthesized into a single review that will be posted publicly on the preprint via {{PREreview/bioRxiv's commenting features/relevant platform}}, listing contributors as a group. With this activity we aim to support broad participation in preprint review, particularly by early career researchers.

We would be delighted for you to participate as a crowd member, could you please let me know if you would be willing to join this activity?

If you have any questions, please do not hesitate to let me know. If you are not available at this time but have a colleague who may be interested, please feel free to pass this on.

Thank you for your time, I look forward to hearing from you.

Kind regards,

Template for agreed crowd members

Dear xxx,

Many thanks for agreeing to participate as a reviewer in our crowd preprint review activity.
The crowd involves {{number of crowd members}}, we hope that 5-8 members will provide comments on each preprint, and thus expect that you will contribute comments on a preprint around {{once a

month/relevant frequency}}. You can choose whether to comment on each paper circulated according to your expertise and your availability that week.

We will start on {{start date}}. We will provide documentation before the start so watch out for an email with additional information; if you have any questions at any stage, please do not hesitate to let me know.

Many thanks again for participating, I look forward to collaborating with you.

Kind regards,

Template to contact preprint authors

Dear xxx,

I am writing from {{your crowd review group}} in relation to your recent preprint {{Preprint title}}.

We are running a review activity where members of the group are invited to review preprints for a period of {{commenting period in days}}. After the commenting period, comments are synthesized to develop a public review posted on {{bioRxiv/PREreview/relevant platform}}. We would like to review your preprint as part of our review activity. Could you please let us know if you and your co-authors agree to this?

The review comments will be synthesized and moderated prior to posting the public review, and thus, in the unlikely occurrence of inappropriate comments, those will not be part of the final synthesis. Please note that the review cannot be modified or removed once posted publicly.

Could you please respond to this email to confirm if you and your co-authors agree for your paper to be included.

Many thanks for your time, I look forward to hearing from you.

Kind regards,

Template to circulate preprints to the crowd

Hello,

Thanks again for participating in our crowd preprint review group. I am writing to share the preprint to provide feedback on this {week/month}, here is the preprint: ***{{Preprint details}}***

Can you please comment on the preprint via the {Google Doc/Hypothes.is group/relevant platform} within the next x days, i.e. ***by {deadline}****. You can provide brief inline annotations for specific parts of the paper or a review of the full study, according to your preference.*

If you need any help posting comments or have any questions, please let me know.
Looking forward to reading your comments!

Best,

Template to approach individual crowd members for comments on the preprint

Dear xxx,

I hope you are well.

I wanted to reach out regarding the latest preprint we have circulated for comments as part of the crowd preprint review group, here is the paper: {Preprint details}

We have comments by a couple of group members and it would be great to have some additional feedback. Based on your expertise, I thought you may be a good reviewer for this preprint, would you be able to contribute some brief comments on this work over the next few days?

If you will not be available at this time, I understand, just let me know.

Kind regards,

Template to share crowd preprint review with preprint author

Dear {{preprint author}},

I am writing regarding your preprint {{preprint title}}. As part of our crowd preprint review activities, our group has reviewed your preprint. We have synthesized the comments on your work and wanted to share them with you - see below.

We plan to also post the review publicly on {{bioRxiv/medRxiv//PREreview/relevant platform}}, but we wanted to share the comments with you directly as well. We'll be posting the review on the preprint by {{date when the review will be posted}}.

Thank you for sharing your work as a preprint, we hope the comments are useful to you and your co-authors. If you have any feedback on the review, we'd very much welcome your comments.

Kind regards,

{{Crowd preprint review}}