Megan Columbus: All right. So thank you for joining the session. My name is Megan Columbus, and I am the Communications Director in the NIH Office of Extramural Research. I'm here with Dr. Mike Lauer who is the NIH Deputy Director for Extramural Research as well as the Director of the Office of Extramural Research and Dr. Sally Amero who's our NIH Review Policy Officer in the Office of Extramural Research. Welcome. Today, we're going to have a short presentation followed by a very interactive session. We're going to be taking you through some real case studies about what's happened and things that you want to avoid. With that, Sally, do you want to give a start?

Sally Amero: Okay. Well, thank you, Megan, and I do see people are still signing up, logging on. So we're very glad to have you here and look forward to the next 45 minutes or so talking about a subject that is so important to the NIH, and it should be very important to you as well, and that is review integrity. So this is a specialty in the realm of misconduct and unprofessional behavior that has gotten a lot of attention in recent years. I want everyone to understand that while you might think this is only a problem for our peer reviewers to worry about, and of course for us to worry about here at NIH, it's really a problem that should be on everyone's radar. If you are a stakeholder in the peer review process, then you have responsibilities here, and we'll get to that in a minute. So why are we so concerned that we maintain the integrity of peer review? Well, if the peer review integrity is compromised, then that opens the door to a number of very unsavory consequences such as inefficient or even inappropriate expenditure of public funds. So we're a government agency, and we are spending taxpayer dollars to support research. Potential harm to human subjects, vertebrate animals, the environment, so if there is a mistake, or if there's a compromised peer review, then there could be consequences to participants in the research that is funded and loss of public trust in biomedical research. So if one of those things were to happen, then the NIH would be accountable, and there could be a loss of public trust. So any violation of a core value of peer review is a breach of review integrity. When we first started this, we thought, "Oh, this is pretty simple. If you breach confidentiality then that's a breach of review integrity," but as we started getting more and more into this, we found that there were many more activities going on than we had realized. So we framed breach of review integrity around the core values of peer review, and these are confidentiality, expert assessment, fairness, impartiality, integrity, and that pertains particularly to research misconduct, so I hope you saw Dr. Valdez's presentation on that, security, transparency and efficiency. So next slide, Mike. Now what is your role? So there are many stakeholders in the peer-review process. Of course, we have a stake in this. We manage the process, so we're accountable for its management. Investigators, collaborators, people who are listed on grant applications or contract proposals going through peer review have a responsibility as well. Obviously, our reviewers must maintain the privacy and confidentiality of the information, the security of our government computers and so forth, but also individuals who are officials of institutions have responsibilities. What are those? Well, when the grant application is submitted, your signing official attests, in writing with their signature, that they will uphold a whole bunch of compliance policies and regulations, and if those are breached, then we could have an integrity problem. Also, the institutions have come forward in recent years to report to us evidence that they have if there are breaches of review integrity of which they are aware, so everyone is involved. There's no "get out of jail free" card here. Everyone has a responsibility. So I'm going to stop here, and Mike Lauer is going to explain our first case study, and I would urge you to put questions and comments, but no specific allegations about people or institutions or grants or reviewers, in the chat.

Michael Lauer: Right. Okay. Thank you, Sally. So we're going to go through some, what we call mini case studies. These are based on real stories. So the first case is what we're calling the seminar trip, and here, what happens is that Dr. A, who is a member of a study section, is invited to another university to meet with graduate students and present a seminar. I'm sure this is something that is quite common, and certainly when I remember when I was in academia, I got invited to various places, and I also sometimes served on NIH study sections. So now, Dr. A is at .. . is visiting. And they are now perhaps seated around the table or at a meeting. And during that time, Dr. A is asked about specific applications that were reviewed in the XYZ study section and their summary statements. So for example, one of the people in the room could say, "You know, I had an application that went to your study section, and the summary statement said X, Y and Z, and I totally disagree, and what do you think?" So the key characters now in this story are Dr. A and the members of the faculty at the university where Dr. A is visiting. So Dr. A is functioning in many roles. Dr. A is functioning as a reviewer, but Dr. A is also functioning as a guest of another university while giving a seminar. Of course, another group of people involved here are the graduate students and the postdocs. Maybe applications that they were involved in are going to be .. . There's an attempt to discuss them with Dr. A, or maybe, maybe not, but the graduate students and the postdocs are going to see how their department faculty are behaving. And then there are department faculty who are asking the questions. So some of the things that we'd like you to think about, first of all, does this resonate? Has this ever happened to you? And if you're Dr. A, what would you do?

