

Thrivecast Episode 43: How to Respond to Grant Reviews

Trish Kritek: Welcome to another episode of the University of Washington's Thrivecast, the podcast designed to help School of Medicine faculty thrive. I'm Trish Kritek, and today we're joined by Dr. Christine Mac Donald. Dr. Mac Donald is a professor in the Department of Neurosurgery and the vice chair for research in that department.

She's a PhD investigator who is also the research director for the Sports Institute at UW Medicine where her work focuses on many aspects of concussion and traumatic brain injury. And I invited her here today to talk to us about getting funding to do that research or more importantly what to do after you've submitted a grant and you get a response to that submission, because I think that's one of the things that people earlier in their career, spend a lot of time, energy and emotion thinking about.

So, Christine, thank you so much for joining us today.

Christine Mac Donald: Happy to be here, Trish. Thank you. [00:01:00]

Trish Kritek: You know, a few weeks ago, a few months ago, I met with Shelly Sakiyama-Elbert, and we talked about kind of how to respond to reviews for a paper. And after that, I kind of thought it would be good to talk about what do you do after your grant is reviewed.

So, that's our focus for today, and I thought I'd start off by kind of framing it. I think we should talk mostly about submitting to the NIH, even though there's lots of other places that people can submit grants. Does that sound reasonable to you?

Christine Mac Donald: Absolutely. And, you know, for those that are listening, the NIH is a common template that even other institutions and foundations will use.

So, I agree. I think it's a good one for us to focus on.

Trish Kritek: Right. So you put in your blood, sweat, and tears, you spend all this time, you finally finish this grant submission, everyone's looked at it, it goes in, and then you wait, and you wait, and you keep clicking and checking in to see if your score has come up.

Let me just start with, like, what's your advice for people as they prepare for that? Because I think there's a lot of emotion that [00:02:00] goes into preparing to see what are they going to think about this grant submission. So, thoughts on that before we even get into what you find?

Christine Mac Donald: Absolutely. So, with the NIH, it's a little bit of a multi-step process.

So, if anybody's new to this, keep in mind that you submit, you may be submitting on a particular cycle, and then there's going to be a few months' time, and then the actual, it's called study section, the group of investigators that come together to review those grants, have, they usually end up getting about four to six weeks to review those grants. They then meet, and so then there's a formal meeting to discuss grants, and then, there's a council meeting, as it's called, that's usually months after that for the final determination, and it's in between that study section meeting and the council meeting that oftentimes a score will be posted.

Trish Kritek: Thank you.

So you find out the scores are posted, and we're going to talk about what different things you [00:03:00] might find at that point in time. I think one of the things that people probably worry about the most is that their submission won't even be discussed. And sometimes we use the word triaged. And so maybe we can talk about that first because I think that that is maybe the highest level of anxiety about what to do if that happens.

Christine Mac Donald: Absolutely. So triage as, as you're saying, Trish is the concept of essentially a grant that is submitted. It will be reviewed. There will be comments from multiple reviewers, but it is not ranked high enough in those initial scores to be discussed. So how does that get decided?

Well, typically the top half of applications for any cycle are discussed. There are some caveats to specific early-stage investigator grants where more may be discussed or all may be discussed, but typically there would only be two or three applications in some of those unique groups. But the top half get [00:04:00] discussed, the bottom half do not. And the bottom half, that's the group that we refer to as being triaged.

So you'll still get scores, but they don't get discussed. Do keep in mind that overall, less than 20 percent of all grant proposals are even funded. So there's a high likelihood of, you know, the possibility of concepts like resubmission. But it is this consideration each time that you're trying to hit a pretty small sliver of that overall distribution.

Trish Kritek: So I think that's really helpful to say, like, it's like a 50 percent cutoff to even get to the point of being discussed. I think that's a helpful landmark for people to have in their heads so that if it ends up the first time you submit, it actually doesn't make it to that next step. You're in a 50 percent group, in many cases, not all cases, that might be the case.

So you get a score, you don't know exactly what that score is going to mean in terms of funding. [00:05:00] But you don't get comments right away. So let's talk about kind of the next waiting phase and then what you find out.

Christine Mac Donald: Yeah, that's that secondary window between when the study section meets and when council meets.

And so it's a little anxiety provoking because it turns out that each funding cycle, because this has to be congressionally mandated for funds, for example, with the NIH, is a little bit different. And so the pay lines can vary a little bit from year to year. They typically are a little more liberal for new stage, early-stage investigators than they are for seasoned investigators.

