Research Misconduct and Integrity

Elyse Sullivan: Welcome, everybody. All right. We have got a lot of folks coming in. We're excited to be here, so we'll get started. You're at the session for Research Misconduct and Integrity. My name is Elyse Sullivan . I'm going to be moderating today's session. Before we get started, a few housekeeping items to note. You should see a button on the bottom of your Zoom window that says Q and A. If you have any questions that come up over the course of the presentation, please go ahead and enter them in the Q and A box. We are going to hold questions until the end of the presentation, but then we're going to hope to get to as many questions as we can. So another thing to note is that closed-captioning will be available for this session. We're going to put in the chat the link to that closed-captioning for folks who would need to access this. We also have some interpreters joining us today. And finally, this session will be recorded, and the recording will be made available along with the slides within the next couple of days, so that'll be a great reference for everybody. Okay. So with that, I will be happy to introduce our panelists. Can you go to that panelist slide? Great, and would you mind making it fullscreen? Wonderful. Yep. There you go. Great. Okay, thank you. So I'm so happy to introduce Patricia Valdez. She's our Extramural Research Integrity Officer with the NIH in the Office of Extramural Research. We've also got Dr. Ranjini Ambalavanar who's a scientist-investigator with the Office of Research Integrity at HHS. And with that, I'm going to turn it over to Dr. Valdez. Take it away.

Patricia Valdez: Okay. Well, thank you, everyone, for joining us today. I wanted to start off with this slide just to show that research integrity is really everyone's responsibility. That includes, of course, the funding agencies including the NIH, the ORI, Office of Research Integrity, institutions, universities, the journals as well as the individual researchers, and this responsibility also extends to the stewardship of federal funds. These are taxpayer dollars, of course, and the protection of human subjects, animals and research as well as the environment. Okay. Now at the NIH, we deal with a lot of different integrity concerns. This is showing you an overview of our allegation review process, so as you can see here, we handle many types of allegations that come in. The one we're going to focus on today is research misconduct. I'll click here. Go back into the fullscreen. Okay, so the one we're going to handle today is research misconduct, but again, our office also handles allegations of sexual harassment and other types of harassment, grant fraud, undue foreign influence or foreign interference as well as peer-review integrity concerns, and when these allegations come to us, we do an initial assessment, and then based on the information we receive, we might contact the institution. We could remove an individual from peer-review service. We could then also refer the allegation to an agency or office that has oversight responsibility. For instance, when we receive allegations of research misconduct, we conduct a preliminary assessment, and if it meets the criteria of research misconduct, then we will send it over to the Office of Research Integrity. Now, in all of these cases, we can also take specific administrative actions. These might be grant actions, removing PIs or terminating awards. We could also impose specific award conditions on the grants. In the worst-case scenarios, we would impose regulatory actions. So again, we do treat all of these allegations with care, and research misconduct is going to be the focus today, so I'm going to turn it back over to Ranjini.

