

Please stand by for realtime captions. >> Hi everyone. We will give folks a few more minutes to filter in and then we will get started.

>>

Hi everyone. So, I think we will go ahead and get started. It is a little after 3:00 and if anyone comes and joins us there welcome to catch up where we are and we will be sharing the slides and the recording of this webinar on the website, the program website. And we can also send it out to anyone who is registered for this webinar as well. We will get started. My name is Amelia Greer and I'm joined by my colleague Allyson Kennedy and I will let her introduce yourself in a moment. We want to start by welcoming you and thanking you for joining us and for your interest in the research experience for teachers program. We will be talking primarily about the overall goals of the research experience for teachers program which has not changed much from the previous program. And we will be talking about the changes we have made to the solicitation. The program itself is I just said has remained largely the same but some of the language in the solicitation has changed and some of the specific sections that we are looking for in puzzles for RT sites has changed a little bit. We will go over in detail what those changes are. I will go ahead and turn it over to Allyson to give more of a high-level overview and I will dive into those details.

Thank you. Good afternoon everyone. I'm Allyson Kennedy, and along with amelia I'm a program officer on the RET program and just before we dive into it, a couple of housekeeping things to note, you are all in listen-only mode, however you can submit any questions you might have throughout the webinar using the Q&A function. Like amelia said we are recording this and will make it available to you, the transcript and the slide deck. Let's get started. The first thing we want to sort of review with all of you is the overall goals of the program. There are two main goals of a RET experience. The first and heart of the program is to provide an authentic inquiry-based summary research experience for K-14 S.T.E.M. educators and then second piece is through that experience, the educators along with the hosting faculty and mentors, the universities and community colleges involved, school districts and industry partners, will foster these longer-term collaborations to create these networks of support. With this 2021 solicitation, size and engineering emphasized this aim to support projects that demonstrate a reciprocal exchange of expertise between the RET participants and their mentors. On the one hand the K-14 educators who participate in a RET experience are going to enhance their scientific knowledge and work with their fellow cohort of educators and mentors to translate their new scientific knowledge into activities that are appropriate for their classrooms. At the same time, these educators bring a wealth of valuable insights into the current educational environment and so the hosting faculty and graduate students have a great opportunity to learn from this expertise and deepen their understanding of classroom practices, curricula, and pedagogy. Similarly, bringing in additional industry mentors can provide an additional lens of expertise that is of value for both RET suspense and the faculty mentors and it really helps to establish these ecosystems of support that I just mentioned, to foster those long-term collaborations. We also see RET experiences as an opportunity to broaden participation in S.T.E.M. These experiences

should not be limited to only the schools with the resources to send their teachers to a RET experience and so we encourage sites to consider partnerships with inner-city, rural, or other high need school districts in their area. We also encourage you to think about how an RET experience might address the long-standing underrepresentation of various populations within size and engineering fields. These populations would include individuals who identify as women, a person with a disability, veteran, Black or African-American, Hispanic or Latin acts, Native American, Alaska native, native Hawaiian, or native Pacific Islander. So this could mean recruiting participants into an RET experience who may identify with these groups for recruiting participants who serve students who identify with one or more of these groups. And of course we recognize that there are other groups and intersections of these groups that face discrimination and disparities within education but our definition is based on the persistent documented and discipline-specific underrepresentation. So this is a really high level overview of the funding mechanisms.

An RET experience can be implemented . The main mechanism is through an RET site and these have a maximum budget of \$600,000 total for up to three years with a per year budget, not exceeding \$200,000. Within that, \$10,000 per participant should be budgeted for the educator or dispense on the site. RET sites occur for a minimum of six weeks during a summer and it is a cohort experience so the sites should recruit 10 or more participants and amelia will kind of get into what you should do to recruit and how you should differentiate between different levels of teachers, for example. Another mechanism is an RET supplement and these are added to either new or existing engineering or size research awards. So, the support wanted to participants for up to one year although we do consider exceptions for things like large centers for example. These experiences can take place during the summer like a site or the academic year or it could be over both. Similar to the sites, the budget for an RET supplement should follow that 10,000 per participant per year. So now I am going to turn it over to Amelia to give a little bit more detail about what you should include in your proposal for an RET site.