Megan Columbus: So feel free to put in the chat comments in response to this.

Sally Amero: So let's just explain for the new investigators that the rosters of the study sections are posted on our websites, and you get a list of the reviewers in that study section on your summary statement. Now we don't post that information so you can harass or try to get information from the reviewers. That's for transparency and accounting purposes. So we have some responses.

Megan Columbus: So it's interesting. When we look at our responses, I particularly like the one that says, "I'd be petrified if I were Dr. A," right, because they're in this position, and lots of people are saying that Dr. A should decline to discuss. Sorry, I can't say anything. Tell them you can't respond. I can't discuss this. You're not allowed to discuss summary statements. It's a big no. Decline to comment. It's confidential. People are suggesting lots of different verbiage for saying sorry. Be vague.

Sally Amero: And we should explain that our reviewers are instructed to report breaches of review integrity to us. So this is how we found out about this particular case. This happened to a reviewer, and they reported it to us.

Megan Columbus: So, Sally, so you're saying that the investigator that asked Dr. A the question is now in violation of peer review integrity. Is that right?

Sally Amero: Yes, and especially if this is coming from department faculty. We take .. . We would take note no matter who contacted the reviewer or who was trying to get information. But really, as Mike said, it's the faculty who are teaching the students that this behavior is okay when it really is not.

Megan Columbus: So, Sally, one person suggested reporting it to ORI, right, the Office of Research Integrity. Should they be reporting it there, or should they be reporting it to NIH?

Sally Amero: So that's a great question. Thank you. And that tells us that people have been paying attention throughout the seminar. Yes. So research misconduct cases would go to ORI, and that's fabrication, falsification and plagiarism. If ORI were to receive it, I would imagine they would forward it to us. But at the end of the seminar, we will give you information for reporting review integrity cases.

Michael Lauer: I do think an important part of this is that Dr. A should explicitly decline to talk about specific applications, obviously should do it in a nice way but should make clear, and in a way, this was probably not part of the planned seminar, but this is part of the planned education that Dr. A is going to provide is to say something politely but firmly that as a reviewer on an NIH study section, Dr. A is not allowed to be discussing specific applications, and actually, communications about specific applications should not occur between anyone and a reviewer except within accepted channels, and the only accepted channel would be through the SRO. So this is actually, although it puts Dr. A, Megan, you said somebody felt petrified or terrified. And I would say that if this were the first time this ever happened to me, yes, me too. I would also be terrified going, "Oh, my goodness. What am I supposed to do?" But this is a great teaching opportunity. So it's an opportunity for Dr. A to teach something that perhaps they weren't planning to teach but nonetheless would be an incredibly important message for the faculty and especially for the grad students and the postdocs. They need to see this.

Megan Columbus: Absolutely. And Margo makes a good point that there's no misconduct if Dr. A declines to provide any information. There are a couple questions in the Q and A and in the chat that, what can Dr. A talk about in terms of generally? So would Dr. A be allowed to respond to a question about the applications in the study section like, "What general level of science did the study section find this round of applications?" or, "This topic X is of current interest in the field. Did the study section get applications related to this topic?" because then they're not talking about a specific application. So how much are they allowed to reveal about that meeting?

Sally Amero: Great questions. So we encourage our reviewers to explain the general review process. That's perfectly fine. That helps us. But when you get into talking about specific applications, conversations, summary statements, scores, critiques, that's where you've really crossed the line. The scope of science that is handled by each study section, each standing study section, is posted on our website, so the reviewer could refer people to that. They can talk in general terms about the scope of their study section, just not specific applications. And I want to come back here to Margo's comment in the chat. This is tricky. So I agree that if Dr. A provides no specific information, Dr. A has done the right thing. But we still have an attempt. Depending on who's doing the manipulating here, there could be an attempt on the part of the department faculty to short-circuit peer review, to put pressure on this reviewer, to get this reviewer to declare a conflict of interest the next time the applications come through that study section. So I would .. . We'd need to know a few more details about exactly what happened on this trip. It's hard when it's all verbal. I will acknowledge that. We'd have to have witnesses to corroborate a verbal exchange, but I wouldn't say that everyone is off the hook on this.

Michael Lauer: And, Sally, do you think Dr. A should report this incident to their SRO?

