

## PIPP Team Meeting

Can you guys hear me? Great.

Hi, there.

Rebecca, how are you?

Can you hear me okay?

Yes.

For NSF people, could you put NSF behind your name?

Or for non- NSF people, welcome. welcome.

[Captioner standing by]

[Silence]

Hello, everybody.

How are you?

And everybody else who is joining us, welcome. We are going to start in a couple of minutes. Thanks. you?

And everybody else who is joining us, welcome. We are going to start in a couple of minutes. Thanks.

[Silence]

Welcome to those of you who are just coming in. We will start this in a couple of minutes and thank you.

Joanna, I just sent you a chat message.

Okay, we will roll with that them.

Are you good with that, Rebecca?

Yes.

Great.

It is 3:00 so we will get started because we know everybody is very busy. I wanted to welcome you all to the virtual office hours where we are going to talk about this in SAP IP Development Grant my name is, Joanna, Program Director at the National Science Foundation. We have a couple of slides we're going to go through today before opening up for questions. The other person who is helping me with the slides is, Rebecca Ferrell, another Program Officer. Do you want to say hello, Rebecca?

Hello, Rebecca Ferrell, Program Director in the economic Director in.

We have the Program Directors from NSF on this PIPP working group. You will see that they have NSF either before or after their name so that you can identify them. NSF colleagues have do you want to wait, hi, insight good afternoon to everybody?

Good afternoon to everybody.

What you will see here is the solicitation page link. Please know the recording of this virtual office hours and slides will be available on the PIPP website. If you have questions please either put them in the chat or raise your hand. We only have about 14 slides we're going to go through and [Indiscernible] spend a lot of time answering your questions. If you have questions after it's over you can send questions to our e-mail which is at PIPP@nsf.gov and we will get back the chat or raise your hand. We only have about 14 slides we're going to go through and [Indiscernible] spend a lot of time answering your questions. If you have questions after it's over you can send questions to our e-mail which is at PIPP@nsf.gov and we will get back to you. Thanks, again, for coming to the virtual office are. I think this is a really exciting funding act -- opportunity for the science community. We're going to talk about this development grant this development grant funding opportunity today. It's called NSF 21590. The purpose of this developing grant is to support planning activities for fundamental research and capabilities that are needed by a multidisciplinary group to tackle grant challenges in infectious disease pandemics through prediction and prevention. That is a mouthful. The whole point here is that this is a grant group to tackle grant challenges in infectious disease pandemics through prediction and prevention. That is a mouthful. The whole point here is that this is a grant that is about 18 months long. It can be up to \$1 million. The whole point here is to provide you with resources to start building a team that can put in a competitive proposal for PIPP Phase II, which will be a center scale facility that will tackle predicting pandemics. Just real quickly, of course, the deadline for this grant is coming up. It is October 1, 2021. We are really happy that you joined and that we can answer any questions that you have.

There are a couple of things that you should look, keep in mind. Here is what we were looking for. For what we think in mind. Here is what we were looking for. For what we think is successful development grant will have. We think it will have an ambitious and forward-looking scientific grand challenge. There were a lot of questions last time about what constitutes a grand challenge. We will talk about that in a few slides to see if we can help. We expect there to be a discussion of both team building activities. That can include finding