Thank you, Allyson. So bear in mind that a number of the themes and goals and underlying aspects of an RET site that Allyson covered I will reiterate and underscore as I talk through sections of the RET site proposal and that is something we felt really strongly about in this revision of the solicitation that we will present you with , what we are looking for and we would love you to present how you would go about incorporating those things in the various sections of the proposal. After this webinar if you want to go back and look for the solicitation which by the way is NSF. NSF 21- 606 and we can put that in the chat as well if you haven't already discovered it and been studying it. Hopefully you have. So you can go back, thanks Allyson. You can go back and refer to the sections that will be outlined in detail in section five a which is the proposal preparation instructions and those are the parts I will cover now at a higher level but there is more details in the solicitation. So after the overview , section B that we asked for in your proposal , a description of the nature of the research activities. It is important that your site have a well-designed

research focus in either engineering and/or computer science and this will help us better see that the participants will really feel a part of something bigger, a part of a cohort. As part of the description of the research we would like you to give us some concrete examples of the projects the participants will be participating in through the site.

In those descriptions of the research there should be a section labeled participant component that highlights what the contribution to the project will be. This will allow NSF and reviewers to get a sense of what the participants will do, whether it is appropriate for the educators involved and that it is clear that they will be participating in authentic research with clear research objectives and questions. The next section that we are really looking for is site logistics and this is to give us a sense of the timing for your site. So, what are the activities that the participants will be involved in during the course of the summer and throughout the academic follow-up. Will they be involved in seminars, trainings, group camps, to bring them up to speed on technical aspects that you will ask them to sort of be aware of or use during their experience so please include enough in there that we have a sense that it is realistic. RET site team experience and training. In this section we are really looking for a number of different things. First we would like to get a sense of the prior experience of the PIs and the mentors who will be involved in the site. Have you been engaged with K-14 educators before. Have you had experience mentoring within the research environment. If not, is there a mentor training in place? One of the things that this solicitation really emphasizes is on tour training for both graduate students who may be mentoring and working closely with teachers and faculty mentors so that we know that any participant who was involved in the site will have consistent and effective support during their research experience. Additionally, sites must be inclusive to all RET participants, so if you plan on doing diversity inclusion training as part of the site or in preparation for the site, please make sure you include a description of that. One thing that is not specifically called out on these slides, but it is a part of the solicitation and it is section B in the solicitation so it should be a separate section in your proposal as well, description of how you will address the NSF sexual harassment policy.

Participant recruitment and selection. As Allyson mentioned, in terms of recruitment and selection, part of the goals of the NSF -- RET program is to be fostering relationships and this robust ecosystem around your site. So often we will encourage that you recruit at least two participants from a given school to help with this relationship, to help with integration of the teachers for the educators as they bring the material back to their classrooms. So in this section, please provide enough information that we get a sense of the names of the schools, the districts or two-year colleges that will be involved and why you plan to recruit from those schools. You are welcome to recruit educators from a number of different levels but we ask that you be thoughtful about it. Recruiting a middle school teacher and a community college faculty may take different support in terms of how you integrate them into the research, so please be thoughtful about who you decide to recruit in terms of educators and make sure you provide enough detail that we know you have thought about it and we know how you will support it and why you are recruiting this range of educators that you plan to

recruit . You can also recruit pre-and in-service teachers and you can do a mix of those as well. Make sure there is enough detail about your recruitment and selection to give us a sense that you thought about it and understand what the implications are of some of the decisions you are making around this. Next slide. Development of curricular modules. So this should be woven into the timeline though it is a separate section that we will ask you to talk about in your proposal. What is the time and support , so the time allotted and what is the support you will provide to your educators for the task that we require in our RET s where they must take the research experience and turn it into either a curricular module or unit or something that will then be implemented in your classroom during the academic year. One thing that is new this year is that we highly recommend involvement of an educational expert, so someone who has experience , either a curriculum specialist, education researcher, a master teacher, so someone who has been involved in an RET-like experience but can work directly with the teachers to help with this curriculum component and this will help support the process of integrating the research into the classroom in the follow-up. Finally, the professional development.

Proposals must describe plans for her to spend professional development relevant to responsible and ethical conduct of research, lab methods, safety procedures . We would really like for you to provide enough detail here we get a sense that the teachers will be supported and they will be properly trained and sort of scaffolded to get the most out of their participation in the site and be able to really take a deep knowledge of the research topics and potential career paths in engineering and computer science, and industries that are available to their students back to their classrooms.

