UC Santa Cruz
Publishing Tips Series Season 3

Title
S3, Episode 6 - Peer Review Primer with Katie Hellier

Permalink
https://escholarship.org/uc/item/1xd2q794

Authors
Stuit, Martha
Hellier, Katie

Publication Date
2026-11-17

Supplemental Material
https://escholarship.org/uc/item/1xd2q794#supplemental

eScholarship.org Powered by the California Digital Library
University of California

Publishing Tips Season 3, Episode 6: Peer Review Primer with Katie Hellier

Martha: This is season three of the UCSC Publishing Tips podcast. I am your host, Martha Stuit, she, her pronouns, the scholarly communication librarian here at the University of California, Santa Cruz. This third season is a little different from the previous two seasons. Instead of answering common questions about publishing from graduate students and candidates, this season offers interviews of graduate students and postdocs themselves, including master's students and PhD students or candidates and postdoctoral researchers, and we talk about their publishing experiences.

These interviews were conducted in the spring of 2026. The aim is to share stories so that graduate authors may learn about publishing from each other. These interviews span eight departments at UCSC, so there is a range of disciplines included. Keep in mind that even if an author interview is not about your area of study, there is still something to learn about the publishing process and the effort and feelings that go along with it from these peer stories.

This episode features an interview with Katie Hellier, she/her pronouns, a postdoc in the electrical and computer engineering department at UCSC. We chat a lot about choosing a journal from the many, many journals out there, including considering the impact factor and how to identify journals that fit your work and develop a shortlist of possible journals that you could submit to.

We also delved into the challenges of responding to feedback from peer reviewers. First, Katie shares about her studies and time at UCSC.

Katie: I specialize in material science and detectors and optoelectronics specifically. I work on X-ray detectors right now and photodetectors for medical and imaging and high-energy physics.

I look at new semiconductor materials and the associated materials with them to make improved detectors for these fields.

Martha: Great. Is there anything else you'd like to share about your academic journey?

Katie: Sure. So I am a longtime banana slug. I transferred here in 2011 as an undergraduate student. I was a returning student.

I have my first degrees in fashion design. Didn't discover science until my early mid-20s and transferred here, got my first degree as an undergraduate in physics, stayed here as staff, and decided to do my PhD in physics as well, and then switched over to engineering to do a postdoc. So I've been here for a very long time.

Martha: It's a beautiful campus to spend a lot of time on.

Katie: Yes, it is.

Martha: So we're here today to talk about your publishing experiences. Mm-hmm. So my first question for you is, what tales from your publishing journey would you like to share with us?

Katie: We can talk about the experience of knowing when to publish, figuring out when is it good enough, do you have enough work that it's time to publish, what kind of journal to select.

You know, there's so many journals out there, um, figuring out what's the right one, learning how to actually go through the process. Dealing with reviewer responses and, and dealing with rejection can actually be really difficult, and especially the first few times you go through it if a journal rejects you outright.

That can be a really difficult thing to go through in your first, you know, few times, especially when you're really excited for your first publication. And usually it has nothing to do with your paper when it's outright. You know, it's more they don't feel it's in the scope of their journal or something like that.

Martha: Mm-hmm. Yeah, those are all great topics. How about we start with selecting a journal?

Katie: Sure.

Martha: I'm curious how you went about finding journals for your articles and what you learned as you started trying to find a journal, how you narrowed them down, and if you have any examples, that would be great, too.

Katie: Sure.

Martha: Mm-hmm.

Katie: Yeah, so often early in your career, your PI, the primary investigator or professor you're working for, will give you an idea of where they think you should submit. But as you actually start taking on the role of figuring out what is the right journal, one of the best things to do is start looking at the papers that you're referencing and seeing where they published.

That can be a really good way to start gauging what are good choices, especially if you see something that's popping up a lot. I publish a lot with IEEE and the American Chemical

Society. The Physics Review is a popular one that, that people in my field go with. But I see these things pop up regularly, uh, in the references that I'm citing in my work.