But even then, they could be, you know, top 20%, sometimes as low as top 9 percent for season investigators will be funded. And so that score, you'll get an impact score in a percentile, you'll see two numbers. And so what typically will happen is investigators will see those numbers and they will reach back out to what's called the scientific review [00:06:00] officer to say, Hey, any idea what the pay lines are going to be this cycle?

You know, I'm trying to understand if I'm, you know, on the fence, if I might make it into the group of those to be funded or maybe not. And so there's oftentimes communication with that scientific review officer. The other thing that admittedly can come up is to see a lower score that, you know, you're more assured was not discussed.

And there are admittedly some angst about, well, what went wrong? You know, what comments, what was it that, that made it so low in reviewers

minds? So the funding lines are basically informed by impact score and percentile, but the comments aren't given until closer to the review council meeting where the formal funding decision is made.

And those comments are the summary of review comments. Part of the reason that is delayed is because following study section, the SRO has [00:07:00] to create a summary section of all of the review comments for each grant. And each study section will have oftentimes anywhere from 80 to 100 grant applications that they review each cycle.

So part of the delay is just purely the time it takes the SRO to create those summary statements. But yes, there is absolutely some anxiety that you feel when you see your impact and percentile score, but you're awaiting the reviews.

Trish Kritek: So, at the end of the day, people are going to care about that number because that's going to effectively tell them eventually whether they get funded or not.

And I'm going to hope for everybody who's submitting a grant that they do cross that threshold and that they are successfully funded and for the majority of people that will not be the case because it's hard to get funded. So let's say you then find out that maybe you did not make it to get funded.

You're going to have a lot of comments you just [00:08:00] talked about. Multiple people have read your grant submission and delineated their thoughts as well as the potentially a discussion about it at study section. So what is your advice for people when they start to delve into those comments? Because I think this is even bigger than the comments you get when you submit a paper and it goes through peer review.

Let's talk about kind of both like emotionally and then scientifically, so you can take your pick on which one you want to start with.

Christine Mac Donald: Well, my knee jerk reaction is to say, take a deep breath. Just take a little bit of a moment. It is absolutely understood that as you said earlier, Trish, you have spent blood, sweat and tears, you know, put in probably to get these proposals together, and that you're right.

Unlike a manuscript, that particular document, this grant can inform whether or not you have funding, whether or not you have studies, trials, you know, for the next years to come. Allow yourself some space just to be human. And also that, yes, most do require resubmission. So there's almost this mindset [00:09:00] that if you're going to submit, you should almost automatically be assuming and preparing for resubmission.

You're right. There's a lot of comments. So how to go about that? Well, generally speaking, you want to read through the comments. Give a few days, you know, come back to it, even if they're extraordinary, just, just come back to it and try to, you know, line by line, think about responding, as we say, thoroughly, professionally, leave the emotions at the door in the response to critiques and try to go through the key review elements.

So for NIH, and then other organizations use this model where there's actually subsections that you were getting scored on. So there is significance. There's investigators, there's innovation, there's your approach, there's environment, and there may be critiques under each one of those sections. So trying to kind of break it apart, you know, okay, this week I'm going to look at the significance.

I'm going to look at the significance of all three reviewers and see what they said about my significant section. And what about [00:10:00] investigators? And, you know, and kind of you can take it, um, chunk by chunk. The other thing we'll see with resubmissions. There's a term called ancillary documents, so keep in mind that the ancillary documents, and we'll define that here in a second, are just as important as the science that you'll be responding to.

In fact, actually, sometimes the critiques on the investigators come from some lack of clarity in those ancillary documents, which include things like your biosketch. You want to personalize those biosketches for each proposal that you write, and making sure that they're in the correct format. Format and that, you know, you're really playing up your facilities and resources.

Don't just use a generic boilerplate because those ancillary documents are considered with the science in the overall review process. Things like human subject section for those who do, you know, clinical trials or observational studies or. vertebrate animal section for those who do preclinical work.

And unfortunately, as they say, all of it matters and all of it can be commented on in those reviews. And the [00:11:00] reviewers do look at everything as required by the NIH for that review process. But then also reach out to colleagues, um, the co-investigators on that grant, because they might have specific expertise that were part of the comments in that review.

But that also just reach out to folks outside your field, because the last thing I'll say is that remember that any review panel you go to, it will be generally the expertise of which you are submitting science within, but they may not be actual experts in your specific science. And so you just also want to make sure, especially with the resubmission that not only are you responding to reviews, but you think about the clarity of your comments and text in the context of the reviewers who are going to be reading them.