Ranjini Ambalavanar: Yeah, so I am from Office of Research Integrity, and our office have two divisions, Division of Investigative Oversight and Division of Education and Integrity. So can I get control of this? I'm sorry. All right. So each division is focused on improving integrity in research by education and oversight review of research misconduct investigations, so I belong to Division of Investigative Oversight where I do review institutional research misconduct investigation reports and make a decision whether to recommend a separate Public Health Service finding, and the Division of Investigate Oversight work on educating the scientist in responsible conduct of research with the goal of reaching the mission of ORI, to promote integrity in Public Health Service-supported extramural and intramural research programs by responding effectively to allegations of research misconduct and promoting research integrity. So what is research misconduct? So we follow policies, PHS Policies on Research Misconduct as shown on the right side of the screen. This is available online at our website, Office of Research Integrity website. This is what we follow strictly. So the definition of research misconduct is fabrication, falsification or plagiarism in proposing, performing or reviewing research or in reporting research results. So what is fabrication? It's making up data and reporting or even recording them. Falsification is manipulating data or equipment and processes so that the result is not interpreted or represented correctly. Plagiarism is the appropriation of another person's ideas, processes, results or words without giving appropriate credit. So we strictly follow this definition when we make a Public Health Service research misconduct finding, and also, misconduct findings are made when the allegation is proven by a preponderance of the evidence, and that is FFP, fabrication, falsification or plagiarism should be proven, and then it has to be proven that it was committed intentionally, knowingly or recklessly, and there is significant departure from accepted practices. So we have different things to prove. FFP, that's fabrication, falsification, and you have to provide intent because honest error or differences in opinion is not misconduct, and also, the finding is against a single individual, and so we know who is responsible for the FFP. So it is, when you think of it, the research misconduct findings are very small portion of the whole research that happens, and also questionable research practices are not included in this finding. So outright misconduct is very small portion of the whole research that happens, but we have to be careful. Even though we don't say that there's a lot of misconduct happening, but there's a lot of questionable research practices that can lead you into that misconduct arena, so small lapses in judgment could lead to a slippery slope ending in misconduct. So be careful not to ignore controls. Don't try to beautify more than what's needed, and controls are very important, so these are probably not actual misconduct issues, but when you do it over time and then think that, "Oh, nobody is noticing," you are slipping into this research misconduct section. So as I say here, research misconduct is very small portion of the full extent of research, and most scientist conduct research with high degree of integrity contributing to advancements of science, but the labs are different. Some labs have a very small portion that's questionable, but then others have more questionable practices, and then the more you do, the more trouble your lab can get into, so this is why it's important to be careful, but who is responsible? Everyone is responsible, everyone meaning here. So what is your role? You are mainly first thing is the researchers. That's where the data is collected and interpreted and written to publications and grant applications, but others have a role. For example, institutions have to have proper policies and practices for data maintenance and everything else, and funding agencies like Patricia's office, they are overseeing certain aspects, and they are taking responsibility. Journals and peer reviewers: Peer reviewers have a big responsibility as well when the data comes, and they have a responsibility to look into them. And whistleblowers, when they find, we get a lot of allegations from journal readers and so on, so whistleblowers. Everyone has a responsibility, so because it's happening starting with research, I'm going to go a little more with the researchers part of it, but I don't have time to go with everything here mentioned. So researchers, there's no need to tell to this audience that there's a lot of pressure for scientists, and so the perceived pressure pushed them to do something quick and so quick and shortcut is to falsification and fabrication, and they rationalize, "Oh, I could do this because of this, this, this," and then this opportunity when no one is looking in the lab, they do it. So these are things that we can focus, educate and also avoid people going into that direction. So some cases of respondents I interviewed, they actually told these statements showing that there are pressure. There's personal circumstances and so on, so for example, this is a real statement said by a respondent. "I felt it was necessary to get a paper in a high-profile journal in order to get a faculty position." That's pressure, academic pressure, and another person said, that's personal circumstance. "I had been applying for a green card and felt pressured to make a good paper and get good publication." And just because there is pressure, not everyone is doing it. There's also personal psychology that works, so if you feel that you want to do this to please your peer, you're not and so on. And if there is poor supervision, and if you're not asking for raw data and so on, it keeps going, and so this statement is, "I was scared to go to my PI. He used to scream and yell at me when things did not go as planned," and this also we see a lot, pressure from the senior investigators and pushing the junior people to make up data. Inadequate training is another big factor that we see. "After 2 years of a postdoctoral fellowship, I still don't know how to properly publish Western blot data." So there's some lack of mentorship. So these are all factors that we see as leading to misconduct. So research is a collaborative effort, and you do get data and text