Sally Amero: I do. So we have some institutions where we are receiving allegations of all types of wrongdoing. And when you put the picture together of harassment concerns and misconduct concerns and grant fraud concerns and review integrity concerns, it gives us a general picture that we need to pay more attention to some of those institutions. Or we might have other information on these people where they've breached other types of integrity concerns, and it would help us to put a picture together. So yes, I would say so.

Michael Lauer: Okay.

Megan Columbus: Great. Should we go onto our next case study?

Micheal Lauer: Sounds good.

Sally Amero: Okay. So I will tell you, these are all real cases. We did not make these up. We've kind of skimmed over some of the details though. So we have here a reviewer who just finished serving for the first time in peer review, and I think we can assume this was an early stage reviewer, probably an assistant professor, new investigator type. And when she comes back from her study session, her department chair calls her to the office and says, "I know what you did on study section. We need to support one another. An old friend of mine had an application in that meeting." So are you understanding the landscape here?

Michael Lauer: So now I guess the question is, what .. . This one is a bit more tricky than the previous one. The question is now, what does Dr. C do when being scolded by her department chair?

Sally Amero: It's actually Dr. B, but the .. .

Michael Lauer: Oh, I'm sorry, Dr. B.

Sally Amero: So this is what we actually do, and sometimes, we have to actually draw these out to figure out who's doing what. But we have a power situation here where a supervisor is putting pressure on an employee, on a faculty member, about her service in peer review. So I see what Rita is saying, and so what immediately comes to your mind? Yep.

Megan Columbus: Right. So clearly, Dr. B needs to report the abuse of power for NIH. Clearly, Rhianna understands that, "Well, how does Dr. C know this anyway?" right? So there's things that NIH needs to be looking into. Rebecca is saying, "Dr. B needs to be going to HR because now she's being bullied." And so there's a whole series of things that people are identifying. Patricia's institution reports to Ethics and Sponsored Programs.

Sally Amero: And those are all great points. So remember, we talked at the beginning about institutional officials and their responsibilities. So sometimes, when we have to go to the institutions and report what we know and ask for their help, then we have concerns, especially in this case, that this assistant professor is going to be outed. So we put a lot of emphasis on the institution officials to protect the whistleblower. So, Mike, would you like to talk a little bit more? You've had more of those conversations than I have.

Michael Lauer: Yeah. So actually, one of the things that we do, let's .. . We find out about this one way or another, and we will then contact the Vice President for Research at the institution. And, yes, in some cases, I happened to notice one of the chats, that one of the options that Dr. B might have would be to report it to the VPR. I do believe we've had some cases where then the VPR has heard about the case from two different sources, from Dr. B as well as from us. But one of the key points that we make is that NIH is very concerned about retaliation. Retaliation would imply an unsafe work environment, and that creates a whole set of problems there. And we would ask the VPR to look into this. I will say, we have had cases like this, and there's one case I'm thinking of right now in the top of my head, but I know there are others as well, where the Vice President for Research was strong and determined what had been going on. Determined by the way, this was not an isolated incident that the department chair was somehow getting a hold of this kind of confidential information, then using that to bully junior staff. And this was considered exploitative behavior, and the department chair was .. . lost their position, lost their position as department chair because this was considered to be essentially a gross exploitation of power.

Sally Amero: Right. So I want to comment on one part of the chat I saw fly by here. You are correct, Sara, that we are limited in our ability to protect the whistleblower. So that's why we go to the VPR and put a lot of .. . explain carefully their responsibilities to do so.

Megan Columbus: So some people have then raised some questions about kind of conflicts of interest and other things. But given this scenario, it's not necessarily a conflict of interest because it's not Dr. C's application, right? It's somebody else's, and we don't know if that's at the same institution or anything, right?

Michael Lauer: Yeah, it could be a conflict of interest because, for example, an old friend of mine, maybe there's a real personal relationship between Dr. C and that other PI. And that would constitute potentially a conflict of interest.

Megan Columbus: Would that .. . But that would be a conflict of interest with Dr. B?

Michael Lauer: No, not with Dr. B because Dr. B would .. . presumably, Dr. B has no idea who this .. . Well, Dr. B may know who the other PI is but would not know that that PI is a personal friend of the department chair.

Megan Columbus: Right. So could you guys talk a little bit about in this kind of situation, what happens? What does the institution do? What does NIH do?