Sometimes it's easy to kind of start looking by, by going through those. Then once you have that general idea, you can go to their websites and they actually have, a lot of them, not all, have things that will help you to search through what they offer. So you have these general publishing companies, and they offer a huge variety of journals, and you have to look at what the scope of the journal is.

And you'll kind of get a general idea sometimes from the titles. Sometimes they'll have a field search that helps you to look through. Sometimes you're just clicking over and over again through them to see what they do. Keeping track through a spreadsheet can be very helpful to, to track and kinda keep a very short list of like what the scope is.

In my case, I work on materials and semiconductors and photodetectors. These are things that I can specifically focus on. Sometimes they focus on experimental versus theoretical, and so you can make notes of those things. Sometimes they only allow theory or they only allow experiment. Sometimes they specifically don't allow human interactions or things like human testing or behavioral testing.

There's very specific things sometimes they do and don't allow. And so if you start noting those things down, you can kinda get a list. You want to take a look at their impact factor. This is something that especially the professor or the investigator you're working with is going to be concerned about, and it's important for you as well.

The impact factor of a journal says something about how often the journal is cited and the respect level of the journal. And so a higher impact factor means that it's going to reach more people and that people typically view the journal with higher respect. And sometimes it's also just not very important if it's not going to be the right journal for you.

But you can kinda gauge. It doesn't hurt to start with a higher impact factor journal as well, and just take a shot. You never know if they're going to say, "Oh, yeah, this is great fit for us," or, you know, they may say, "Oh, no, this isn't within the scope of our journal," or they don't think it's a high enough significance, and that's okay.

It's important to be publishing work of all scales. It can be extremely significant, be, you know, world-changing. It could also just be something that's extremely informative. It could be minor, but it could end up leading to somebody else making great science later on, and those are still extremely important papers.

So going through that selection process, you kind of have to make that choice of the balance of is this the best fit for my paper? And, you know, and what do you want to get out of the publication as well? Are you looking for something that's going to look really good on your list of publications, or do you want something that is going to You know, just be like the perfect fit and an easy acceptance.

Martha: Those are all really good criteria for thinking about finding a journal. One other thing that is good to note is you may only submit to one journal at once, and that can be something that new authors don't always realize, but also makes the process take longer.

Katie: Yes. That is definitely another important factor.

So a lot of journals will tell you something about the time to first notification. When you go to a journal's page, there's usually an About section, and it tells you about that. There's also, like, guidelines for authors, things along these lines. There's a page that says something about the scope But in there, not all journals, but many journals will tell you about how, roughly how long it takes till they make a decision to send it to review or to tell you if they're gonna flat out not take it to, to send to review.

And that can be really important if you're trying to get this paper out quickly or if you're concerned that it's a, a long shot for this journal. You'd like it to be in this journal, but it's maybe not quite as good of a fit. If they have a really fast turnaround, it might not be a bad idea to just submit it and see how it goes because you're gonna hear back quickly.

And then if it's sent for review, fantastic, and if it's, you know, sent back to you, then that's fine. You can submit it to your next journal. But since you are limited to one journal at a time, you do need to make sure that if you're submitting it somewhere where it might be a stretch but you're really excited to potentially have that journal, that you're gonna hear back quickly unless it's not something that is urgent for you to publish.

Martha: It really takes some effort to match your article to the right journal, or maybe right is the wrong word, to a journal that aligns with what you're trying to do.

Katie: Yeah. Sometimes you find a journal that is perfect. You fit exactly into what their scope is. And this actually just happened to a colleague of mine.

The journal they selected was... It was perfect, but they actually said, "Oh no, we don't think this is the right fit," and sent it back. And it was kind of a surprise to us because it fit along with everything that they do, and so he submitted it elsewhere. But luckily, he heard back very fast, and so it made it easy for him to reformat it.