members of your team that you might not have yet, and also research descriptions. That can mean future research directions or Small pilot programs. We also think I successful development grant will have a diverse, multidisciplinary team and it can also be multi- organizational. It should have a plan for scaling from your development to the center operations, and also project management plan. The key here is this grand challenge. We have talked about this a little bit before. We are expecting proposals to explicitly describe a grand challenge in this infectious disease pandemics area. This was brought up last time. This does not have to be limited to SARS, COVID or even viruses. This can be in infectious disease and any living system. Plants, animals, maybe humans, other microbes, whatever you think is exciting research and that you can bring a multidisciplinary team to that can address these problems in predicting and preventing infectious diseases. Proposals need to describe not only what the grand challenge is but what is there innovative vision for addressing the grand challenge. Obviously, this grand challenge is occurring because there is an overarching problem or hurdle that has been getting in the way of reaching a grand challenge. What had the hurdles been? How is this multidisciplinary team going to be able to get you to that next level? We would also like to understand, what is the potential for the transformative Richard outcomes here that room -- transformative research that go beyond the status quo? This is just to describe what we are hoping to see from the research community. What I want to say, before we talk a little more about grand challenges is this idea of what this funding can support. As I alluded to earlier it can support research. This can be pilot projects that begin to address subset of grand challenge problems across subdisciplines. These can be experiments to show feasibility, and also to also to start providing a platform for team building. In addition, this funding can go towards supporting other types of team building. That could mean finding additional colleagues or that could mean starting to work with colleagues during retreats to help build your message. And so, please, describe a rationale that justifies the need for a collective effort effort for a multidisciplinary team, how you are going to build this multidisciplinary team, and how you are going going to start working t ogether. Remember that this PIPP working group is made of program directors from four different Directorates here at NSF work it is the Director for Biological Sciences, for computer and information science and engineering, for engineering, and for social, Haverhill and economic sciences. Because there are four Directorates that are involved we really want to see grand challenge problems that will span across research disciplines. Once again, this grand challenge should be commensurate with a center scale problem. We realize we are asking you to write this Development Grant to say, hey, here is our idea and here is where we think we want to go to be competitive for submitting a competitive Phase II proposal. This is where Rebecca and I are going to talk a little bit because there were some questions about about what makes a grand challenge. I am sorry to say that we are not going to provide you examples today because we think that the research community, meaning you all, I really best positioned to identify grand challenges. The reason we're not providing examples is that there is no way that we know all of the amazing research that is going on out there or all of the connections people may have. I almost feel like giving examples would probably rain in your creativity, and so, we're not doing that. But what we do want to say is that I think one of the keys and thinking about how to pinch this proposal is to explicitly State that grand challenge, and to be able to communicate why it is a grand challenge, and why your team and the question you are answering is unique. And then make sure that you are clearly linking the proposed planning to that grand challenge. Rebecca, this is where I am going to bring you in. Is there anything else you would like to say about that? Do you want to tell them a little bit about these workshops? And how they might be able to use that to their advantage?

Yes, sure. To add to what Joanna mentioned about the second sentence here, one of the reasons we have included this is based on the kinds of things we have been seeing in the one-pager's we have been receiving. It's really helpful for us in trying to provide feedback to potential PIs if that one-pager is very clear about what is that grand challenge, who are the people that are going to be be involved, how is this ever promote other research groups have other done or my be doing, and so forth, just making sure those points are clear if you are planning to send in a one-pager to get sure those points are clear if you are planning to send in a one-pager to get input from us.

In case people have not heard about this, you can submit a one-pager to our website, sorry, are e-mail address at [PIPP@nsf.gov](mailto:PIPP@nsf.gov) until September 23rd, and we will try like heck to give you feedback on your idea.

Yes, and while we are not including specific examples in this slide deck the rest of the slide is pointing to the four Workshops that we're held earlier in 2021, each of which included report that is available online. I believe those things will be provided maybe later on in this slide this slide deck and also from the PIPP website on the NSF website. These four Workshops focused on four different areas. Somewhat aligned with the four different research Directorates that are involved in the working group but what we discovered very quickly is in each of those Workshops there were opportunities and topics and scientific needs and gaps that really span across multiple different research areas. If you take a look at those workshop reports it may give

you a sense of the top of things that we're already discussed by other individuals in by other individuals in a number of research communities I may have given you some ideas about how to frame your own proposal.

The last part here is just to point out that these grand challenge ideas may very well include multiple parts of the pandemic process, if you will, might be focused on pre- emergence, post emergence. What we really want to see is that it's not too narrow but we also understand that everyone can't take on the entire issue in a single project.

We can go to the next slide.

A little bit more just because we understand that it's not satisfying to hear we are not going to tell you what we mean by grand challenge, specifically. What are some things that are not a grand challenge. This may be repeating a little of what Joanna said earlier. If your idea is really just more of what you have been doing and it isn't going to require you to branch out and work with other individuals, in other research areas and to push beyond the research program that you already have, it probably isn't going to be a grand challenge. One of the big questions questions that we have been getting a lot from the previous Office Hour and also from some of the one-pager's is, what if I don't really know anybody in a particular research area or I don't really understand how somebody from one of these other research communities is going to communities is going to fit into the project. You may not know that now and it may be the case in the end of, that not all the different areas are going to play equal are going to play equal roles in the project but we really are pushing the community to think hard about finding out what you might not know that could help you if you knew about it. That may come from some of these people from other research communities. We are really looking for teams that are already engaging with these different groups or plan to expand their team as part of the planning process.

That is an excellent point.