Michael Lauer: Well, I think what we do is .. . What we do, of course it depends upon the specifics of the case and how much detail we have and how comfortable we feel that, are we seeing a pattern? What's particularly helpful is if we see something, for example, a copy of a text, we've had those where we've had copies of texts or copies of e-mails. But in any case, if we feel comfortable that there really is something going on, we then contact the Vice President for Research. It's not unusual that as part of this, it's not just a written correspondence but then there's some oral discussion as well. So we might meet over the phone, or I guess we don't use phones anymore. We would meet over Zoom and discuss this. Some institutions are stronger than others. So what we like to see is that the institution will take the concern seriously and look to see what happened, try to figure out what actually happened. And if they then determine that what happened is a violation of their integrity or honesty policies, they can potentially act on that. So I think, so there are a couple of things. One is, how seriously will the institutional leadership take our concerns? That obviously is a culture issue. And then a second is, how strong are the policies? Some universities have strong academic honesty policies that cover peer review behavior. All academics or most academics engage in some form of peer review, most often in the form of reviewing for journals but also reviewing for grants. And so some universities have strong policies that say if you violate a journal's peer review rules or a grant agency's peer review rules, you have violated our academic honesty policy because part of being an academic is engaging in peer review. Other institutions do not have that kind of strong policy, and so that puts them in a somewhat weaker spot.

Sally Amero: So some other consequences, I see some questions here. We have removed people from peer review for violations of many different flavors including review confidentiality breaches. So yes, putting pressure on the assistant professor reviewer person is one violation. But we don't know in this case who on the panel is breaching confidentiality of the information as .. . when they run the panel. So we'd need a little more information.

Megan Columbus: So, Sally .. .

[ Chatter ]

Sally Amero: .. . have been fired .. . I'm sorry?

Megan Columbus: I'm so sorry, I didn't mean to interrupt you.

Sally Amero: I'm sorry too. Some institutions have imposed their own administrative actions on faculty once they learn what their faculty member is doing. Sometimes .. . We know of several cases where the person has been dismissed, has been fired. So this one is probably less egregious than some of the others we have seen. But we also can refer to our federal partner agencies who can conduct investigations and take legal action.

Megan Columbus: So we've talked about what happens on the institutional side a lot. But what about this issue about how Dr. C knows this at all? In this instance, how does NIH go about investigating?

Michael Lauer: Sometimes we can figure it out, and sometimes we can't. Sometimes we can figure it out. For example, we have seen cases where a reviewer will share a confidential URL. So this is not .. . I'm sure you've all seen this, right? You're invited to a particular meeting. You'll get a unique URL that can be tagged to you. So sometimes what will happen is a reviewer will share that unique URL with somebody on the outside, and that is actually an event that can be .. . We can detect that. We can determine that that actually has happened. We have had cases actually where we have had difficult conversations with certain people, and we've asked them, "We need to know how this breach happened," because if we don't know how this breach happened, then we have a whole lot of questions about the integrity of the review of a bunch of applications. And so in some cases, then people have come forward and told us how they found out.

Sally Amero: Great question here from Rhea Beth, "What if Dr. C is bluffing?" We have a sleuth here on the panel.

Michael Lauer: Oh, that's a good one.

Megan Columbus: I do have got a great question in the Q and A box here, "I'm curious why reviewers are publicly declared before the review meeting. Influence could be minimized even further if this list is confidential until after the peer review to maintain transparency."

Sally Amero: So we've discussed this recently in light of all these cases that we've learned about. So for a couple of reasons, one is that we operate .. . So if you remember the list of core values, one of them was transparency. And so to demonstrate that we have a breadth of expertise, that we have covered geographical representation, seniority, minorities, all of those things on the panel, we've published the rosters. It's also helpful in declaring conflicts of interest. So it happens frequently that once the roster is posted, then we learn more about conflicts of interest. So there are many reasons.

Megan Columbus: Another question, why does the NIH have chartered members on study section who they would say have excess power in some ways? Why wouldn't we opt for fresh perspectives at every meeting?

Michael Lauer: Oh, that's a great question. And .. .

Sally Amero: It really is.

Michael Lauer: .. . that's spot on. So actually, Melanie Burns who's the Director of CSR has posted some information on this and concerns that we might have that we've been putting aside any issues of dishonesty that if somebody is serving on peer review too often, they're having too much influence in a particular field of science. So we have two problems. One is that one person may be having too much influence. And the second is that we may be denying ourselves a diversity of opinions and thoughts because other people who could be serving on peer review are not. So as has been, I think Dr. . . . I'm quite sure Dr. Burns has posted this. We are looking at this, and we are looking at people who are serving an awful lot so more than, I don't remember, Sally, more than three times a year or something like that or over a certain period of time. And we are strongly encouraging our staff to say, before you bring somebody onboard into a review group who's already doing an awful lot of peer review, let's instead find some other people who are not doing that much peer review, or haven't done peer review at all, so that that way we can expand our reviewer pool, make our reviewer pool more diverse, and also decrease the risk inherent in having a small group of people have too much influence over what's going on.