So this is another thing to keep in mind. Every time you submit to a journal, you have to potentially reformat it to the new journal's guidelines and submission guidelines. Um-

Martha: That was gonna be my next question. Uh, how do you go about reformatting to fit their article types, but perhaps there's even some re-rewriting?

Katie: Yes. So different journals have different guidelines, and this can range from being a page limit to being the structure of the journal or the structure of the article, which might be, you know, introduction, methods section, results section, discussion, conclusion. Some journals, for example, with, uh, the American Chemical Society, ACS, their methods section

goes at the very end And so you need to write the article when you do your introduction and go straight to results so that it makes sense doing that transition.

Some articles don't have sections. They're more of a letter format where it's just all written out. And so, you know, going from one type of journal to another, you have to take that into consideration. Sometimes this can be easy. A lot of journals will provide a template for formatting. Like, you, you download their template either in Word or in scientific journals we use LaTeX, which is a common thing.

Mm-hmm. It's basically like a coding platform- Mm-hmm ... for, for how to write. And in that particular platform, it's really easy to just copy and paste a section and move it around. Word, you can kind of do that. It makes it a little bit trickier, but it's, you know, similar. You just have to go through and then do some...

Either if you know Word really well, you can have it set up to do referencing automatically. Otherwise, you just have to go through and you change all your figure numbers and all your references and everything. I will say, I will ping for something that the library promotes, which is Zotero or Zotero. I'm not sure how to pronounce it, which is a-

Martha: We say Zotero, but-

Katie: Okay

Martha: I, I don't know what the guidance is on how to say it actually. Yeah.

Katie: I'm not sure.

Martha: Yeah.

Katie: Um, but it's a wonderful program to use. I highly recommend looking into it.

Martha: Saves a lot of time.

Katie: It's the most useful thing I have ever found for managing my references and citations and inserting them into papers, either through Word or LaTeX, and it, it can be shared across, uh, users.

Martha: Mm-hmm.

Katie: And that makes it just so easy. So.

Martha: Yeah.

Katie: But yeah.

Martha: Yeah, because you can save all of your references and even the PDFs-

Katie: Yes ...

Martha: of the, of the papers or publications you're referencing, and then it organizes all the citation components-

Katie: Mm-hmm

Martha: ... and just puts them into the paper.

Katie: Right. And one of the most useful parts is if you change the order of your references, it automatically updates the citation numbers and the references at the end of the document so that you don't have to worry about that, which is amazing, especially if you have to go through and reorder the structure of your article.

First articles as a post-doc, I submitted to a couple different places. The first place said it was outside of the scope of the, the journal that we submitted to, and then I submitted it to ACS. And again, this took me moving the, the methods section to the end and reformatting for their specific layout.

And the way that they do it specifically is, is just a open document, double-spaced lines, so it's not the final format for the print Um, but it was different than, than the previous one. And so you have to go through and, and update and make sure that everything flows, and there's minor things like some journals request that you use the full word figure, and some request that it's just, you know, the, the abbreviation, you know, fig.

And so you have to go through and update those little things, and you have to read through all of the guidelines, uh, to make sure that you're meeting all of those.

Martha: How kind are the journals about not formatting something correctly? Will they make desk edit requests, or is that reason that they might reject an article?

Katie: It depends some on the journal. One journal I just submitted to, actually, uh, that I have a paper that's, that's under its second review. It was sent back to me for a resubmission, uh, almost immediately because there was a section in it that wasn't written in the author guidelines but was in the submission format.

Like, as you go through and actually are submitting, they ask you to fill out all these different sections. And I filled it out, but it wasn't my manuscript document, and so they sent it back to me for me to add that into my document, and I had to resubmit it. Which wasn't a big deal. It was just considered a revision So they didn't outright reject it, but they did send it back to me immediately for that.

Martha: That's a good point to make because journals sometimes have outright rejections either at the desk level, which means when you've just submitted it and an editor is considering whether to send it out for a peer review, or post peer review when they have the reviewer comments back and don't like, you know, there are negative comments perhaps, and so they decide not to keep the article.