In addition to the standard merit Review Criteria that NSF uses, which our intellectual merit and broader impacts, there are solicitation specific criteria that will be considered and review of these Phase I proposals. Again, there's a little repetition you but we want to drive on these points that whatever it is you it is you are proposing in your Phase I planning and development proposal need to clearly and explicitly [Indiscernible] the grand challenge and you need to be the funny that grand challenge. You need to be clear about how you about how you are bringing together expertise, methods and theory from different research disciplines. And what that's going to look like in terms of the synergistic efforts as opposed to siloed projects. And you need to include a project management plan that addresses all of the required elements that are listed in the solicitation. Even though these are only 18 months they are fairly substantial amount of funding. The idea is that you should have something to say in something to say in a project management plan and you should need to be thinking about a project management plan for the scope of activities we are envisioning for these Phase I proposals.

Other requirements, and again, we encourage you to read very closely the full solicitation if you are preparing a Phase I proposal I proposal pick you need to have the title begin with PIPP Phase I followed by a. Colon a person may only be one PI or one Co-PI on only one proposal. You may send a PowerPoint slide summarizing your planning grant proposal pick this will be helpful on the programmatic side. If you have multiple institutions the solicitation is requiring you to use sub-awards to include different institutions, so we're not using the delete, MoneyLink clipboard proposal model. You do not need letters of intent. Again, you do need a project management plan.

The only thing I think most of this is repeating, one more time to say, please, be very clear about what the grand challenge is, what the scope of that is and why you envision this requiring a center scale effort that would come after the Phase I proposal.

Again, the timeline, in addition to reminding you that the proposals are due on October 1st, 5:00 p.m., your local time. Again, sub-awards structure, not the collaborative lead, non-lead [Indiscernible] other NSF programs have. No letters of intent. We will be trying to do the standard, we have to have a turnaround time of six months for most of what we are doing in [Indiscernible] of what we are reviewing. We are aiming to have the review process coming to an end and making award decisions by the end of March of next year.

On the funding opportunity page page there are a number of links. I also saw that Goli included some links in the chat. Maybe you can go directly there. There is an FAQ I highly recommend you look at. We spent a lot of time thinking about all of the different questions that are likely to come up a lot of things are addressed in those FAQs. If you have questions or want to get more feedback about your particular project idea, as Joanna mentioned before, you may send an e-mail, and one page perspective too [PIPP@nsf.gov](mailto:PIPP@nsf.gov) until September 23rd Rick the way we're working on this is the entire working group has an opportunity to read each of those, so this is not something where you were going to get an immediate same day, next a response. There may be a lack of the number of days while we all have a chance to look at those and provide feedback. Another thing to know is when I giving very, very detailed be back, even though it's taking us a few days to

get back to you. We simply don't have time and we can't really be fair if we are providing different levels of feedback. This is sort of a high level response saying Yes/No, seems like something that would be appropriate for the solicitation. And maybe some additional comments but not getting into the weeds. And then I guess I recording, as you saw, the recording notification came up and the transcript of these office hours will be available after the end of our meeting.

Now we are going to open it up to questions pick you may raise your hand pick you may also put pick you may also put things in the chat and we're going to have some of the other people, other Program Directors on the working group scanning the questions coming into the chat. I see two people, the people with their hands up. I'm going to start with in RECOE. What is your question?

-- the name of the program starts with pandemic. I want clarification on the term, pandemic. My understanding, to have the pandemic you need to have a host that is [Indiscernible] distributed. That is not always the case with plans to work with trees, in particular, so forest species are not continuously distributed around the globe; therefore, you cannot strictly have a pandemic. But rather you can have an epidemic at landscape at Continental scale's. Is that pandemic you need to have a host that is [Indiscernible] distributed. That is not always the case with plans to work with trees, in particular, so forest species are not continuously distributed around the globe; therefore, you cannot strictly have a pandemic. But rather you can have an epidemic at landscape at Continental scale's. Is that contemplated or does, I just want to make sure that even though we cannot [Indiscernible] pandemics in the case of forest [Indiscernible] health that we are still okay.

To 24, Scott from the computing side. I know a little bit about biology. I would say we're not going to wordsmith the term pandemic in this case. And as Joanna said, we are very much open to disease, in plants and animals, as well as in humans. I think what you are talking about is very very much in the scope. The question came up last week and I am going to say that we are not going to be wordsmithing on that term and the finding it, but what you are talking about is indeed in scope if that helps.

I don't know if the biologists want to comment on that.

