

ICARE



Interagency Collaborative Animal Research Education

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ICARE Dialogues: Optimizing Performance During the Pandemic Crisis: Animal Welfare

Presenters: Interagency Collaborative Animal Research Education (ICARE) Project faculty members: Bill Stokes, Carolyn McKinnie, Eileen Morgan, Ernie Prentice, Tracy Thompson, and Susan Silk.

A record of this meeting is posted on the OLAW website (<https://olaw.nih.gov/home.htm>) on the ICARE Project webpage (<https://olaw.nih.gov/education/icare-interagency>).

Silk: It is my pleasure to introduce Bill Stokes. He and his group will be talking with us about **Optimizing Performance During the Pandemic Crisis: Animal Welfare**, a topic that is dear to all of us. Bill will introduce his team.

Stokes: Thank you very much, Susan. I am Bill Stokes and I currently work as an independent veterinary consultant in animal research and welfare. I have over 40 years of experience in biomedical research, including serving as the attending veterinarian for two of the National Institutes of Health and two Army research labs. At NIH, I also directed an Interagency Center managing the national and international validation of 3Rs alternative methods for regulatory testing of vaccines, chemicals, and other products. Most recently, I served as Assistant Director for Animal Welfare Operations at the USDA. I am looking forward to our discussions today. So I will let the other team members introduce themselves. We will start with Eileen Morgan.

Morgan: Good afternoon, everybody. I am Eileen Morgan and the director for the Division of Assurances in OLAW. My career in biomedical research has also been for a lengthy amount of time, about 37 years in various roles, including veterinary technician and facility manager supporting research and in various administrative roles, probably about half of that time. Through that time, I have been an IACUC member and IACUC chair in one of my first facilities. I have had the pleasure of working with many of you in this panel and -- and in the room today. So I look forward to this session today.

Stokes: Thank you, Eileen. And Carolyn McKinney.

McKinnie: Good morning, everyone. I have been with USDA Animal Care for nine years and I have a lot of pride in that. I have also worked in a chimpanzee facility as a veterinarian as

well as at Saint Matthews University as associate professor. I was attending veterinarian at the University of Hawaii for a cognition program as well. So if there is ever anything you need, please reach out, I am happy to try to help you. Thanks.

Stokes: Thank you, Carolyn. Next is Tracy Thompson from Colorado, and Tracy I am glad to see the forest behind you is not burning.

Thompson: That background photo is in Maine, I was there few weeks ago and I think, so far, the east coast is doing okay. I am a veterinarian by training, working with the National Park Service, going on five years now, as the IACUC chair and attending veterinarian and as well as wildlife veterinarian and one that is interested in, and cares a lot about, the nontraditional species. I have worked in animal welfare with USDA Animal Care and also as a zoo veterinarian and as an attending vet for a venom lab with a lot of rattlesnakes. So if you have any questions about those kinds of critters, I am also happy to talk about the creepy crawlies and unusual species. I am looking forward to the session.

Stokes: Thank you, Tracy. And last is Ernie Prentice

Prentice: Thank you, Bill. Hello, everybody. I am Ernie Prentice. I am a Professor Emeritus in the Department of Genetics, Cell Biology, and Anatomy at the University of Nebraska Medical Center. I am also a senior consultant with an independent IRB located in Austin, Texas. I retired from the UNMC about three years ago. Sorry, Bill, but I have got you beat by a few years. I had a 45 years academic career. [laughter]

Stokes: Makes me feel young, Ernie.

Prentice: I know. And during that time, I was a basic scientist, an IACUC chair and an IO and, in both the latter cases, for many years. I must tell you that I loved what I did. I hated to retire but I didn't want to die with my boots on. I look forward to your questions. I am happy to answer any comments and I want to close by saying - I recognize how important all of your roles are, and I hope you do as well. I know from my experience at the University of Nebraska Medical Center that every member of the team was especially important to make the program run. And I am sure we are going to explore this team concept a little bit later.

Stokes: Thank you, Ernie. And I also want to extend my appreciation to all of you for taking the time to join this **ICARE Dialogue** session today. Obviously, your participation reflects your commitment to the important work you are doing during this pandemic, and to finding even better ways to deal with the challenges that you have experienced. As I reflect on the last six months, I think it has been extraordinary to hear the stories from the IACUC and animal care staff about what they have done to ensure that the animals continue to receive good care, and their efforts to support ongoing critical research, especially research directly related to finding treatments and preventatives such as vaccines for COVID and other infections.

Obviously, the last six months have created challenges in ensuring optimal animal welfare for the IACUCs that have responsibility for overseeing the animal welfare, and especially the animal facilities that are attempting to provide and continue the same high level of care throughout this period. We have learned that facilities continue to face challenges in personnel staffing so they can ensure necessary husbandry and enrichment, and that they have faced logistical challenges in obtaining things like food and medicine and other supplies necessary to maintain high standards of care.

So today we want to have a dialogue with all of you. We are particularly interested in knowing how you are doing, as you deal with your day-to-day challenges. We encourage you to share your experiences with the rest of the community on the call today. Obviously by sharing our ideas and thoughts we can all find a better way to address these challenges. We received a great response when we asked for topics you wanted us to address. We will do our best to cover all of these, but if we are nearing the end and haven't addressed your topics, please bring these up on the chat line or unmute your voice so you can tell us about it.

We also welcome you to expand on the challenges as we discuss them, as you may have additional details you would like to share with the group about how you addressed these challenges.

Our faculty prepared a resource handout that was sent to you, and I want to see if any of our faculty have any additional comments or things they would like to bring to your attention in that handout.