But at several points during the process, they might ask for changes-

Katie: Mm-hmm

Martha: ... which don't necessarily mean it's rejected. It just means-

Katie: Right

Martha: ... you need to align with our formatting or we want you to do revisions.

Katie: Since I'm in the physical sciences, I can't speak for, you know, outside of that too. Mm-hmm. It might be very different for social sciences or humanities.

Martha: Yes. And there's so much variation across journals, different policies, different editorial teams-

Katie: Mm-hmm

Martha: ... you know, and how they approach running the publication process.

Katie: Right.

Martha: A lot of times editors are volunteers and-

Katie: Mm-hmm ...

Martha: um, have their own style and limited availability. But then even across the disciplines, we're talking here about articles that have these sections maybe in different orders, introduction, literature review, methods, results, discussion- Mm-hmm

and conclusion. But humanities-

Katie: Mm-hmm ...

Martha: you know, may have more essay-like articles that- Right ... have a lot more flexibility with the sections that are included.

Katie: Mm-hmm.

Martha: This conversation is bringing me to another question. With all these requirements around formatting and getting the journal article ready to send into the journal, how do you decide when it's ready?

How do you know when to say, "This is good enough-" "... let me send it off"? Because I imagine there's a spectrum of, you know, something really drafty that-

Katie: Mm-hmm

Martha: ... will probably come back with, at the very least, format comments versus, like, something that is so perfect the peer reviewers only want minor revisions.

And it's a lot of work either way. How do you know when it's ready to send to a journal and good enough?

Katie: Knowing when it's ready can be hard, and especially depending on the level of input and advising that you have at the time. During my PhD, my advisor was a little more hands-off and was very busy. And I, I didn't publish very much, and I had so much work that I probably should have published because I had the data there.

I did the work, but I was always striving to have more and to have everything and to, to really feel like I knew every single detail of what was going on. And that's not necessarily what everything is about. Sometimes it's about sharing the knowledge that you've gained, even if you don't understand every detail.

Martha: And getting credit for it.

Katie: Right.

Martha: By, you know, having your name on it and having the article out there.

Katie: Yeah. I mean, it's a combination of all the things. The hardest thing to do is to start writing and to start putting things together and getting feedback Sometimes that feedback doesn't even need to be from somebody involved in the work if it's just you, because sometimes you just need somebody to bounce ideas off of or to just to read and tell you if it makes sense, especially, you know, if you are doing the work solo.

And something that I learned going into my postdoc, my advisor is much more active and pushes for publication. And I, especially in the beginning, I frequently felt, "This isn't ready. This isn't ready." And I learned that feeling ready is, is something that's a very relative thing, again, depending on what the goal of the work is.

There are ways oftentimes that if you reframe your own thinking and think about, "Okay, well, what have I done? Have I actually shown anything?" You might actually be more ready than you realize, especially if you write it up and tell that story, and then share it with somebody. If there's somebody on your team that helped participate in the work, you can have them read it and be like, "Okay, yes, this is a complete story."

Or they might point out, "Oh, you still need this." Almost as like a reviewer. Or, you know, if they're helping to write a section, they may give comments on another section while you comment on theirs. And sometimes you'll also go through that writing and phrasing that story and realize, "I need this thing." So the paper that I was talking about that's currently under review, I was being pushed to publish that one earlier on, and I kept saying, "I don't think it's ready.

I would, I would like to get this done. I'd like to get this done." And, and so I pushed, I pushed on this one, and when we did submit it, I felt very good about the paper, and we got very good responses from our reviewers. They did suggest an additional characterization. We just didn't have access to it, and so we ended up figuring out a way to get access to this particular experiment, and it actually revealed a lot of information and changed the paper quite a bit.