Perhaps to add-on to what you said. This is Katharina. I totally get your question but, again, we look at this in the broadest possible term. If you look at our solicitation we solicitation we specifically say that all organismal kind of [Indiscernible] are allowed as long as they kind of get to a grand challenge that may be difficult in understanding this kind of pandemic beyond better. If your grand challenge encompasses that and you're model systems plans, that is totally fine.

I see a hand from [Indiscernible].

I have two questions. Number one, can a person who is a [Indiscernible] are proposal be a senior person on a different one. I understand [Indiscernible] on ten to proposals but can the person be [Indiscernible]? That is what you want. Understand the letters of intent are not needed. Do we need in a letter from the [Indiscernible]? That is two questions.

Would like to address the second part first which is, too be clear, Letter of Intent is not the same thing as letters of collaboration that you may be including as part of your proposal.

The template letter, that is [Indiscernible]?

Letter of Intent is a separate mechanism we sometime use at NSF I had of a full proposal being submitted to understand what we might be getting in. Letter of collaboration is where you should be following path G, does PAPPG, [Indiscernible] for proposal preparation and using that language to describe the people are that are going to be collaborators pick if you knew to include additional information about what they are doing that goes in project description or in project description or may also go in your facilities and resources page.

I was going to say, the first question you are asking has also been in the chat and several people have raised it. The intent here was to have a Professor, the intent here was you did not have a Professor who was splitting their time amongst more their time amongst more than one of these developmental grants work each of these developmental grants is going to take a lot of time and energy and it's really not fair to one group to be limited by a person who has other responsibilities to other developmental grants. It's going to end up slowing you down as you try to get to a competitive Center Grant so that, that was my long answer. The short answer is, really, you can only have, you can only be a PI or Co-PI on one of these proposals.

Okay. I have a follow-up question. Sometimes a person is involved in different topics and different proposals and may have one role in smaller role in the second proposal but as a senior person, is it allowed? Or would that disqualify the proposals [Indiscernible - muffled]?

Technically I think you can [Indiscernible] personnel on another proposal. If I understand it right and others may correct me but as I understand it [Indiscernible] is for the role of PI or Co-PI, which is a person that would show up on the cover page. But again to add to what Joanna said to be mindful of the fact we of the fact we will have all of this information and we will be looking at what are the time commitments here and how feasible each of these project to be completed if there is to much commitment spread over to many proposals. On the other hand, I totally hear you in that sometimes there is specific expertise in the room and

there are not a ton of people that have that expertise pick we are fully aware there may be a little bit of overlap occasionally.

Thank you.

Another hand raised and then we will look at some of the chat questions.

I have two questions. The first is about the [Indiscernible] slides Rick if I understand that is focusing on grand challenge and not team building?

For the single slide, region slides [Indiscernible]. [Indiscernible] focusing on the grand challenge, nothing at all on the team building.

The intention here is that you are going to be submitting a proposal for 18 months and up to \$1 million where you are going to have research activities and team building activities. You need to build a multidisciplinary team and there is many ways to do that. One maybe through starting research collaborations. Another maybe through meetings. Or working together having retreats. Does that help you?

Okay, I think I got the message.

I do have another question that is sort of, I sent my one page together with my current vision. I hope I did not overdo myself Rick I sent by one page plus by single slide.

That is fine. We got a high volume right now but we are getting there so, please be patient.

I will ask a question from the chat from [Indiscernible] who asks, what is the earliest timeline if you're going to possibly awardees in late March? What is the earliest timeline? We can always adjust that but you can put down April 1, 22, is a start date, in my opinion. That may be a little aggressive or could be May, 122. Those can be adjusted at the last minute but we're hoping to get through the process six months.

Katharina, go ahead.

I think Chris has a question.

Thank you. My question is about scope for grand challenge. It's about sort of the other side of scope. I get that we should not be too narrow but at least to me it seems like a single center by itself may not solve an entire grand challenge. I am wondering, should we err on the side of really stating a very big grand challenge? Or should we err on the side of what could be accomplished in the scope Center? Computing, for example, being a [Indiscernible - low audio]?

I think the grand challenge can be described and it's largest form and it can also be described in described in terms of what you imagine your interdisciplinary center scale efforts addressing for the grand challenge. Others want to add to that? We want to understand not only what the biggest issue is but what is the piece that your center will be able to address.