That they may or may not be true experts, so they might be things that you'll have to explain a little bit more, but they also might be, you know, as we jokingly say, naïve enough to give you a pass on something that maybe is not as fleshed out as, you know, it would be otherwise, because we're limited on space.

Trish Kritek: Okay, so I'm going to kind of dig into a couple things. So the first [00:12:00] thing, and I think you summarized it nicely, is deal with it in chunks. And I think that's always a good strategy for something that's overwhelming. And I, I very much appreciate that. And I like that thinking. And then I heard a second thing, which is the chunk should include both the science and all the ancillary documents and People should tend to all of that because it all matters and will all be reviewed.

And then the third thing, what you added at the end, which I really want to kind of come back to is and engage others. And so when do you think is the right time to start saying, Hey, I need to share this with, maybe it's a mentor. Maybe it's a co-investigator, maybe I think you just suggested, maybe it's somebody who's tangential and can read it with a different lens.

So tell me a little bit more about how and when you engage those other perspectives on trying to parse all this feedback that you just got.

Christine Mac Donald: Yeah. And this is that concept of almost like, you know, it's a marathon, not a sprint. Um, and you don't want to be sprinting a [00:13:00] marathon right next to deadline.

And so in that marathon model, you know, in the first few miles, if you will, that's where, you know, it helps to kind of make a plan. And actually when you're responding to reviews, it can be helpful to not just write out some key comments that you might be initially thinking about, but also write out key investigators that you might want to come back to.

For those specific comments, or that particular section of the grant statisticians are a great example. There are typically with the NIH and other organizations, a formal statistical reviewer. And so, oftentimes, you know, many of us will collaborate with bio statisticians and other statistical colleagues, depending on the methods that we're going to plan out in that approach section.

And so. As an example, you know, maybe there are comments in the approach section about, you know, a weakness or concern that something isn't properly powered or sample size. So, you know, make a note like, okay, I'm going to go back to my statistician colleagues for that particular element and so [00:14:00] making a plan and then in that kind of compartmentalization as you as you build out that plan to put in some key names and then just pace yourself going through it.

Um, there is oftentimes this. Okay. Initial response. Oh, I want to resubmit immediately. And so resubmit immediately, typically from the time you get the documents, the closest one, if you're on kind of the natural cycles would give you probably a couple months, maybe a few months. It's, it's a pretty quick turnaround if you're trying to hit the next cycle, but you can.

Do another cycle out from that, which would give you more like six months or so. And so, depending on what those reviews look like, make your plan, lay it out, identify some key colleagues under each element. In the same process, I would though be reaching out to the program officer and just again, kind of keeping that.

Conversation going about potential interest. There may be reasons you might want it to request to go back to a different study section. Um, if you think that the reviewers just totally missed it or something that just, you know, was [00:15:00] fundamentally just misunderstood that you're not going to be able to change.

Maybe you can change the wording and then, you know, this kind of. Seeking of advice once you have your list, um, you know, call it mile 6 to 12 and kind of getting some initial feedback.

But then as far as going to a mentor or having somebody tangential to the field, call that, you know, mile 12 to 18 where once you have a drafted, at least, you know, some kind of drafted response that I would go to somebody and say, Hey, can you take a look at this? Here are the comments for them to do a thorough job. And also just out of respect for busy colleagues, you know, you typically want to give them and say, you know, can you give me comments in the next two to four weeks or something? It can be hard to ask somebody to turn something around in, you know, three to five days.

So that's why I would put it, you know, after the half marathon mark in our analogy of a marathon, but definitely before mile 20, that you would want to reach out, get some of that feedback and do so to multiple folks.

If there are mentors you've had over the years in [00:16:00] academics who are, you know, familiar with this process to reach back out and say, Hey, can you just look at this from a different perspective? I'm trying to make this, you know, as competitive as possible.

And then the last thing I'll say on this kind of pacing effect and what to do when is go back to the funding announcement. One of the things that has come up more commonly now is there'll be specific what they call RFA's, these funding opportunities and funding announcements and there might be specifics in that announcement that one of the common critiques is did they address the actual announcement?

And so you want to go back and make sure that when you're resubmitting that you're also very responsive to that announcement and that it really hits key elements that they're looking for in that process.

Trish Kritek: You are a fount of important take homes. So let me see if I can pull some of those out of there.