Silk: Bill, it is also online on the ICARE website [<https://olaw.nih.gov/education/icare-interagency>], under the ICARE dialogues pages [<https://olaw.nih.gov/sites/default/files/20.08.04%20%20Resources%20and%20References%20Animal%20Welfare.pdf>]. And you can download it from there.

Stokes: So Eileen, you have listed a lot of resources from OLAW, any comments on those?

Morgan: Sure. I would recommend for those who have not looked at the OLAW COVID-19 landing page [<https://olaw.nih.gov/covid-19.htm>], go to the OLAW website [<https://olaw.nih.gov/home.htm>]. Click on the COVID-19 red banner and it will take you to the site. Of particular interest are the FAQs, frequently asked questions. Maybe a question that you have - others have had - and it will be answered there. You can search the website by topic and always feel free to call our office [(301) 496-7163] any time if you need direction. There good resources with links provided on the page. The last page has links to other organizations. If you need information or have questions regarding our sister organizations, you find a link to their websites as well.

Stokes: And one of those sister organizations is USDA, and Carolyn has provided resources from there. Carolyn, do you have any comments on those?

McKinnie: We are constantly updating as well, we have a new stakeholder announcement about the 21st Cures Act. That is coming out for research facilities - so take a look at our website [<https://www.aphis.usda.gov/aphis/ourfocus/animalwelfare/usda-animal-care-overview>] and stakeholder announcements [https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/ct_stakeholder_announcements].

Stokes: And Tracy provided resources from the National Park Service.

Thompson: Yes, thanks, Bill. These are the most current that we have right now, although I am expecting some new information from some of the research that is ongoing and also some field guidance that will be updated. As soon as we have any updated guidance for folks on conducting field research, we will update that guidance. You are free to use that information to develop your own or, use those for guidance that you would want to share with other researchers that are either working with the national lands or looking at doing field research in the future.

Stokes: Thank you, Tracy. And for any of you who are doing any research on bats, there are great resources on that that list. And finally there are some resources from the Veterans Administration. For those of you who are a part of or support VA research units, they have quite a bit of information as well.

Well, the most common issue that we heard about from you is one about staffing, and especially having adequate animal care staffing to take care of the animals. Staffing issues also extend to providing IACUC support and oversight for the programs. One participant put the issue very clearly. "How do we balance animal and human welfare?"

I think it is clear that if we are going to ensure the welfare of animals, we have to ensure the welfare of the staff that take care of them. Some of the issues that we heard about include addressing compassion fatigue, attrition, morale, and addressing communication challenges with the staff due to limitations for face-to-face interactions. Communication channels and supervision, and keeping staff engaged and focused. While we heard much about these issues from the first half of this dialogue session, I want to ask Tracy who has given a lot of thought to this topic if she has any additional comments or perspectives on these challenges.

Thompson: Thanks. And I think we did talk about quite a few of those options, Bill, that people are starting to think about or engage in their own institutions. I can say from our perspective [National Park Service], we had a new director added to our facility right at the time that COVID hit, and so a lot of us did not get to meet Todd in-person. It is always that scary thing of what is the new director going to do and bring in - change or whatever on top

of all of the stress that everybody is already having. And I have to say that these meetings - Zoom and Teams meetings and these options to have face-to-face, real-time meetings - have been a life saver for staff. Especially knowing that we have all been fortunate enough to have Internet access and computers or phones that are provided by the government. So that helps a huge amount. I know that options may be limited at other institutions. But definitely we had those challenges of being separated from each other and having new leadership.

One thing that I was really impressed with is - Todd set up a virtual happy hour on Fridays. And he has made almost every single one of them so we got to meet, get to know him personally off the clock and have a chance - like we talked about earlier, not just to talk about work and what our missions are and what we are doing every day, but how we can connect as human beings and maybe bring up issues that are a little bit more personal during those times and feel free to do so. So I don't know if other folks are doing those kind of virtual happy hours, it sounds there were some more fun meetings you all are having [see Meeting Report for Optimizing Performance During the Pandemic: Managing Teams across Multiple Locations and Circumstances on ICARE website [<https://olaw.nih.gov/education/icare-interagency>]], but has anybody else had any opportunities either to deal with changing supervision or a lack of supervision and how they have dealt with those particular issues?

Stokes: I think we are heard earlier about some people checking in regularly with their staff, which is especially challenging where there is no face-to-face contact and no Zoom meetings for people who may be providing direct animal care, and certainly from a health and safety standpoint that's a good thing to do.

Thompson: Great. I know we sometimes use our chat and IM functions quite a bit, just to touch base with our supervisor, or the supervisor to check in on us, so I think it can be a two-way street that way. It doesn't have to be a full-blown meeting.

And I see that we have got a great comment here from a participant about training during this time. Certainly I agree. I think a lot of us that have already been somewhat virtual, because of being scattered across the country, or scattered across office space. We have done some virtual training already, but it is certainly not as valuable as face-to-face hands-on training. It seems like the participant and her staff are definitely dealing with that for getting a lot of staff training during this time and what is that is going to mean directly to animal welfare.

Participant: To clarify, that is specifically our attending vet's unit, the centralized lab facility. Over the years, I realized those unexpected events that happen really do relate to new staff being on board and when there are these -- you mentioned the attrition moments and this is one of them. We have lots of recent turnover due to animal care staff who departed because they are now going to vet school.

Thompson: That is awesome.