Christopher, I think it can be both grand about the grand challenge and broad, while being realistic about what your center can accomplish. Certainly, just in the one-pager's we have looked at there is some grand challenges that take your breath away and make you want to think that it could to think that it could take 20 or 30 years to get to the point where these folks want to get to. We resonate with your question and, go for the grand challenge and feel free to be realistic about what you can actually do, certainly in 18 months you can't solve it but in the center phase whatever the direction is there may not even be possible to fully solve such a challenge.

I am trying and having a hard time with the chat here.

One question that came in from Lauren was, plan to include non-profit institutions [Indiscernible] not be included in the proposed budget, has we document such collaborations?

The best way to document those will be through be included in the proposed budget, has we document such collaborations?

The best way to document those will be through collaboration and, perhaps, outlining of the project descriptions and project management plan which you have to submit what the roles what the roles of these people are.

Cost Sharing strictly is prohibited. Please do not mention that in your proposal.

That I follow up on a question then? If there is an institution where there are investigators who want to collaborate but don't need salary support, what do we call it if not cost-sharing?

Unfunded collaborators, and you can submit one of those stock letters that is on the NSF website that says, I plan to do whatever it says in the project description in facilities, documents, et cetera.

Awesome.

The capacity -- PAPPG where it talks about [Indiscernible] and resources page pick you can include can include information about unfunded collaborators there as well.

That was a question in the chat about with the facilities and other resources section is required. Again, we do follow the PAPPG so it is important to read that document and facilities and other resources is in there. If there are special requirements we have outlined that in the solicitation. One last pitch, for all of these nitty-

gritty procedural submission things it is always good always good to work together with your sponsors. That is what they are therefore. They should have deep knowledge of that and they should be able to help you.

[Indiscernible], you have a question?

Thank you.

Is there any template for the project management plan? I know in the [Indiscernible] it's a two pager and with some of the five different sections, is there any subsections we should follow, template or form?

The project management plan has to be submitted as a supplementary document. I believe we outlined in the proposal submission section of the solicitation what that roughly should entail and what the page limitations are in that pick if you can't find it, just shoot us an e-mail and we will help you with that.

No, there is no template that drills down below what is listed. The five required sections.

Correct.

Thank you.

Other questions?

There is a question about what are the expectations for broader impact activities that are additive to the main goal of Phase I activities?

Who wants to add to that?

I will.

Great.

Certainly, as a lever ask that question, you are welcome to talk about the potential broader impacts potential broader impacts of the research itself but programs at NSF also love to see when you have highlighted other ways that you will be impacting the scientific enterprise, communication of science to the public, and so forth Rick if you have students involved you can talk about student training. Your supporting [Indiscernible] participation in science and including underrepresented scholars, that is something to highlight. If you are going to have a log or a blog or any other kind of science communication efforts those are what I would consider additive to the main project. You can even have things that are not directly related to the project, technically, but I think intent to feel better when you see a package a broader impact activity with the project you are building. In terms of 18 month planning grant, you would want to adjust the scope of your broader impact activities so that it makes sense with the scope of the overall award, that there is the possibility of writing something that looks not visible because it's overly ambitious and you air to far in that direction.

From the chat, thanks, Rebecca. There's a chat from Dr. Kim who asks, the project management plan requirement five as for [Indiscernible] to budget line items that support these management and coordination mechanisms. Could you to budget line items that support these management and coordination mechanisms. Could you please elaborate?

Basically what we're saying is you might have you might have a Managing Director that receives salary, or you might have staff that coordinates between the Team members receive some salary, you might have a meeting after six months between your PIs are between your personnel and that is supported in the budget. We want you in the management plan [Indiscernible] those items in the budget that are supported by supported by the project that lead to better management. That is all we are saying.

There is also a question in the chat from Sierra. Our there any limitations on travel, either location wise or financial?

The whole point here is to help build a good team. If that means having somebody come out for a seminar or to meet people, that would be appropriate. Or if there are certain field sites you might need to go to to get preliminary data, that will be considered acceptable. Does that answer your question?

Yes, thank you.

Great.

If you write that your entire group needs to go team build part two weeks in Las Vegas, it might run into some bumps there during the review process.

I see a question asking about the amount of time commitment, the amount of support that can be requested for Co-PI.

Where is that question?

It is a question by David, David Meyer.

That is an excellent question. As per the NSF guidelines if a nine-month position I think there is a limit to NSF providing salary for more -- the general guideline is NSF provides, can provide salary for up to two months for API. Of the can be special exceptions but it all goes back to what you think you will be spending, what time you think you will be spending on this project.