Sally Amero: Right, and the charter, kind of the language we use but it's not entirely correct. We operate under the Federal Advisory Committee Act, FACA. And FACA requires a term of membership for the chartered study section, so it's a FACA requirement.

Megan Columbus: One more question before we move on. Just we touched on this, but they say, "It sounds like Dr. B is in a very bad spot. What are the policies to protect her? And so is that institutional policies that would be protecting her at that point?"

Michael Lauer: That's a tough one because neither Dr. C nor Dr. B are NIH employees. And so that is a difficult one to address. Now we can certainly indicate to the Vice President for Research that we are concerned about the risk of retaliation and that this is something that we really hope they'll pay attention to. I will say that we've had some cases that we have referred for debarment or suspension where the concern was more the retaliation than what the original offense was. And so for example, we have found out another .. . We found out, for example, in other kinds of peer review integrity situations that the person who was the respondent, the person who was accused, had directly and deliberately interfered in the investigation and had threatened people, when after having been explicitly told not to do that. And so when we put forward a case like this for suspension or debarment to the officials downtown, we'll point to this and say this is the kind of behavior that really worries us on top of the fact that there was a problem to begin with.

Megan Columbus: All right. Thank you.

Sally Amero: And we go to special lengths if we get an accusation from a student or a postdoc in a laboratory. They're seeing behavior on the part of their mentor or the lab director. We have sometimes waited until that person has left the lab to go to the institution depending on circumstances. We had one case though where the person was quietly removed and put in a different department to finish the degree and research, and so that one turned out well. Shall we do one more?

Megan Columbus: All right. Should we go into case study three so we don't lose time here? Great conversation.

Michael Lauer: Okay. Oh, yeah, okay. All right. So Dr. D is at a university and leaves for another position. And in cleaning out his materials, the university found a box. Actually this is, I guess a university, this is an electronic box so a set of electronic files. There's another case I'm thinking of where there was actually a physical box. And they found all kinds of things. They found NIH grant applications, critiques, notes, and these had not been properly destroyed. The department chair contacted us. And one of the things were the notes weren't just notes. These weren't notes that somebody wrote to help them put together their critiques, but they were notes to other people saying, "Hey, take a look at this. There's some good ideas to consider here." So the characters here are Dr. D who is the faculty who left who didn't clean out his electronic files and, well, actually probably couldn't clean out his electronic files. That's a good thing. And the electronic files indicated that they had been sharing confidential material with others. There's the department chair who's trying to figure out what to do. There's a Vice President for Research who we might contact. And then there's us. So what do you think about this one?

Megan Columbus: Okay, well, obviously a huge breach of confidentiality. So are we asking what do we think should happen? I think everybody recognizes that this is not good.

Sally Amero: So there's an interesting comment here from Melinda about contacting the new employer. So this is also a tricky landscape. So we have on occasion reached out to the new employer to report egregious behavior that we know about. The problem here is that this took place at the first university. It's the first university who has the information.

Michael Lauer: Yeah. So this is tricky. We're dealing with people who .. . This is not only in this case dealing with a peer review problem but also in other kinds of integrity concerns. When a person moves from one university to another, how much can we actually do given that the problematic behavior happened at the original university? Sometimes we do work with the new university, and we try to help them figure out what might be going on. But we have to be careful that we're not violating confidences that could potentially get people into trouble.

Sally Amero: Right. Now if the VPR at the first university wanted to reach out to the second university, we would have no say in that matter. They would .. . That would be their decision to make. And that has happened as well.

Michael Lauer: And that's actually, Sally, if I'm thinking about this, given the fact that this person is no longer an employee at the original university, the VPR might be more willing to do that.

Sally Amero: Right. And we saw a report very recently about, was it a professional society, Mike, that is encouraging exchange of this kind of information on harassment cases?