And so it's back under review right now, but two reviewers had suggested this particular type of characterization, and it was extremely effective. And this is one of the benefits of saying, "Okay, I think it's ready," going for it, getting feedback from outside reviewers who can give expert responses.

Sometimes they'll help guide your work. And so even if you want it to go through and be perfect upon submission, it doesn't have to be. That's what the review process sometimes is for, is to make your work better and to bring it to that point. When I'm submitting, I always have this fear as like, "Is it ready?

Is it ready?" And I kind of go back and forth sometimes where it's like I look at the paper, and then I find a mistake, and I remove it, and I go through, and I upload a new version after I fix that mistake. I'll go through that sometimes, and I look over it several times before I push Enter, and then I'm like, "Oh, did I do it right?"

And it is, and it's fine.

Martha: Mm-hmm.

Katie: 'Cause again, it's gonna go through a review process, which is the point of-

Martha: Yeah

Katie: ... the whole process.

Martha: Yeah. That is a really good insight into the process and some of the anxieties around it.

Katie: Mm-hmm.

Martha: The publishing process brings a lot of emotion.

Katie: Yeah.

Martha: There's anxiety around all of the things we talked about, choosing a journal.

Is my paper ready to submit? There's disappointment or frustration. There's excitement and joy when your article is published. So I wonder if you could speak to how to manage those emotions, or what kinds of emotions you've felt during publishing and how you have responded.

Katie: Sure. Number one, it gets easier with practice.

As so many things do. My first papers that I, that I wrote and submitted were much more stressful, and especially upon receiving responses. Whether it was the reviewer response or the first time I had a paper rejected, I had much stronger emotions than I do now. I still get irritated or... Angry is too strong of a word.

So maybe we'll stick with irritated. When I have a reviewer that says something kind of rude or, or negative in a way that's not tactfully done, 'cause it does happen. Not everybody is, is tactful in their responses. You will have reviewers that clearly don't read your paper all the way through, as I just had in, in my most recent review.

Many of the comments, first of all, repeated comments that were the exact same thing, or comments that made no sense because they glanced over the paper. Um-

Martha: How disappointing.

Katie: It is. It's very disappointing and frustrating. One of the best things that I do i- when dealing with the reviewers and you're frustrated, or it makes you sad and you're not sure how to respond, walk away from it.

Come back to it. Let the feelings settle. Go complain to people. Get the, get the feelings out. Whatever is the best way for you to handle those feelings. Try not to wallow in it. You have to remember that these are people as well, who are most likely over taxed in their time. They have whatever emotions are going through them when they're writing their responses.

They probably aren't spending enough time, and be appreciative of people who are spending that time and giving you those positive responses. Even if they're rejecting,

hopefully they're still giving you feedback. In a paper I just reviewed a couple of days ago, I rejected the paper, but I gave them feedback on what they needed to do to bring this to a level, uh, that it would...

That they should submit either for this journal or a different journal.

Martha: Um- So you can be constructive.

Katie: Right. That's, that's the goal, is the review process should be constructive, whether it's a rejection that tells you this isn't ready, or if it's not the right scope, you know, you may disagree with that, but it's just...

It's an opinion. You know, all of these things, sometimes they're opinions, sometimes they're a statement of fact that this, this is an error, or this doesn't make sense. Well, this doesn't make sense might be an opinion as well. But remember, if they call out something that you disagree with them on, that means that maybe it's not clear what you're trying to say.

And so you should take that even if it's not written explicitly as a, as a constructive way of saying you should make this clearer. You should take that as a consideration that maybe I need to write this in a way that makes it better. It's not a reflection of you as a person, and yes, you've put a lot of work into this, but that doesn't mean that there's anything wrong with you or your work.

It just means that maybe we, you know, try rethinking it and think about it from a different perspective.

Martha: Right. And you can decide which reviewer comments to respond to or to use to make edits and which ones you explain to the editor why that doesn't work for your paper?

Katie: That's correct. There were a few things in my response for my paper that I didn't do.