One potential exception, which we are not guaranteeing is, let's say some of your duties our scientific and with this 18 month grant some of your duties might be more management or planning, and one could argue

that those are multiple facets that could justify going beyond those two months. Although, that would have to be negotiated with the Program Director in charge.

And also just one other thing is that not each Co-PI may put in the same amount of time or, therefore, had the same amount of support requested. It's perfectly fine to be heterogeneous in this. David, does that help answer your question?

Yes, that's great, thanks.

Thank you.

There is a question from Bill about, sorry, I heard unfunded collaborator, in the letter of commitment, but where is the best place to include the information that is an unfunded collaborator? Project description or project management or elsewhere?

I think answer that in the chat to everyone but, basically, obviously, if an unfunded collaborator can still have a very significant contribution very significant contribution to the project. If that is the case it's really important to mention that, that is happening. You can do that to a degree of the project description if that is the place to do it. But also in the project management plan where you are outlining who is doing what. Obviously, it is always good to submit letters of collaborations. If you have such unfunded collaborators that are not appearing and [Indiscernible] it's good to have a letter of collaboration and use the four letters that are specified in the PAPPG.

Go ahead.

I'm sorry if I apologize you name incorrectly, CR as a great question on data management plans. Size that might have requirements, bio might have different requirements. Is there a format for PIPP that is required for the data management plan? Folks can correct me if I am wrong but I think the answer is, know. Essentially what we're interested in is how you are going to store data, how you are processing your data securely, or you using Open Source Software? The typical questions that you might think regarding data. It shouldn't have to adhere to size, bio, SVE, for engineering.

The PAPPG, again, if you have not specified in specific format and this solicitation got I suggest everyone look at the PAPPG and the current format. There is a pretty elaborate section on management plan. It outlines pretty nicely all of the point that Scott just brought up and it is an easy way to remind everyone what needs to be [Indiscernible] and what NSF would like [Indiscernible].

I specified in specific format and this solicitation got I suggest everyone look at the PAPPG and the current format. There is a pretty elaborate section on management plan. It outlines pretty nicely all of the point that Scott just brought up and it is an easy way to remind everyone what needs to be [Indiscernible] and what NSF would like [Indiscernible].

I see another check question that is interested. It's from [Indiscernible] page. We're still trying to find a good fit for one of our multidisciplinary areas. You mentioned that expanding the Team is a potential activity that could be part of the proposal. Would we be able to include budget for this potential additional collaborator? How would we designate that? My thought is, is that you could do a TBD in the budget line as collaborator Team is a potential activity that could be part of the proposal. Would we be able to include budget for this potential additional collaborator? How would we designate that? My thought is, is that you could do a TBD in the budget line as collaborator with X expertise, for example. To any of the Program Directors have any suggestions?

I would just add once an award is made the institution as award he has a lot of flexibility in being able to [Indiscernible - low audio]. Even if you do not know for sure you do not anticipate how many additional people might be involved, it is possible to move things around later on. on.

But if you are thinking about adding someone it should definitely be described in your project description.

Remember, this is only an 18 month effort so there isn't to much isn't to much time to be adding within this effort, this development effort. We're hoping you are building to potential center that would be the [Indiscernible].

Scott, along those lines I cannot remember if this question has been answered yet but it's posted in the chat and it's from Kim. Would you please elaborate on a plan for scaling to center operations and to what extent the plan should be outlined?

What does that mean to you?

For me it's like, you might have a group of PIs that have a good idea but to get into the level of being able to get to a Center in the next 18 months, you know they need to refine and build on their ideas. And so, part of the thing to do in this is this development proposal, talk about how they are going to go to that potential.

I am not sure if that is explicit enough, Scott. Do you want to add to that?

I think Katharina does.

Do I have that look on my face? You know me so well.

I always look at this more in the context of what the grand challenge actually is that you define. Really what you want to look at is what is the grand challenge, what part of the grand challenge are you going to address in this particular development grant. What are you envisioning if you're going to scale-up all the way to actually tackling well.