Number one. I love it. Pace yourself. And I appreciate the marathon analogy very much. And let's go through it together and make sure that I kind of got all the points. [00:17:00] So the first step is you read through, you kind of start to

map out your thoughts and, and you identify who you might go to, to talk to about responses, some specific points along the way. Yes?

Christine Mac Donald: Yes.

Trish Kritek: Yes. Okay. And then you are going to actually gel your thoughts more and kind of put it more into a not finished product, but closer to a finished product and then share that with your mentor or somebody who, you know, another reader, get some diverse perspectives on that. Not totally tied with a bow, but closer to tied with a bow before you move to that spot. Yes?

Christine Mac Donald: Yes.

Trish Kritek: Okay. And then I really liked the analogy. You're like halfway through the marathon, but you're not in the final kick when you do that because you got to give everyone enough time. And you have obviously reviewed lots of people's grant submissions and in general, you think three to four weeks is good.

What will be your recommendation?

Christine Mac Donald: Yeah. You know, I think of it along the lines of, you know, what you would do if you're [00:18:00] asking somebody for a letter, for example, and you know, we have a lot of our residents and fellow that ask us for letters for different submission processes and two to four weeks if you can swing it to give them time to fit it in and also give them time to do a thorough job for you.

You really want them to not rush through it so that you get, you know, really thoughtful and constructive feedback to just make it the best resubmission possible.

Trish Kritek: I think that's really good advice, and I appreciate that, and I think in general, we're all people who work with deadlines, and so this is like setting your deadline, not the deadline of when it's going to be submitted, but move back so that you're giving yourself plenty of space to get it to people to read it and give you their thoughtful review.

I also heard you say, go back to the RFA and reread it, because maybe there's something in there that you didn't miss, but maybe didn't fully appreciate and,

and there's stuff that you could pull in that would make it a stronger resubmission. And then finally, I'm [00:19:00] curious, you know, I do think most people are like, I got to resubmit, I got to resubmit as quickly as I can.

And I'm curious, like, how often you think it makes sense, when would you push to get it in on the very next cycle? And when would you give yourself a little bit more time? How would, how do you help people make that decision? Obviously if it's like, I have to do more experiments and things like that, that's probably going to guide it. But I'm curious about anything else.

Christine Mac Donald: No, you're, you're spot on, Trish. So, you know, especially with our new stage investigators or junior faculty, we'll usually sit down with them and say, okay, can you respond to this with what you have already? Or is this going to require more work?

And if it requires more work, if it requires more patient evaluations, you know, more experiments, whatever it may be, then maybe target a cycle that's two cycles out, not just that next immediate submission cycle, because this might be, you know, and this is the parallel probably to manuscript submission, that major revision side of the fence where there's actual legitimate more work you need to do [00:20:00] versus just reclarifying or reorganizing.

Just to try to come back as strong as possible because one of the things, and I will end with this point on this comment, is to say there is a review element that says how responsive were the investigators to the prior critiques? In fact, when you do a resubmission, that becomes an additional element of review criteria.

So you really do want to come back as strong as possible. And so if they on the first round, say, you know, this is encouraging. This is highly innovative, but, you know, the approach is just not there or I'm not convinced they can really do it. That's probably going to require you doing more work and experiments and data collection, whatever it may be to really, you know, increase, for example, showing feasibility of the approach.

And in that case, push it back a little bit. There is no harm really in going out, you know, unless you're up to, you know, against a particular funding deadline, you might lose funding per say, but most of the time one cycle to [00:21:00] the next isn't going to make much of a difference. And you just want to come back as strong as possible.

Trish Kritek: I think that's really helpful and I particularly appreciate raising people's awareness that you're going to be scored on how well you respond to what you heard the first time. So it is worth all this time and energy, not only to make your submission better, but to make sure that you're responding to the things that people raised as concerns in the first go round, if you will.

I have one more question before I ask you for what I ask everyone, which is one last pearl. But sometimes I've heard people say, usually probably when they first read the reviews, these people do not understand my science, or they did not get what I was talking about. These are the wrong reviewers, and you alluded to the fact that maybe you occasionally, I think, probably pretty rarely, ask for a different study section to review it, but I'm curious what your response is to people who say like, I don't think they got my science.

Do you do anything different in that situation or [00:22:00] is that just a normal reaction that gets better after a month after the second or third reading?

Christine Mac Donald: Well, it, it does come up, unfortunately, probably more commonly than all of us would like. And part of that, I think is, you know, breaking it down a little bit.

Some considerations of you're the expert in your field, you're writing from an informed perspective. But again, that reviewer may not be an expert in your field. Are you writing it in a way that somebody who is, you know, generally medically or scientifically informed will understand even without being an expert.