from different people to put together something, and so for example, you submit an NIH grant application not aware that the data and/or text included by others were falsified, fabricated and plagiarized, but you're submitting it. Are you liable for research misconduct, and what can you do to even get into that scenario? So the citation, I don't need to say it. Everyone knows it, but in the rush, in the multiple deadlines to meet the deadlines, we all rush through, but that's a bad idea. It can actually take you into this misconduct problem. So use valid, reliable data. Verify data by looking into raw data. Never plagiarize, not that you plagiarize, but somebody else may have plagiarized, so it's a good idea to check for plagiarism, and avoid placeholder images because that's one of the excuses, one of the mistakes, actual mistakes, or excuses, we don't, but that comes through many different cases that we see. "Oh, it was a placeholder. I forgot to replace it then," so don't have a practice of using placeholders. So whether this is research misconduct or not on the PI who submitted the grant is up for challenge, but from recent decision by ALJ on two of the recent ORI cases established, a PI and/or the corresponding authoring papers can be liable for research misconduct even if he or she was completely unaware of any fabrication or plagiarism. So the answer to this question, are you liable for research misconduct even though you didn't know? The answer could be yes. You can challenge it, but our precedent from this ALJ decision is yes, so be careful. So I'll quickly go through the steps in research misconduct proceedings, so it starts out with an allegation. We don't just go around and look for problems, but somebody makes an allegation, and who is that making allegation? It could be your colleagues, peer reviewers, coauthors, journal editors. We get allegations from grant reviewers that Patricia Valdez pass onto us, and so people are watching. And who do they make the allegations to? To the institutional officials, funding agency, journal and directly to Office of Research Integrity. So once an allegation is made, we do assessment. Whoever receives it can do an assessment to see if the allegation is actually credible and specific. If Patricia gets the allegation, she does the initial part of it, and then it comes to us, and we look at it again because we don't to disturb a lab's smooth functioning because this is very upsetting, disturbing problem. So in institutions, the Research Integrity Officer ... So when it comes to us, we forward it to the institution. Every institution has a Research Integrity Officer. They arrange the rest of the process after their initial assessment, so the remaining process include inquiry. That's like a short process for 60 days according to our regulation, and then if the inquiry determines that there's more to look into, and it's actually needing a deeper look, then it's going into investigation. Inquiry and investigation are done by committee of scientists who are in that field, and so it's a very thorough job to see if there's actual falsification, who did it, and is it intentional or honest error and so on, and once all the process is done, the report is sent to ORI, and that's when we come in to do an oversight review of the institutional report, and we look at the data right from the beginning. We also look at hard drives of computers that used by the respondents and so on. I can't go into detail unfortunately because of the time. And after our oversight review, we agree. Sometimes we feel there's insufficient evidence to make a separate finding, but institutional findings are valid because they make their findings based on the evidence that they had. So we then recommend administrative actions. Depending on the scope of the misconduct and so on, we either debar the respondents from DHS fundings, suspend, terminate funding sometimes and prohibit advisory roles and so on, and we also tend to recommend fixing the literature that's affected and that you see a lot of retraction or this is also sometimes mentioned about misconduct finding. So all ORI findings are published in Federal Register, the ORI website, newsletter and NIH website, so usually when you are accused of misconduct, your scientific career is kind of done because it's public, and people know. If you are debarred, you can't get federal funding for research for a certain number of years. So quickly, I will talk about this case example and hand over to Patricia. So there was a postdoc grad student, became a postdoc and was leaving the lab, so the PI asked for data. He suspected because there was no reagents and samples and records were missing. So he asked, and there was only one notebook for 5 years, and there's lack of primary data. When asked, the respondent said he will upload his data into network drive, and he uploaded, and the green is data that was collected by another student called H in 2007, and this is the respondent, SS, and he was only ... He joined the lab after 2009. However, the data that he put in was a copy of all these previous data from 2007. He copied all these and generated these different files in his name and the copied more from the copies. And so the committee, like I said, the committees are made of people who work in these areas, and they're really good. This was from an institution that did this analysis, and so they didn't stop there. Their contents, because of the contents of the copy was revealed after opening the files and looking into them, and the names are SS, so these are the public files, and you can see everything, all the content of the files are the same, and dates of creation are 2007 but copied on 2010 when the PI asked for the data. So this is what is done in each case. This is just a little glimpse of everything that was done in this case, and this respondent signed a voluntary settlement for 7-year debarment from PHS funding. So we also collaborate with other agencies, as you know, NIH mainly, but the Office of the General Counsel, OHRP when there's human research involved, CDC and so on, Office of Inspector General when there is financial fraud involved with misconduct cases, and then when there is joint funding, DOD, VA very commonly and NSF. There is joint funding, so we collaborate with them, and then we work to improve overall integrity by working with journal offices and universities. And with that, I am handing over to Patricia.