Michael Lauer: Yeah. Now this is really great news. So this is AAU, the American Association of Universities. And what they have done is they have made a pledge to do two things. One is that they will share information with one another about integrity breaches. Now this particular pledge, they were focusing on harassment. But they're also talking about different kinds of professional misconduct in general. So one is that the universities have made an agreement amongst themselves that they will share this kind of information. The second is a bit more subtle but also extremely important which is that for many kinds of professional misconduct, a university might be doing an investigation. And then if the faculty member leaves the institution, they resign. They leave the institution. The professional misconduct investigation automatically comes to an end. This is different than in the case of scientific misconduct where by law, the scientific misconduct investigation must continue to its conclusion even if the affected scientist no longer works at the institution. So this is a way in which what we call rogue faculty, can get out of trouble is by resigning and going someplace else because that automatically stops the professional misconduct investigation, and therefore no findings can ever be made against them. We were very pleased, very pleased to see that AAU, the second part of the pledge is that they will continue professional misconduct investigations to their end even if the faculty actually leave. So that would be very .. . I think that's .. . It's a fantastic development, and that would be very helpful for a case like this because then if the first university makes a formal finding, we're in a different spot then. And that makes it easier for us then to work with others.

Sally Amero: And thus we changed some of our records rules a few years ago. So we are at liberty to share more information now pertinent to some of these cases than we were in the past. So we can also share more information with the institution. Do we have time for one more, Megan?

Megan Columbus: We only have 4 minutes, so I don't think so. I do have some questions here though that maybe I can .. .

Sally Amero: Okay.

Megan Columbus: One question is that NSF doesn't share their review roster. And so does FACA not apply to them?

Sally Amero: Great question. They share what they call an annual roster. So at the end of the year, they post the list of all the thousands of reviewers who have served for them in the past year. We do have an aggregated roster process for some of our smaller study sections. It's also the case that NSF reviewers are appointed under a different mechanism under FACA. So NSF is not entirely comparable to the NIH system.

Megan Columbus: Interesting, thanks. Is NIH considering unblinding applicants to the actual reviewers? They're thinking about this in the context of the NIH anonymization pilot. And if not, how do we plan to preserve the transparency for the applicants and reviewers?

Michael Lauer: So right now, we do not identify who is reviewer one, reviewer two or reviewer three. And actually that's quite deliberate in part because we want to protect them from anything that might happen. Sally, I don't think we're thinking about revealing their names.

Sally Amero: No, that's right.

Michael Lauer: I do know that there are a number of journals that have pushed for I guess what they call an open peer review or named peer review. Whereas in the old days, all journals used anonymized peer review, and you would not know who the reviewers are, there are some journals that will actually say it was Dr. Lauer was the person who reviewed your article. I know "The British Medical Journal" does this, and there are a number of other journals that are doing this as well. I have to say while I understand the motivation behind that, the stakes behind a grant application review are very different than a journal article review. I don't think that we're considering going in that direction at all.

Sally Amero: So keep in mind that kind of the whole idea here of our peer review system is that reviewers need to feel free and unencumbered to express their opinions. And if they felt that Dr. C and Dr. Whomever, Dr. A were going to put pressure on people, were going to come after them for expressing their opinions, then we've lost our .. . Then kind of what's the point of the peer review process? So we have to tread very carefully here.

Megan Columbus: So a question from somebody who is helping people submit applications, they said, "The day of submission years ago while reviewing the citations, they found that one had been retracted. They notified the PI and let them know, but they were surprised. Is it too late to change that application?" So what do they do if they've submitted the application and then they find out that something was retracted, and what implications does that have for peer review?

Sally Amero: Oh, in their literature cited? Yeah, we would have to look at that. That might be eligible as a post-submission material update.

Megan Columbus: Okay.

Michael Lauer: Yeah, I guess it depends upon how important that particular citation is. If that particular citation is absolutely central to the argument of the proposal, that would have a different meaning than if it's a citation that says something like, "There have been multiple studies published on X, Y and Z," and this just happens to be one of them.

Megan Columbus: Yeah. Well, we're at about time. I want to thank you. I think this session is really important for a number of reasons. I think it speaks to the fact that NIH is taking this seriously. We're following up. We're looking for institutions to follow up as well. We're looking for reviewers and for the PIs on applications to all be playing their part in upholding the system that we hold so dear that where confidentiality is kind of the basis of what we're doing. So thank you to Mike, and thank you to Sally. We absolutely will be posting this video, and so it will be available for later viewing. We'd love to hear, if you go back to the previous screen, tell us what you thought about the session. We take those information seriously. And tell us about the .. . how you feel about the whole seminar with the overall session evaluation. Okay?

Michael Lauer: Great.

Megan Columbus: And thanks so much!

Sally Amero: Thank you.

Michael Lauer: Thank you.

Megan Columbus: Bye.

Sally Amero: Bye.