So there's a little bit of text communication and kind of grant writing strategy, and just making sure that it makes sense if they really just didn't get it and your concern, they might not the next time around. It doesn't always go back to the same reviewers, even if it goes to the same study section.

So that's one thing to consider: would other people get it? You can also - and it's highly encouraged - you reach out to the SRO, the scientific review officer. That is, in this case, an [00:23:00] employee of the NIH who, you know, is typically an MD or PhD level individual who decided, you know, to take a different route for career.

So they're informed of the field at large, and you can say to them, I really, I'm concerned they didn't get it. There is a slim chance, I've seen this happen

sometimes, it's kind of like the request for different review panels, where you can prepare a response, get it to the SRO, and see if it comes up at council.

The SRO could advocate for it. I've seen this happen, you know, again, single digits, maybe on one hand, with success, where they just didn't get it. The PI contacted the SRO, explained the situation, provided a one page, and then there's usually a dossier that follows to the SRO, they went to counsel, and SRO, the SRO actually advocated for that proposal, and it was funded.

Now, that's rare, it does happen, but the key [00:24:00] and probably most common one is, can you communicate whatever it was in a way that is more digestible to a, you know, scientifically and medically informed, but slightly broader audience. Just recognizing more that those reviewers may not be experts in your field.

And typically we say, let's try resubmission. Let's go back strong, and if for whatever reason, the resubmission doesn't hit, that's really where we, you know, go back and potentially reset.

Trish Kritek: I think that's a really helpful frame of reference. So I think it's probably a super common feeling like these people don't get me or don't get my science.

And, and that's normal to feel that way. Cause you're the expert in that space, but making it written in a way that the person who is knowledgeable, but isn't the expert can digest it is a really important part of it. And I think what I heard you say is, yeah, there are these things where you could push harder and occasionally that works, but usually the path would be to try to resubmit and address it in that way.[00:25:00]

All right, Christine, you have shared so much. This is like a goldmine of information for folks. And I feel like it should be required listening before people submit their first grant. So I really appreciate all that you've shared already. I always like to ask people, is there one last pearl you want to share with our listeners about kind of this whole process of submitting your grant and getting that score on the first set of reviews?

Christine Mac Donald: Yeah, I always try to have an answer when somebody asks a question about that. First, thank you, Trish, very kind. What you're hearing is learned from my many failures to inform your successes going

forward. I think we all have that kind of feeling. I had a good colleague of mine say, you know, if you are successful on one to two out of ten grants, you're doing really well.

But, you know, in general, I would say reach out to colleagues, and just have that sanity check on the critiques because it can be hard to not take it personally. I would say don't give up. Remember countless people have been where you are [00:26:00] today and so few get funded. It's actually more common to not get funded than to get funded and you're not alone.

That kind of general soar with your strengths and work with your weaknesses. None of us are perfect, and none of us are ever going to write the perfect grant for every reviewer. There's always going to be something that somebody says they would want to see more of, or they want to have it done differently, and you kind of have to be okay with that, or at least be okay with it in your professionally worded response.

And then, you know, the last bit is just truly, after much deliberation, if it becomes multiple resubmissions, don't be afraid to pivot. You know, a lot of times people will take that proposal, they'll take the positives and they'll make it into something new. And then I will just say foundationally, you know, we all know this, but that medical research and science in general at their fundamental level is about asking new questions.

And sometimes those questions work out and they come to an answer that, you know, we say, gosh, that was exactly what I expected. And sometimes they don't. And out of that, sometimes our [00:27:00] biggest failures can be our greatest achievements. And the contributions to the field at large.

So don't give up. Take a deep breath. You're not alone. We've all been there. And as an academic institution, we're here for you. And we're in this together.

Trish Kritek: That's great. I was going to just go with the soar with your strengths and work with your weaknesses, but there was so much more there. That was wonderful. Thank you so much. I am confident that folks who have listened today have learned a lot.

I learned as I talked about this with you as well. So thank you very much for your time. Your thoughts and your wisdom.

Christine Mac Donald: It was my pleasure, Trish. Thanks for having me.

Trish Kritek: Of course. And for folks who are listening, if you want to hear more episodes of Thrivecast, you can find them at Apple Podcasts, Spotify, or wherever you listen to your podcasts.

You can also always find them at the UW School of Medicine faculty website at faculty.uwmedicine.org. Thanks for listening and have a great [00:28:00] day.