Participant: Right. It is great. And some of them are ambitious and they say, no, actually I got admitted to vet school at your institution so I will stay on about 10 hours a week. And I am just like, I am not so sure. It is not my job, right. So I am standing on the sidelines and that's why I started doing the e-mails, with everyone's okay, on compassion fatigue. Because it was the one thing I could do, and it seemed like it was being received well. I got some good feedback on it, on the pros and the cons of it, so that is why I wanted to mention it. It is like acknowledging where it is not your place to do something but then how can you add to the safety net and the mental bandwidth support, so hopefully that gives some good support to some of these people.

Thompson: Absolutely. And, you know, William mentioned at the very beginning of our **ICARE Dialogue** [see Meeting Report for Optimizing Performance During the Pandemic: Managing Teams across Multiple Locations and Circumstances on ICARE website [<https://olaw.nih.gov/education/icare-interagency>]] maybe to give us all a little slack and I think that is what I felt in our organization. That ability to say, we are trusting you to do your job and if you need help, we are here for you. Those check-ins help reinforce that you are there for them and also open up that communication so that hopefully they will reach out if they are feeling stressed or if they are feeling like maybe I need some help with this particular project.

So I think that is really great, participant, that you have done the one thing you know you can do, which is communicate, right? That's all we can all do in this, we are all learning as we go - what is working, what is the not working - some people communicate differently. Like I mentioned Instant Messaging, or some folks are texting. Folks have mentioned that if they don't have computers for e-mail, text messages from supervisors for wellness checks, or wellness groups to check-in on folks is another way we can communicate and make sure that there is an opening for folks to reach out if they need it.

One of the questions we got from another federal agency had to deal with training.

Participant: I know for the folks, we have not been banned from our office, but some institutions have not been allowed to go into their workspaces. I think that has probably challenged a lot of folks, as well as in our case. We could set up one-on-one safe distanced trainings at our facility, if we need to do that. Maybe some of you had limitations on facility access, I could see that being a real significant challenge. And, I don't know -- I don't have an answer for folks on how you deal with that except to look for opportunities to do face-to-face at some level through using PPE and all of the resources you have.

Participant: Maybe my NASA colleagues will want to climb in here but the astronauts need to continue to be trained. NASA missions don't stop because of COVID-19. It has been tremendously difficult with the animal research training that has to go on. They have just

made it so that the number of trainers in the room is limited to one while another one watches through a camera and offers suggestions.

Silk: Well, there you go. That was NASA's question. So you answered it for your colleagues. It was their question.

Thompson: That sounds like a really good approach where you minimize the direct exposure, but you have others involved. I like that.

Participant: They kept the same number of trainers. They just had to leave one with the astronaut and one in a room with a camera and able to watch what was going on and offer guidance as well.

Thompson: That's fantastic. Great solutions. I think, participant, you alluded to this with folks feeling stressed and even felt like - how can I help them? What are the things I can do in this moment? I think we talked about quite a few different things already about how folks maybe are picking up on encouraging folks and making sure folks are taking time for themselves, setting boundaries. I think that came up quite a few times.

I shared this on our previous talk [Optimizing Performance During the Pandemic Crisis: Animal Welfare, August 4, 2020]. We started what we call a Thoughtful Hour. It is not mandatory. We may not even have it every week. It is just my working group, although we invited others to participate if they want to. Instead of a book club, like some folks have, that may be too much to commit to, it is an opportunity either to talk about a scientific article or a socially relevant article about some of the crises we are seeing in our community. It is an opportunity to come together and be able to open up to some of the things, participant, you mentioned earlier about the discussions you are having with your core team about racism and the impacts it is having on morale and personal health, mental health issues, in these times.

Thinking about what can we do to communicate with each other about things that are important to each other, but not necessarily work-specific and have it be about building morale and building compassion and building communication. Does anybody else have anything that they have heard or would want to share about how they are dealing with morale?

McKinnie: One of our VMOs likes sewing and crafting and she decided to make masks and offered them to anyone -- she offered all of these options. So I gave about 50 bucks to pay for postage and materials. And out all of this variety of materials and mask designs - that was really great thing for my team, a little package in the mail. And I think it really went a long way for my team. So I was just thinking -- like a little care package for people, even like little snack bags or, you know, here and there for your staff and let them know -- little note inside that sort of thing.

Thompson: Absolutely. I just saw someone post on a forum through a federal agency group that they went into their office for the first time in a while and they had this special gift they got there - a Scooby Doo lunch box. And they opened it up and somebody had left homemade chocolate in it. It was from one of their group members and it was such an unexpected lovely joy for them to have that - especially after not being in the office and connecting with people. I love that idea of getting a little care package or finding something on your desk when you do go back in or finding something in your workspace that makes you feel good.

Thompson: We are talking about morale and animal welfare, in particular linking those to what a participant shared with us is happening at their facility. I think Carolyn you can probably speak to this because I know you know the situation really well.

McKinnie: It is about the disconnect that people are feeling in the animal care facilities. They may come back and animal they really cared for is no longer there because of the end of a study or because of a need for euthanasia because studies aren't going forward. There is this emptiness, this loss, this despair in some cases. In this facility, they put up a wall that has a tribute to these animals that explains what kind of studies they participated in, and how that helped science and medical advancements or whatever that animal was involved in. They give people a chance to write notes and say something about the particular animals they worked with.

Thompson: So ways, again, to build in compassion, offsetting compassion fatigue. And still connecting people because you are not there all the time and these times are really, really stressful for everybody. So I think there are opportunities like that to help folks feel a little bit more connected and better about what is happening when they are not there.