In one case, we didn't... couldn't do what they asked. In some other cases, I disagreed with them because what they were asking for didn't make sense. So there were points where I, I wrote that we disagree with the reviewer. I said it maybe in slightly nicer words. I also have years of experience in responding to reviewers.

I recommend in your first several responses if you're writing them to have the primary investigator, professor, somebody else look over your responses to make sure that you are writing them in a neutral manner or a positive manner. I have times when I come across more negatively in my responses at my first go.

Martha: We want to be professional.

Katie: Yes. And so I always have somebody else read it to make sure that it's not-

Martha: That's a good tip.

Katie: Yes. Mm-hmm. Um, when I'm disagreeing with somebody or irritated in the response.

Martha: Yes. And you can professionally disagree.

Katie: Yes.

Martha: Mm-hmm.

Katie: Yes, you could certainly can. Even if they are being kind of rude in their comment, you should respond professionally because if you're hoping to still get it through the review process and be accepted, if you can respond professionally and with good logic as to why you're disagreeing, that's fine.

The editor will go through that and be like, "Okay, that makes sense." It's okay to disagree or to decline to do something. You don't have access to a certain type of instrument or you don't think it's going to add to the paper, that's okay. You can justify that. Sometimes comments are things where you don't need to do anything to the paper.

You just need to explain something to the reviewer. Sometimes it... if you need to explain it to the reviewer, that might mean you need to add something in or reword a sentence to make it clearer. That doesn't necessarily mean that you need to do more work.

Martha: Mm-hmm.

Katie: Or sometimes reviewers just want a little bit more information to prove that you know what you're talking about.

Martha: Mm-hmm.

Katie: And you maybe you just add a reference in or, you know, any of those kinds of things.

Martha: Mm-hmm.

Katie: It doesn't have to be something complicated.

Martha: It can be hard to tell when you're so close to the work.

Katie: Yeah. And, and especially when it's, it's bringing up strong emotions.

Martha: Mm-hmm.

Katie: You know, and dealing with the rejection.

Remember that those responses most likely bring some feedback that you can use to improve. And again, it's not a reflection on you. It means there's something in there that needs to be tweaked- Mm-hmm ... and you just haven't caught it yet.

Martha: Mm-hmm. Is there something we didn't talk about that you were hoping to talk about or one last piece of advice that you want to give to students who are new authors or aspiring authors?

Katie: One of the hardest things that I always found, I still find, in sitting down to write is just actually getting down and writing. Even before you worry about picking a journal and worrying about formatting, it's figuring out what to put down. And, uh, like I said, if you even have enough to publish. We're trying to figure that out for a new paper right now, and one of the first things to do is, you know, if it's the type of paper where you've got images and plots, start with your images and organizing those as a story, describing those, you know, and, and just start writing about what you see.

And just getting started on that can be a really good way to just get going in the process. Method sections, if you have one, are also a really good way to just start writing. How did you do it? You know that stuff. Even if you don't know what the data means yet, you know how you took the data. It can just be a really good way to start getting the process going and kind of getting the juices flowing.

And if you start writing, you know, restructuring for different journals and going through the whole process, it can be a long, tedious process. Don't be discouraged, but getting started is probably one of the biggest hurdles. You just gotta start somewhere, and sometimes those two sections, those are the best way to get going.

Martha: That's great advice. Thank you so much, Katie.

Katie: You're welcome

Martha: Thanks for listening. This season of Publishing Tips was produced by Daniel Story and me, Martha Stuit, with additional editing support from Isaiah Brazel and Jennessy Barba. Daniel, Isaiah, and Jennessy are all part of the University Library Center for Digital Scholarship, and we thank them for their support of this podcast.

Thank you to the Librarians Association of the University of California, or LAUC, for a grant that made these interviews possible. You may follow this podcast on Spotify to receive notifications of new episodes. If you have questions about publishing or other library-related topics, please reach out to us by email at research@library.ucsc.edu.

Thank you!