Patricia Valdez: All right. Thanks, Ranjini.

Ranjini Ambalavanar: Yes.

Patricia Valdez: If I can go to the next slide, okay. Yeah. So we all understand that research misconduct proceedings are kept confidential, but there are some situations where the institutions do need to contact NIH, and I laid out some of them here. So first, we have the special circumstances, so these are circumstances that could impact the NIH-supported research, public safety, human subjects, animal welfare, federal funds. Also, if you look at the Grants Policy Statement, the NIH Grants Policy Statement section 8.1 for Changes in Project and Budget, so if there's developments that have a significant impact on the award-supported activities. Also, if there are any problems, delays or adverse conditions which could materially impair the ability to meet the objectives of the award. So what does that mean? So for instance, if during a research misconduct proceeding a PI is put on administrative leave, and they cannot serve as PI, that is obviously going to impact the conduct of the NIH project, and so the institution, the authorized organization representative, should contact the NIH grants management official to either pause the award or to request a change of PI. Another situation that could come up is perhaps the allegation involves data in the application, in the NIH application, and that it's really looking like data are not reliable, so perhaps there needs to be a change of scope. Maybe the direction of the research needs to change, so that's another case where we would need to be in contact with you.

Ranjini Ambalavanar: Next slide.

Patricia Valdez: Yeah, that's it. Okay, so let's go through a case study. This is kind of focused on, how do you incorporate research misconduct proceedings and grants compliance? Okay, so here is an example. So Rebecca RIO, the research integrity officer at the institution, extramural institution, so she assembles an investigation committee that's going to review these allegations of falsified data in an NIH grant application and multiple NIH-supported papers that belong to the PI, and the PI's name is Dr. Smith. So shortly after the investigation begins, Dr. Smith sends several e-mails to his lab members asking. He's saying that whoever is responsible for this problem, for the data falsification, they need to come forward immediately and let him know so they can end this investigation. One of the lab members forwards the e-mail to Rebecca RIO, so I'm going to pull up a poll now to see, what do you guys think Rebecca RIO should do about Dr. Smith's actions? So select the best answer. Should she ignore Dr. Smith's actions? Should she ask Dr. Smith to let her know if anyone comes forward? So maybe if someone says, "Oh, okay. I did it, Dr. Smith. Sorry." Or should she ask Dr. Smith to stop e-mailing his lab members? Okay, so I'm going to let this go for just a couple more seconds, maybe 5 more seconds. Okay. I'm going to end the polling now, and you guys can share the results. Here we are. Hopefully you can see. So what did people say? So ignoring Dr. Smith's actions, probably not the best idea. He's trying to influence the investigation which is a big no-no. Ask Dr. Smith to let her know if anyone comes forward, this is not the best answer because we really want to make sure that Dr. Smith, as a PI at the lab and as the corresponding author on the papers and PI of the grant, we do not want this person involved in any type of investigation, okay? They should be not involved in the investigation at all, so we need to make sure he's not talking about the investigation with people in the lab or anything else like that. So the last, the best answer would be the third choice, so ask Dr. Smith to stop e-mailing his lab members. Okay, so again, we want to make sure that he's not interfering. Okay, let me stop sharing that. Okay, so let's go to the next one, next slide. Ranjini, I don't know if I can ... Okay, I'll just try. Okay, well, the next slide has ...

Ranjini Ambalavanar: See if you can move forward.

Patricia Valdez: Can you move forward?

Ranjini Ambalavanar: I'm not able to.