One of the issues that came up that I heard about was the idea of adoption programs and I wondered if any of our participants that have adoption programs had to suspend those programs or whether you found creative ways to keep those going.

Participant: I can -- as far as I know that has not been suspended, but I also know that our quote unquote supply of animals isn't exactly at the level to continue, but I have heard confirmed stories of adoptions happening. So it is both, because of COVID, because of the increased demand on certain species, so what Carolyn was talking about in terms of the memorial wall, I am going to take it to our, to one of our supervisors to talk about compassion fatigue. That has happened where they would go in and say I was going to adopt this animal, but it had to be used for a COVID project. The positive there is that they know the animal was used for very important research but at the same time they grieve that, there is a grieving process there.

One of things that I wanted to mention in the e-mail that I sent to the facility people is an update about my own adopted dog. It might trigger something in them. I try to be kind of sensitive about that so I don't do that in every e-mail. But I have given updates and just to

simply show him in a home environment. I have heard back from them, it is very comforting and that's one of the things I do periodically, not every time. And it is not just me, it is a bunch of us that contribute. It seems to help with morale and I get to know some of these people that I don't get to see or even talk to ever. They open themselves up like this to me and they feel safe in doing so and that really has been such a privilege.

Thompson: Thank you for sharing that. I think that there really is a strong human animal bond that develops between caregivers and the animals in the labs, and of course when animals have to be euthanized at the end of studies rather than adopted out that is -- that does create a lot of -- there is a grief process that goes on and having -- I think that is very helpful, I think.

Silk: It looks like from the chat there are some people who are still trying to adopt out animals. A participant is saying they are having a difficult time finding people to adopt. They have zebra finches. That would be kind of cool.

Thompson: It would be awesome. Little peeps. I mean that is really great.

[Note: Adoptors were connected to those finches because of the mention on this program.]

There was a comment I wanted to highlight. A participant made a comment about how the administrative group has been cleared to go back and work on-site, but the facility staff and the vet staff have been on site throughout and there is some resentment for those who have come back. She said but it is hard as we are on the same side and equally passionate about animal welfare. Can you expand more on what the resentment is. Is it just because the administrators were able to go home and the vet staff wasn't?

Participant: The admin staff, my group, still has not been cleared to report back to work. They are basically trying to minimize the number of individuals who are on-site to adhere to the social distancing norms and so we are home and our counterparts in the facilities, they have been there in the epidemic, at the epicenter. I am from New York City, so they have been through the deep dark days. This is kind of resentment that has grown over the months and it is hard to address it in meaningful ways. Obviously, we do appreciate what they have done tremendously and continue to do on a daily basis. But there is a resentment about what we could have done and could not have not done. We could not have reported onsite, because that was the administration's decision. There was an advisory that we could not enter the city if we didn't need to. So there are these roles and responsibility that differentiate individuals. This pandemic is creating these kinds of fissures in our relationships, in groups that typically work together. This now is an undertone in our ability to interact with each other. And both of us have the same goal in terms of having good animal welfare, so that is hard.

Silk: It reminds me of the discussion around essential personnel and how that was really divisive and sounds like that is kind of maybe what is underlying what you are experiencing.

Stokes: Yes. I think all of the personnel involved in animal care are essential whether they are essential on-site or not really needed on-site. Maybe they need to clarify that there are essential on-site personnel and essential off-site personnel.

Participant: Yes. To make matters worse, I work at a hospital, so everyone is essential, so that is the flip side of it.

Stokes: Thank you. Ernie, did you have any comments about staffing issues?

Prentice: Yes. I don't want to reiterate what was already said. I found the previous session to be remarkably informative and valuable as well as the comments from our facilitators a little while ago in terms of staffing. We all know that the staffing problems are related to where you are located. There is a big difference, for example, between institutions in New York City versus institutions in other areas of the country that have not had a significant increase in coronavirus-19 cases.

For example, where I live, in Vermont, we have the lowest viral count in the nation, and we don't have the same kind of problems that you would have in New York City, or perhaps in Austin, Texas, or maybe in Miami. Therefore, institutions in Vermont are not faced with the same kind of staffing problems experienced by institutions in many other states.

Fortunately, many institutions have backup staffing plans in their disaster plans. For example, recruiting graduate students or research technicians who worked for the PIs, or postdocs, for example, can be trained in the event you have staff who are not going to come in. They can't come in. They are sick. Okay? They have to stay home in a quarantine, or perhaps they are in the hospital. Also, some institutions have instituted shifts of their current staffing, where not everybody comes in at the same time. They have different shifts. That somehow helps, I think, to solve some of the staffing shortages. Other than that, those are the main ways that I am familiar with to try to address some of the staffing problems.

Stokes: Thank you. There was also a comment that said they wondered about resources for providing support for potential compassion fatigue. And having worked in the federal government, we have, what is called an employee assistance program where counseling services are available, readily available at no charge, that we can refer employees to if we sense that they may have stress in their life from whatever the issue is, whether it is work related or something in their personal life. And so I think it is important for institutions and organizations to have counseling services available for those employees that may be experiencing extreme stress in their life. You have a lot invested in employees and I think that if there are some interventions that can be provided, such as having that available to them from the institution, I think that can help them work through that and get them back on track to being able to focus on their jobs in a way they can be more effective. But I

would be interested in any other ideas or techniques that any of our participants have used to address these issues.