I always look at this more in the context of what the grand challenge actually is that you define. Really what you want to look at is what is the grand challenge, what part of the grand challenge are you going to address in this particular development grant. What are you envisioning if you're going to scale-up all the way to actually tackling the grand challenge. That basically would be where you would perhaps talk about what else would you need to accomplish that goal or what are the areas that are still ahead of you and your research group that would basically have to be built still? And so, making that nice connection between the broad umbrella of the grand challenge, what can you accomplish now and what is there in the future and explaining that in your project description is really what we're looking for here. You do not need to be too nitty-gritty in terms of actual personnel numbers like time commitments, . But it should be very clear to us that the research group has thought about what does it actually mean to tackle this grand challenge and what are the pieces that have to come together.

Excellent.

Maria asks a good question in the chat. What is expected

Maria asks a good question in the chat. What is expected of the pilot projects, showing progress in critical aspects, collecting preliminary data, or, I will take a short stab then pass it on. One thing, Maria, these are called development grants and not [Indiscernible] grants for a reason. That is we want you to get your feet wet. We want you to start out in the research work we realize there is no way that if it were a grand challenge you would be able to solve the grand challenge in 18 months. But we want you to get started. What that means is where not completely explicit about could be preliminary data, it would be solving one aim of many. I don't know. To my collaborators or colleagues want to comment?

Done right got you go first.

You go first because you are going to say it better than better than me.

I do not know about that but I think one point to add to what Scott just said, these pilot projects and specifically when he said, you wanted to get your feet wet also means we want you to push the envelope. You can really think about risky stuff that still needs too, that is very critical to address this but nobody has really started to tackle that. And so, those will be kind of the areas that we are looking for here. And, yes, you can collect preliminary data or you can collect data. This is why we have this research part in it. We very specifically what to do not just have a team building planning project, which is often the usual planning project for NSF, but also include the research part simply because, hopefully, something comes out even at this planning stage that may be doesn't go to a full center stage but still adds to the body of research that is necessary to really push the field in terms of being better prepared for pandemics in future pandemics.

Yes, that's really great.

We have another question asking, approximately how many published papers typically result from successful NSF Development Grants?

Julie, why are you asking that question? Help me out here?

Hi.

Hi.

I am asking that question because we are a couple of postdocs who our writing this proposal and and one of our senior mentors asked us that question. We said, well, have three pilot projects we will probably have three papers reporting results. She then said, is that normal through NSF, and what is normal? So I just thought I would ask it.

Okay. I want to say that, let's refocus a little bit. Let's step away from this idea of publications and let's focus on this group coming together to be able to put in in a really competitive Center Grant. That, that should be the focus here. And as Katharina said, if there are risky types of experiments that need to be done to show that your idea isn't completely off the wall, you know, you should be thinking about doing those types of experience, not necessarily experiments for a paper. Katharina, do you want to follow up?

Yes, perhaps. out that it's really, we don't have a standard number. We're not expecting a standard number and it's really usually how many papers come out of something. It's really hard to assess. That being said, NSF we are interested in publishing the results of research, and as you're going along in your own career you will realize it is always beneficial to report or [Indiscernible] research, and as you're going along in your own career you will realize it is always beneficial to report or [Indiscernible] result from prior support when you reapply to NSF to have some [Indiscernible] there. We don't have an expected number here. We're just hoping that there will be a lot of interesting research coming out of this.

Nice, yes.



Chris Stewart brings up an interesting question. Any idea how many of the 25 to 30 development proposals will be selected in Phase II?

Scott, go for it, man!

First of all, thanks for the question because I want to clarify.

Do you want too [Indiscernible] the chat quick.

I want to clarify on Christopher's question in that the actual Center Grants might come from outer space they might come from a Universe which is not those funded by Phase I, so it isn't a percentage or a number from the Phase I. We actually don't have any numbers to give you on how many Center Grants we are expecting so we cannot answer that at this.. I guess Enrico has another question.

I have a question regarding the role of existing research in drafting a center. In other words, the thing you would not expect people to come out with completely new areas of investigation, but rather advancing kinase research that can be integrated into a center that, what do you say, pursue a grand challenge. Is that a correct interpretation?

I hope that made sense.

You are saying top hey, you are not expecting me to come up with a to come up with a completely new research plan. Is that what you are saying?

No, with a new research direction, perhaps, or copper example, if I am already doing work already doing work in the area of infrared sensor technology, which is cutting-edge for some of the stuff we do, that is a natural component of the center. Would that be looked upon favorably or in context?

No but understand that what is going to happen is because you are working with people from other disciplines, you know, you may find that you need to stretch a little bit or you need to build your tools in a different way to answer these types of questions. Does that make sense?

Yes, absolutely.

Okay, good.