Patricia Valdez: Okay. All right. I'll move forward. Okay, ah. So this is, yeah, just rehashing, what should Rebecca RIO do? And so we've established that she shouldn't be contacting the lab. So the next part, Rebecca RIO and the university officials, they decide to place Dr. Smith on administrative leave while the investigation continues. He's not allowed on campus, and he's prohibited from communicating with members of the lab. Now, Rebecca RIO and the university officials, they decide that Paula Postdoc is senior enough to receive work on the NIH project, so now we have another question. I'm going to launch the second poll here. So who needs to be notified about Dr. Smith's change of status? So he's on administrative leave. He's not allowed to come to campus. He can't contact people in the lab, so should only Dr. Smith's lab be notified? Should the NIH grants management official be notified, or should I be notified? What's the best answer here? Okay, and we'll give this another, again, 30 seconds, so we have about 5 more seconds to answer this question. Thank you for everyone who is participating. Okay, so I'm going to end it now, and I will share the results. Okay, so good. The majority of people did select the right answer, which is the best answer, that the NIH grants management official be notified because again, if he's unable to serve as PI on the NIH grant, the institution should contact NIH to let them know that they may need to change the PI. Okay, now the third answer is contact the HHS Office of Research Integrity. Ranjini, so this is something that you do occasionally get these types of people coming to you, institutions come to you and saying, "Oh, we're changing the PI," but it doesn't really impact what you're doing at the ORI.

Ranjini Ambalavanar: Not really.

Patricia Valdez: Right.

Ranjini Ambalavanar: That's not ORI's role, yeah.

Patricia Valdez: Yeah.

Ranjini Ambalavanar: So what we do, we either direct the caller to NIH, Patricia's office, or we directly contact Patricia about it.

Patricia Valdez: Exactly, right.

Ranjini Ambalavanar: So either way is fine. I mean, if they want to contact, and they don't know who to contact, it's fine to call us.

Patricia Valdez: Yep. So grants compliance issues, we need to work with the NIH. If it's a question about the research misconduct proceedings, work with ORI. Okay. Okay, let me close that pulldown. Let me try to go to the next slide here. Okay, again, so here, I just included ... Sorry, this last slide, I included the Grants Policy Statement links here, and again, you can look these up when you get the slide set next week. Yeah, so here we are. Okay, so part three, several months later, this is the last part. Let me go back.

Ranjini Ambalavanar: Can we close the polling?

Patricia Valdez: Is it still open?

Ranjini Ambalavanar: Yeah.

Patricia Valdez: Let me ...

Ranjini Ambalavanar: It's closed.

Patricia Valdez: Sorry, okay. Okay, let's ... Sorry. Okay, several months later, the investigation is continuing. Dr. Smith notifies the university that he's at that he has a tentative job offer at a new institution, and this institution is out of state. The job offer requires that he bring the NIH grant with him, so he asks his current university to transfer the active NIH grant to his new university. So Rebecca RIO and the other university officials have reservations about transferring the grant especially since the data in the application may not be reliable. Okay, so here is our last poll. Okay, what's the best course of action for the institution? So select all that apply. Should they keep the award and request a change of PI? So again, the grant, the research misconduct allegation does involve the grant application, okay? Should they terminate the award? Should they relinquish the grant and transfer it to the new university? Should they inform the NIH of the ongoing investigation, or should they contact the new institution and alert them to the ongoing investigation? And hopefully, you're able to select more than one here because there are more than one right answers here. Let me just give this just 2 more seconds, and then I'm going to end the poll. Okay, just going to share the results here. Okay, so should they keep the award and request a change of PI? Now, it's possible to do this. It is really going to ... Okay, you're only able to select one. Okay. Sorry, guys. Well, thank you for selecting the best answer, then. So again, keep the award and change of PI, so now if there's a problem with the data in that application, this is something that you might want to think about. Perhaps there may need to be a change of scope in order for the research to continue, okay? But that's a possible correct answer. Terminate the award, sure. So if ... One thing I want to stress is that the NIH makes grants to institutions, not individuals, so this is not Dr. Smith's award. This is his institution's award, so it's up to the institution completely to determine what to do with that grant, and if they can't find a suitable replacement PI, they can definitely request to terminate the award. So that's another fine answer. Should they relinquish the grant and transfer it to the new university? Now, if they do relinquish the grant and say, "Okay, we're relinquishing it to be transferred to the new university," if they do that, they should definitely inform the NIH of the ongoing investigation, and I'm so glad that you guys picked that one, the majority of you even though you were only able to pick one, so hopefully, yes. Definitely inform of us of the ongoing investigation. We might put a pause on the transfer while the investigation is ongoing, for instance. And then the last one is, contact the new institution and alert them to the ongoing investigation. Now, again, there's privacy concerns here, and I'm sure that different institutions have different policies, but if your institution does allow you to notify the new institution that they are getting a grant that has problems, that is a good thing to do, but again, the best thing to do is probably to inform the NIH, and we can then work with the new institution to let them know the problem. Okay. Okay, let me close that. Okay, so let's go to the next slide if I can advance. Okay, so again, this is just a rehash, and I included some links to the Grants Policy Statement that are about change in scope and what to do when there's a change in recipient organization, so you can take a look at that later. Okay. And with that, I'm going to end my part, so this is our website up here. If you want to send either questions or allegations, you can go to the link. There's a link here that says contact OER-RI right there. There's also FAQs here. So and then I'm going to ... This is ORI's website, so, Ranjini. Whoops. We ended it. I ended it. How did we end that? Okay.