Participant: I have something that I have done with my people. And this is something that people can look at within their organization. We have what is called -- they rebranded themselves as talent development, and it is great because they shifted to online training fairly quickly, knowing the challenges that working from home would place physically, like ergonomics as well as mentally on mindfulness and also because of the strengths finder assessment that most of us have done here. It just has been such a wonderful puzzle piecing and dovetailing of all of these skills, right? So with my staff and in our office at staff meetings we did a great one hour Zoom for talent development and one of them is adaptability fatigue. Some people have done it and I am going to do it next. We can talk about it. I have to say having an office where that is received and encouraged and then to also do that with my staff. I can say, remember your strengths and remember that if you don't like to do this, we need to support you there. Because actually I enjoy that more than you do, so why don't we change your job description, temporarily while working at home? For example, because she has a disabled partner and they have a different need and it is harder for her to work at home. So I have to say, your institution may have resources that are free for you and if that is something that you haven't looked into, now is the time to kind of strategically advocate for that to put that in the next year's budget. That is something that I found incredibly helpful.

Stokes: Thank you for sharing that.

Hollander: Carolyn made a good comment in the chat. It is related to memorial walls and compassion fatigue, she is talking about an institution that makes a post that if an animal is going to be humanely euthanized in X amount of time, they put the picture up and what their contributions to science were. And this gives a chance for the care staff to say good-bye and spend a little extra time with the animal. And I think that is a great idea. West Virginia University, where I used to work, the animal care staff once a year has a memorial service for all of the animals that had been used for research and science. It is really nice, the animal care staff really looks forward to it every year. And it is a good way to honor the animal care staff that are doing all of the work and having worked with these animals. And just one more comment. A participant put in the comment that their care staff runs a compassion fatigue program where they provide information and resources for employees, including links to university mental health resources, that are available for staff and students. That's another really great idea.

Stokes: Also related to shortages in staffing, we had a comment about asking about flexibility that could be provided in terms of animal care requirements when staff shortages occur. Such as any advice for when culling should occur instead of decreasing staff support, or by decreasing animal care staff support, such as decreasing frequency of cage changes, decreasing frequency of animal welfare checks, replenishing food and water only when needed. Eileen, would you like to talk about that from an OLAW perspective?

Morgan: I would. One of the things in particular that institutions can look at is consider their current practices and evaluate with their animal program personnel and their IACUC, if they are overarching and putting in more than they need to? Is there a way they could modify their practices yet still maintain consistency with the *Guide* standards? I think we have seen through discussions on burden that there are things that institutions could, such as the items you mentioned, Bill, that someone wrote in the chat. Using some of the measures suggested, your staff would be able to actually handle the workload with reduced personnel without compromising animal welfare.

Institutions sometimes don't take the time to see what they are doing and figure out if their practices are absolutely necessary to follow during this time. If you identify and develop those changes, for example, we could do two-week cage changes instead of once a week. Because that would meet the *Guide* standard, maybe we don't need to change the tops to the cages or we could extend the filter changes. There are things we could do that would still be in compliance with the *Guide*, consistent with good animal welfare and yet maybe will take less time and therefore the staff you have working would be able to accomplish those tasks.

If you do identify changes, developed for a situation such as this pandemic. if you are going to do it temporarily for this time, you add that to your contingency plan or your emergency preparedness plan. That way you don't have to change all of your SOPs, instead create a modified practice and add these into the appropriate section of your disaster plan and you're good to go. Your IACUC looked at it, your animal program personnel have had input.

And to key in on something critical that was mentioned in the team session was communication. Sometimes people at the level of conducting the work are left out of the communication. If you can keep those teams in the communication, as was discussed earlier, through texting, using a virtual platform, Facetime through their phones, or you can communicate with them directly, keeping personal safety in mind, then individuals will be engaged in the program.

If you have well established performance standards, you can conduct things in a different way than the *Guide* has suggested. Now is the time to maximize the use of those, and if you don't have them, maybe it is time to start looking at some performance standards for your program. The last thing I would say is that colony culling should be a last resort.

Look at all of the flexibilities. I mentioned the FAQs and the OLAW website. There really are a large volume of offerings of flexibilities that institutions might adopt during this time [<https://olaw.nih.gov/covid-19.htm>].

Stokes: Thank you, Eileen. And I noticed we have a comment from a participant who said they have semi annuals going on now, and they review this during their program review. It is also helpful to raise awareness for the committee periodically so they know what the AV

is doing and why. So that is a great time if you are still conducting your semi annual program reviews, to have those changes reviewed and endorsed by the committee.

We had another comment about the most significant challenge their facility has faced has been the safe continuation of research during this public health crisis and balancing between scheduling restrictions to provide animal care while also facilitating ongoing research. They state that their focus has been animal care as a priority but this is becoming more and more difficult as researchers continue to ramp up ongoing projects and begin new projects. Ernie, would you like to comment on that?

Prentice: Yes. Sure. That is a very important question. Let me begin from an IO perspective. In a pandemic situation, I think there are probably three overarching goals. First, you need to ensure that your personnel are safe. And when I say safe, I am talking about both physical and emotional health. That means you have got appropriate training in terms of reducing the risk of COVID-19 infection, both on the job and also in your own personal life when you are at home or out and about in the community.

The second would be to ensure that animal welfare is maintained, that is extremely important. No compromise.

And the third is to try to protect the ongoing research. Now we all know that depending upon the situation in your particular locale, sometimes you have got to stop research projects. And if we have to do that, there should be criteria as to what you do. For example, they may stop research projects that are not NIH funded over those that are departmentally funded. They may stop research projects that are labor intensive, that require a great deal of comparative medicine resources, like long-term studies, studies involving multiple surgeries, surgical interventions, et cetera. And I think that it is a good idea for an institution, when they develop their disaster plans to divide it up into phases, a Phase 1, Phase 2, Phase 3, for example, which would be based upon the pandemic threat at the particular institution involved. You might never reach Phase 3, hopefully, but if you do, it might mean almost all research is shut down. Phase 2, maybe only some research is shut down and Phase 1, none at all.