I think we are absolutely expecting people to be building on things that they already know something about. We are not asking people to do 180 quickly change direction, but we're asking them to think about how to integrate those types of expertise in new ways.

Thank you, very much.

It has to become clear how these individual pieces come together to make something that is larger than the sum of its parts that is really what is at the heart of this effort. Yes, everybody contributes but kind of this [Indiscernible] line that we want to make progress.

That was a related question of the chat asking if everyone on a grant has to have the same amount of effort. I think the answer there is, no, they don't, and it's going to depend on to depend on what the effort is and what each of those individuals is contributing. To the overarching effort.

At the same time I would say don't put people in as sort of, I don't know, just to have somebody from a particular research area on the grant. You would want to make sure that you clarify the clarify the role of each person even if those roles are not exactly equal in effort.

I think there is another question from Kevin. Nope, you answered it.

Was basically, is industry participation allowed? The answer is, yes. You can see the thank you 22. You can even subcontract industry.

Okay, thanks.

Any other questions that people have? I think we have gotten through everything. We are happy to answer. I am not doing anything the whole weekend.

We submitted a short summary -- summary. By when it might there be feedback?

Send it sooner rather than later. As Rebecca said the whole EBP Working Group looks at it so it takes a couple of days takes a couple of days for all of us to read it, give our comments, synthesize, and come back with a high level discussion of your summary. Just give us three or four days. Remember, we were asking you to submit these before September 23 for obvious reasons.

To reiterate, you do not need any permission from us to submit. If you can go, I suggest go ahead full Board with your preparations because it's close to that deadline right now. The feedback that you will get back is very, very high level. Also because we do not want to be descriptive. Literally say very general, yes, this roughly fits. Maybe you can [Indiscernible] some things in this area. That's basically the kind of level of feedback.

Maybe we can take a last question.

Hi. I want to double check because are [Indiscernible] on the human infectious disease side but a key aspect is really just how do you collect that data and how do you motivate people? I wanted to double check and

make sure that, that grant talent to be able to collect the data need to be study human intentions and everything like that, if that is within scope?

Rebecca do you want to answer that?

You are asking if you are focuses primarily on human behavior, is that within scope?

It's on basically how do we get the data that we need to do all sorts of predictions analysis. Of course, we would eventually do the predictions analysis but really we feel a huge challenge is even getting to that point. So, yeah, were just trying to understand if that is the scope of like are initial proposal. We definitely need involvement from all of the various directorate areas. I guess I [Indiscernible] proposals more on the analysis of how how do we predict, and we model, how do we, you know, what info doing it but this is on the side of how can we even get that at all pick and then of course, what do we need because we got to to figure out what to get. It is kind of a human factor [Indiscernible]. We feel that's a fundamental issue to solve any of this.

Did you or can you submit the one pager to PIPP?

We submitted one over a week ago. I guess that is why I am resorting to the office hours.

If you submitted a one-pager were getting to it Rick we try to get to it within about ten days. I think you are actually up in the next the proposals we're looking at. If you could just be patient. We will get back to you personally on that.

Absolutely, thank you, so much.

There is a question, can you can you tell us how many people have attended office hours we're submitted summaries?

I do not want to throw at specific numbers of the summaries simply because I do not want to come perhaps, bias peoples opinion in terms of the competition. We are very happy with the volume of requests we are getting and there were lots and lots of people attending the webinar and going to Office Hour, which is great. This means that there is a lot of interest generated in the community. As NSF we are very happy about t hat. I think there is a really good question that might be good to end on. Can you provide examples of existing NSF funded centers that are similar to what you are in visiting for PIPP Phase II?

That might help people understand the size of this.

Well, I would s ay, perhaps, rather than pointing to specific examples I would say that the actual structure of the centers themselves and how they will interact is still in development, and so, I would rather not bias peoples perception of t hat. I think the general sort of funding volume for individual centers will be in line with what NSF usually has at the Center scale. If you just type into Google or even look under NSF website, NSF center, there will be a bunch of them coming -- coming up giving you a little bit of an idea. But just as a little bit of a preview from what we can double, the idea here for these centers that are going into the future is that there will be a little bit more interaction between centers then perhaps historically or previously expected. And so, there will be likely some structural measures in place that will be, well foster interaction between the centers. I think that is all that I am comfortable saying in that regard.

All right, were at. 4:04 thank you everyone for attending. Thank you, Program Officers, for attending. Everybody have a good weekend.

Goodbye.

Goodbye.

[Event Concluded]