Ranjini Ambalavanar: It's okay.

Patricia Valdez: Or you can call ORI.

Ranjini Ambalavanar: Yeah, you can call our office. I think your polling screen is on.

Patricia Valdez: Is the polling still up?

Ranjini Ambalavanar: That's okay.

Patricia Valdez: You might have to click it off yourself, but I did close it.

Ranjini Ambalavanar: All right. Anyway, contact us. If you have questions for ORI, you can contact us with any of these questions. You can make allegations anonymously if you want to, but there's an ask ORI e-mail address. You can send your questions, and we will respond to you within a day or two.

Patricia Valdez: And I just put the NIH mailbox in the chat, so it's nihresearchintegrity@ mail.nih.gov, or you can go to the website and click the link to send something. Okay.

Ranjini Ambalavanar: Okay.

Patricia Valdez: So I think we need to take questions now.

Ranjini Ambalavanar: Questions.

Elyse Sullivan: Perfect. So this is Elyse again. I've been collecting your questions, and we've got some really good ones, so I'm going to just start asking. The first one is, "How common are allegations? AKA, do you receive them daily, weekly? How many a year?"

Patricia Valdez: Is that for Ranjini?

Ranjini Ambalavanar: Which one? The first one, you mean?

Elyse Sullivan: Yeah, so how common are allegations? How do we receive, does ORI receive, allegations?

Ranjini Ambalavanar: A lot. We do ... It differs. There are some anonymous, constantly anonymous allegations we get from same source. They have a pseudonymous name and send us, but say, for example, 200 allegations a year. But it varies. It depends. It's very common. Nowadays because everything is available online, people can see the images that are manipulated, and that's where most of the allegations come from.

Patricia Valdez: I think at the NIH, we start seeing a lot more allegations come in during peer review time, so we get a couple of those a week at that time.

Elyse Sullivan: Well, that brings us to the next question. So if there's an allegation of peer-review misconduct, is there a process that allows a researcher to have the grant reviewed by somebody else?

Patricia Valdez: Right, so if there's an allegation of peer-review integrity concern, so, again, there's many ways that someone could try to manipulate peer review, and of course, you want to keep everything confidential and keep the applications confidential themselves, but if we do think there's a problem with that peer review panel, for instance, there's been a situation where we have rereviewed all the applications again because we couldn't be confident that that peer-review session was conducted with integrity. But we can move applications to different study sections, so that's something that does happen if needed, too. Yeah.

Ranjini Ambalavanar: There are situations where peer reviewers take ideas and text from other grants and use them. That comes to our office.

Ranjini Ambalavanar: It's plagiarism.

Patricia Valdez: Yeah, that will go to ORI.

Elyse Sullivan: Yes. Let's see. If you are at a small institution, and you don't have a pool of experts that can assist with your internal investigation, what do you do? Is it acceptable to use people outside the institution for your investigation? What do you recommend?

Ranjini Ambalavanar: Yeah, sure, absolutely. That's what happens in small institutions, and also, if you don't have the expert in that field which is in question, you are allowed to bring in experts from outside institutions or university, other places, analysis experts and so on.

Elyse Sullivan: And do the committees who process the inquiry and that do the investigation need to be different, or could they be the same folks?