I am also reminded, from the previous conversation, about what you could do to reduce the workload of staff and it is hard to add anything to what Eileen said, except that I think that you need to plan in advance as to what those deviations from the *Guide* or your policies and SOPs are going to be. I think that most institutions, if not all, were totally unprepared for the magnitude of this pandemic. We had no idea that this was going to happen, and we had to play catch-up across the country.

Consequently, if we are going to get another spike, which we hope we don't, in the fall and winter, I think that disaster plans ought to have provisions as to how to move through the phases. For example, it means we are not going to change the cages so often, or we are going have to do this or we are going have to do that. So that would be my comments.

And then finally, from an IO perspective, I was kind of concerned about a comment in the last session with regard to not getting adequate support. The IOs are the individuals responsible for the animal care use program, and they are, therefore, held accountable. They have the responsibility to ensure that all resources are provided as necessary to ensure those three goals I just mentioned are readily achieved. And I would hope that all IOs recognize this is their responsibility. I would also suggest that it is not the role of the IO to micromanage. If you get good people, you let them do their jobs. You give them the support and, then, if there are any tough decisions with regard to perhaps senior investigators, well, you can take the heat for making the tough decision. But clearly, it is IO's job to make sure things work properly.

Thompson: What to do about those kinds of limiting factors with regard to these times is that the IACUC has had to do some of the things. And the documents that have come out of this when the research is, not only safe for the humans to be involved to work together in certain situations, but also when it is not safe for the animals. Because certainly early on we didn't know which species would be impacted, potentially. The zoo animal infection with the tigers and lions is a classic example of who knew that those particular species were going to be susceptible and impacted by their caregivers?

So I think that is where a lot of our guidance came out of - was early on recognizing there may be certain species that were at risk, as well as the people in certain circumstances where they would be working on particular projects like Ernie mentioned, where there are more animal welfare risks, maybe more complicated procedures and those with close contact. So part of the discussion can be about which protocols should we continue to review, but maybe not approve, until we know what the safety and security of the funding and the personnel and the animal care issues are. And so we have done that for instance for bats because we don't know whether or not it is safe to do that research at this time. We have done all of our protocol review and it is ready to go but we haven't approved those protocols until we have the okay from the institutions that are looking at these species and looking at the risks to say yes, it is safe to go forward.

Stokes: So it is important to think about where the IACUC could have an impact by talking through which research projects may or may not need to be approved or held back until they know more about the capacity to support each project. And I don't know if other people are doing something similar or not but we would love to hear if you have other suggest suggestions. It is a real balance, I think, to try to ensure the same robust level of research while still maintaining good animal care in an institution where the resources to do that are limited.

Morgan: Bill, I wanted to add something to what Tracy said. This is just an interesting scenario. We had a grant that was coming through that was going to be awarded with a subaward to a performance site. We received information from the performance site that they could not provide IACUC approval for that activity because their institution was only

conducting COVID research. The grant had probably been submitted in a previous quarter or months before. The organization was not able to be the performance site at that point and the PI would have to wait or find another performance site for their activity. This was an interesting scenario that shows the impact the pandemic is having on research as a whole.

Silk: And on people's careers.

Participant: If I could also add to contrast, to what Eileen just said, for some of our people who have had last minute funding and also were approved at our institution to return to campus and restarting at 50 percent or whatever level. When we get those communications, then we talk to each other in terms of let's look at all of your protocols or your approvals, are your approvals okay? We can get you approved but understand we are just the first thing on your checklist. And so that is the way we do our gatekeeping here. And then of course, if there are other things that require us to withhold approval, then we do that. But what I found from the e-mails, they really need help in organization and communication. If they did not do a good job previously, they certainly are not going to do a good job now. So what I learned in the past six months is that all of our unanticipated events, all of our unexpected things, that happened previously are benefiting us now because we know what to do now. So if I could just put a plug in there for using previous events to your advantage now because I have found that to be like your muscle memory almost. I have found those e-mails helpful and that basically I do not expect someone to do a 180 now during a pandemic. It is basically about we each have to meet them where they are.

Hollander: A participant has a question that is interesting. Is anyone out there engaging in COVID vaccine development in animals? And how are you managing social distancing with all of the pressure that comes with a viable product?

Participant: That's a great question. I have to tell you this is what I think about whenever I hear it in the news, there are those across campus doing this and this continues to be the highest priority for my office, whatever we can do for those submissions. Our IBC committee has seen triple increase in their submissions and so how are they supposed to deal with that? Because that is in vitro as well as in vivo use. And then the BSO, the -- office who is also going through a leadership transition, so it has been difficult for them. I would say that in terms of the social distancing that return to work application process through our IO's office, the VP of research has been important. For the facility, that has been the COVID planning team to dictate how much square footage is needed for a certain number of people in this space. Our office for research compliance is down here, but that is up here at leadership, and so they go through the different checklists and by the time we are here, we have confirmation in e-mails and in our programs that everything else has been green lighted.

And so the vaccine development, there are a number of people across campus in different units doing that, and so there is also an environmental health and safety group, the EHS for the PPE stuff and also research going on with the reuse of the N95s. So it really has been an issue of everyone coming together and making sure my boss and the AV, especially have been like - if you are here and you are talking to me about this - that means that you have gone through and gotten permissions and that you can have five people but can you please also check on this because you are going in a room half the size and have a large number of people there.

Stokes: I can imagine the challenges are great when you are approving COVID-19 organisms to be used, and like you said, whether it is in vitro, in vivo, or in both animals and invitro.

One of the things we had another question about is protocol review during online meetings. And wondering what people are doing to try to make sure that the animal welfare discussions are as robust as possible. As they would have been in person. Are people finding that the online format is or is not a hindrance to this? And do you have any tips or prompts that could be used to help with this to assure that the discussions and the reviews are as robust as they were previously in person? Tracy, do you have any comments on that from overseeing your IACUC?

Thompson: Well, we always are virtual, since our IACUC is scattered from Alaska to Hawaii and out to all of the regions of the country. And I have to say, a pretty amazing group of people that take animal care very seriously. So ours haven't changed and I guess my helpful tips would be we do ask for questions to be submitted, whether it is DMR or full committee review, in advance of whatever meeting we are going to be having to discuss those protocols. They can be collated by my administrator into really compact questions to go to the PI. Then we get responses back and then we discuss at either the full meeting for full committee review or through the designated review process. And, that has been a huge help. In addition, certainly those that have become really complicated - we have one right now - where we invited the PI to join us for a truly informative discussion. Unfortunately she was unable to do so, but the park representative that is helping to foster this project was, and so being able to bring in the folks that might be able to answer these animal welfare concerns directly is crucial to our committee feeling comfortable about making decisions as to whether it is okay to move forward with some of these more risky capture protocols we deal with. So I would say try and do some of the groundwork ahead of time so that when you get to that virtual meeting it can be much more robust and focus in on the core issues. That's worked for us.

Stokes: Thanks, those are great ideas. And, as you pointed out, if you are bringing in experts, or if you need to have a consultation with the PI, actually it is easier now with the virtual meeting.

Silk: Jennifer says in the chat that their attendance has actually been better now that they are doing things via Zoom for their IACUC. Because it is easy to get to, because Zoom can be wherever you are, right?

Stokes: We had a couple of comments about IACUC membership issues and I am assuming that the COVID-19 crisis has caused some issues in either attendance in getting a quorum or difficulties in recruiting new replacement members. There were questions about two areas. First, what about the process for appointing alternate IACUC members for the COVID pandemic period, which may be an effort to try to make sure they have a quorum each time, and secondly, clarification on the requirements for the general community, nonaffiliated IACUC member. So I will turn to our regulators and ask them to help remind us about what the possibilities and requirements are for these two areas. So we will start with Eileen from OLAW, followed by Carolyn from USDA.

Morgan: The PHS Policy requirement for the nonaffiliated member of the IACUC is one individual who is not affiliated with the institution in any way other than as a member of the IACUC and not an immediate family member of someone at the institution and they are not a current or former laboratory animal user.

It's always a good ideal to have alternates on your committee for any of the PHS Policy membership roles, especially the nonaffiliated member. We recommend alternates to keep the committee properly constituted. Alternates must be appointed by the Institutional Official, the head of the organization. We look at the highest level person at the institution as the one who appoints the IACUC. That authority may be delegated to either the IO or another individual in the organization. That person officially appoints the members and alternate members and they agree to serve.

We have some guidance on the OLAW website on alternates. Alternates should be offered the same opportunity as the other members. Alternates should have the same opportunities for training and to participate, whether virtually or in person. At this point it is probably virtually, so that they understand the workings of the committee and that they are trained in all of the responsibilities of an IACUC member as an alternative and serve in the absence of a member for whom they meet the same PHS membership criteria. Scientist for scientist, nonscientist for nonscientist, nonaffiliated member for nonaffiliated member, and additionally that they would vote their conscience. And one of our participants, you probably can give this response better than I can with all of your IACUC 101 experience, so if there is anything I missed, feel free to jump in.

Participant: Yes. The one thing you might want to emphasize you can have dual positions and the nonaffiliated member can also serve as your nonscientific member, but you have to make sure if you have an alternate, that individual may need to meet both of those as well, unless you have another nonscientific member over here or another nonaffiliated member.

Morgan: We see that more frequently in smaller institutions where one person wears two hats, keeping in mind that you need five members.

McKinnie: USDA agrees with OLAW.

Stokes: A note made in the chat states that if you have a virtual IACUC meeting, you may want to consider not recording it because it can be requested through FOIA if you have it on record.

Post approval monitoring challenges were mentioned earlier in the first session. For example, do you need to have a waiver for postponing semi annual inspection of facilities? We also had questions about the concept of virtual visits for either post approval monitoring or semi annual inspections, and again, Eileen and Carolyn, do you want to comment about using some of those modifications for conducting virtual inspections without having to have the IACUC members or the inspectors going to the laboratory.

McKinnie: So we are very comfortable with using live video feed for your semi annual inspection, so as long as there are certain provisions are met. The first is that the video feed must be live and can't have been recorded already, so the IACUC members watching the video feed can actually move the camera around or say turn to the left or turn to the right or please check this out, and always don't forget looking and at the ceiling and floors as well and focusing on the animals. It is an animal welfare thing.

Also, two committee members must be involved with the filming for video feed. So that is important to remember so if you had a staff member actually doing the videoing there would have to be two IACUC members that are a part of the observing of the live feed. And then also importantly, no committee member that wants to be involved and wants to participate can be excluded.