Ranjini Ambalavanar: Either is fine. Some universities use the same committee. Some don't, and it's allowed. It's not a requirement that you need to have separate committees.

Elyse Sullivan: And could a PI be liable for plagiarism for using standard language when describing institutional facilities in part of the grant application?

Ranjini Ambalavanar: No, that's not plagiarism. That's not.

Patricia Valdez: Right, so we do see these types of applications that come in. You know, a reviewer will say, "This is plagiarism," but we know ORI will not follow that up in a case for plagiarism, but we do think that cutting and pasting is not a great grant habit for writing grants, and so what we may do at the NIH is contact the institution and just alert them to this grantsmanship issue and just say, "Please remind your faculty that this is not a good practice."

Ranjini Ambalavanar: As I understand ...

Patricia Valdez: I'm sorry. Go ahead.

Ranjini Ambalavanar: No, the outright misconduct is, we have very strict definition, but that doesn't mean that we condone all the other questionable research practices, but what you question, writing your own language for describing the standard things, that's not at all a problem.

Elyse Sullivan: And so this is another question along the same lines. It's about attribution in publications, so in collaborations, if, let's say, a high-income partner and a low-income partner contributed equally, but they're not included equally in the publications, is that considered research misconduct?

Ranjini Ambalavanar: It is not under the definition of research misconduct. We do get a lot of inquiries about this, but it is up to the institution to resolve it, its authorship dispute. We don't get involved in it, and it is not research misconduct. It's authorship dispute. Institutions handle it or journals maybe. I don't want to answer that other than, we don't do it.

Elyse Sullivan: Do you have any suggestions for administrators when it comes to recognizing possible cases of misconduct? The administrators aren't really working directly with the PIs in their labs, so they may not be privy to this type of information.

Ranjini Ambalavanar: Yeah, so they can have policies for data precision and maintenance, and they can ... Because most of the problems can be clarified when the data is maintained properly and carefully, so that's one aspect I would say institutional administrators should focus on and also auditing if possible. But other than that, you will see too-good-to-be-true data and too many publications in a short time. Things like that is what we see as a common problem, so if something alerts them, that's something that they should keep an eye on. But proper policies and procedures for everything in the lab is important.

Elyse Sullivan: So this now is about the RPPR submissions. Would misreporting of publications in your RPPR be a form of misconduct?

Patricia Valdez: So if they're reporting it as a product of the grant, and say they're including several publications that were not actually products of the grant, that would not necessarily be research misconduct, but it could be a false statement, so it could be a problem. Yeah.

Elyse Sullivan: And same thing for the opposite. If they actually were omitting a particular publication because maybe it needed ... It had a retraction, or it was noncompliant, that too.

Patricia Valdez: Yeah, that could be problematic as well. Yep. And so there is a type of ... not necessarily making the false statement, but failure to report information is a problem as well.

Elyse Sullivan: So this is an interesting one. Would nepotism be considered research misconduct if the PI can provide justification that the family members are scientifically necessary?

Ranjini Ambalavanar: It happens, but it's not research misconduct to have someone in your family to be part of the paper if they did the right thing, but we have had a case where the father put his medical student son in many papers but ended up having a plagiarism finding, and so you're hurting rather than helping your family, so it is not outright. As it is, it's not a problem if they do the work. Why not?

Elyse Sullivan: All right. And we're at ... We're almost at time, so we'll just take one last question. So would it be required for institutions to have a hotline or whistleblower e-mail for anyone to inform about allegations?

Ranjini Ambalavanar: Yes, the research integrity officer, many institutions have that hotline. We do get a lot of allegations starting that way, so it's up to the institution. This also answers another previous question, what the administrators can do. Generate a hotline so people don't feel reluctant to come and talk to you, so they can actually put it on the hotline. So it is a good idea, yes.

Elyse Sullivan: Wonderful. All right. Well, we're on time.

Patricia Valdez: Okay, well thank you. Yeah, thanks everybody. Yeah, we couldn't get to all the questions, but if you have any questions, go to the exhibits hall, and they can help you there or e-mail us at the e-mails that we've provided. Thank you all for very much for joining us.