Morgan: Yes. OLAW's perspective regarding conducting the semi-annual program evaluations is in a footnote on the bottom of page 12 of the PHS Policy. OLAW offers that the IACUC can determine how best to conduct their semi-annual program evaluation. If your facility does not have USDA covered species, then you can determine whether it would be IACUC members or ad hocs that would conduct the facility inspection. An ad hoc can be whatever person you would like to do it, especially in this time frame. The ad hoc(s) need to be qualified to conduct a semi- annual, they would need to be knowledgeable, perhaps have the checklist but certainly it could be done virtually. You could have someone in the facility who is working and then have your other members or a member or an ad hoc person join virtually. OLAW agrees with the USDA that every member should have an opportunity to participate, if they would like to. The flexibilities are wide open on how you could do it. If you have USDA covered species you have to follow the USDA guidelines that Carolyn just mentioned.

I would also comment on post approval monitoring. Besides the semi, an institution could reexamine their practices for the way they were doing their post approval monitoring, not just their semis. They could either do them in a different way or they could conduct them using a virtual platform. Any of the platforms that we were just discussing would be an acceptable way for the committee to do it. Keeping in mind that the IACUC is still responsible when it comes to the semi for the inspection and the report.

I will remind you that OLAW does offer a waiver for the semi annual facility inspection. If your program conducted a semi in March and, the question is - how are you going to conduct your six-month next semi? If you don't think you will be able to do that, you could contact the OLAW Division of Policy and Education and get a waiver for the facility inspection.

Also we recommend that for those institutions that got a waiver for their spring semi annual facility inspection, that maybe they look at an opportunity to use, a virtual platform or a different way conducting their semi-annual facility inspection than they did before.

They can add this process to their contingency planning document or their emergency preparedness plan as a method they would use in this type of situation. They don't have to change their description of the process for the semi in their Assurance or in their other SOPs and documents. They would just do it for this type of situation that is occurring now.

Stokes: That's really a great idea. There is a comment about what kind of advice there is for new ideas that come forward during the COVID crisis to be incorporated into future planning and I think you just have described one example very well as to how to do that.

I just want to add that institutions need to keep personnel safety in mind during inspections, and that is going to vary from institution to institution. Some institutions are not going to allow any outsiders or non-essential employees in. Others are going to perhaps use the people that are in the facility to help them conduct the semis.

Well, these discussions have been very robust. I think at this point I would like to ask our participants if you have additional questions or comments that you would like to share with the rest of the group on challenges and issues that you have faced relative to animal welfare or that impact animal welfare? I would also ask if any of our faculty have any other words of wisdom to offer.

Prentice: Yes. I will say something. A lot of folks on this Zoom meeting know that I have been involved with IACUCs and animal care education for 35 years, and I am very concerned about having an effective way of communicating with and training people. I have to tell you in the current crisis, ICARE is exceptionally useful. I really need to thank Susan and all of the rest of her colleagues who helped her put this together. I find it very, very valuable in terms of not only the faculty comments but also the participants offering their

questions and their solutions. It has been really helpful. So, thanks very much, Susan, and everybody else.

Silk: Thank you, Ernie. And the faculty, I can't say enough good about the faculty. We have always been a community that cares about each other. This has been a great opportunity for us to all be together. I miss seeing all of our participants at face-to-face meetings, but this is wonderful too, in its own way. We don't have to fly. We don't have to stay in hotels and we can still be together. It is really terrific - so I would say back to you. Thank you, Ernie and thank you to the faculty and the participants.

I want to thank some of the participants for being open and sharing some really difficult scenarios that they maybe don't have solutions for right now or have come up with great ways to solve these problems. It is wonderful to hear from you all and I hope that we have been able to provide a supportive forum for you here. You can also reach out to us if we can help individually, because we know it has been incredibly challenging for everybody to deal with these impacts on our programs. I am grateful for the vulnerability and the openness and the care and concern that you all expressed here today.

It is not surprising to me, but one of the things I learn each time we get together is how astonishingly hard you are working out there. It has always been a hardworking community but now you doing way more work than you were doing before. So I hope you will all remember to take care of yourselves.

In October, we will be offering the same three sessions on the same five topics, maybe assorted differently. We still have a big wait list but we are going to expand the number of people that we allow to participate. If you already have attended one of these sessions, we ask you not to attend a repeat of it. Each session is somewhat different, but you can read the content of those other meetings on the website. We go through each meeting record and add links and phone numbers, so we hope those can be very useful to you. Please encourage your colleagues to join us - and don't be discouraged if there is a wait list. Just get on the wait list. We will do our best. [barking] That is Apollo Hollander weighing in. Apollo says, "Hi." Bill, maybe you would like to say something about what we are doing in November.

Stokes: In November, we are going to address what we have learned from the pandemic and applying that to contingency plans. So as we talked about quite a bit today, there are many things that we have learned that can be incorporated into contingency plans that could be useful. Let's hope we don't have another pandemic, but if we did, we would be better prepared because we would have incorporated things that we have learned into those plans so we can take advantage of them. So we are going to be talking about the different things we have learned, we will be building on a lot of what we have talked about in the last few months during these **ICARE Dialogues**, only in a more focused way. We will be asking what are some of the specifics that we can include in contingency disaster plans to help us out in the future? And I think this is really a good time to update those plans,

while it is fresh in our minds as to what worked and what didn't work, what could we do so that we don't have that problem the next time around, or have better ways to deal with it. So we invite all of you to join us for these sessions.

Silk: Thank you, Bill. Now it is time to go. It was terrific seeing all of you. Good bye, everybody and stay safe.