Before we move onto the next slide, that final bullet, presentation of research results. We do strongly encourage the teachers be involved in presenting the outcomes of their research at conferences or through papers and publications following their summer, as well. Next slide please. Evaluation and dissemination. As a part of the evaluation, you should have an external evaluator as a part of your site. The budget for this should be between \$3000 and \$5000 per year. Please make sure that you are having an evaluator that addresses informative and summative assessment. It is focusing on the quality of the site and the participant experiences. So for some of you who may be involved in either engineering education research or maybe computer science education research, where the evaluation also has larger implications, that is probably a small budget but because of the nature of the RET site where we want the focus to remain on the teacher and teacher experience, that is really the focus of the evaluation. The dissemination part should sort of take that next step though and think about how your site could impact a broader audience. So beyond just the teachers who are participating in it. Dissemination plans should include strategies to share the research projects, curriculum , best practices that you may have gleaned from running your RET site and again, we strongly encourage that you sort of involve the RET dispense in future scientific meetings and really share their knowledge and what they have learned either with their education communities or with the research community and involving them in all aspects of that. We think that is our last section for the RET site proposals. Additional requirements. So there is one final additional requirement and this is really only

for RET renewal sites. If you have an active RET site or you have had an active RET site within the last five years, then this section will need to be a part of your RET puzzle and this is the results from prior support so in this please make sure you include information about how the project went, evaluation of the project, summary information about how the recruitment went, recruitment numbers, in terms of applicants, demographic composition of participants, enough information for NSF and the reviewers who will be reviewing your proposals to get a sense of how your site ran and if there were challenges and what are you planning to do to sort of modify your site or improve on your site and address those challenges. And Allyson, I will turn it back over to you to talk about what the supplements entail.

Thank you, Amelia. Amelia just outlined a lot of elements required in an RET proposal and RET requests are much smaller however they still need to meet all of the goals of the RET program we have been discussing. In an RET supplement request the following things should be included. You should describe the form and nature of the participants involvement in the research activities as well as the type of mentoring support that they are going to receive and by whom. It is also important to clearly outline the type of follow-up activities that will enable the teachers who translate that experience back into their classroom, either through modules or small curricular units or what have you. The request should describe any experience of the PI or other mentors involved in working with K-14 educators and or any previous RET double metal support that the PI may have received and what the outcomes were of that support. Just like with an RET site supplement request should clearly describe the process and criteria for choosing participants. A lot of times for an RET supplement you might have a teacher in mind and if that is the case and the participant has been chosen, a brief bio sketch should be included with the request. I will just sort of close here with a few pieces of the key information about both the sites and the supplements. You might find these helpful as you're putting together your proposal. That is not the correct link that is on the slide. I apologize. The correct link is in the chat and I will put it in there again but like Amelia said I encourage you all to look at it because we did change a lot of the language in there even though inherently the program is basically the same. There is a new deadline and it is November 16th of this year and it is due by 5:00 p.m. your time wherever your time is. Four for supplements there is no deadline but you should contact your program officer on the research award you are applying for the supplement with before you submit it. Finally we are going to be holding office hours to answer any additional questions as you put together your proposals. We will have two sets, one on October 12 and one on November 8th both starting at 3:00 p.m. Eastern time and this link right here is where you can go to register for either or both of those office hours. I will drop that into the chat. I think with that we will move into the Q&A session and answer all of your questions and Sarah Yang is going to join us and help moderate the Q&A board.

Thank you, Allyson. The first question we have is as we prepare for overarching regions questions should this primarily be the PIs expertise not related to the teachers clear and their expertise or

should it be intended to research subjects that will have utility for the purchase many teachers and their future practice?

I can take a first stab at that and Allyson then may want to chime in. The overarching research question should be something that the teachers will actively be working on during the course of their participation in the RET site. It will probably be sort of a mix between the two. So it will need to pull together sort of a theme that sort of can be an umbrella topic for all the different research, individual research projects, the teachers will be participating in. Say with any given department teachers will be working with 10 different faculty, what is a theme that would pull those together so that teachers can see the context for the individual projects they're working on and get a better sense of how their project fits into this larger topic. The translation piece will be part of what they are going to work on in the curriculum development, so translating some aspect of what they are doing during the research into something they can then talk about with their students. I hope that answers that question. Whoever asked that.

Thank you, Amelia. Someone else asked if we have research funding to organizations besides NSF and a possible to pay supplement funding?

No, the supplemental funding is only on a new or existing size or engineering research award through the NSF, not through any other organization.

Next question, when describing RET sites and supplements it is stated that RET -- supplements can only be during the school year. Can RET sites extend beyond the summer and support teachers through the academic year?

So the site experience, the actual research experience should not go into the academic year. That should be six weeks. We don't encourage you to go past eight weeks because teachers have lives too and so it is important to make it realistic, but as a PI through the academic year you will need to have a plan as to how you will stay in touch with those teachers and make sure they feel comfortable influencing the curriculum they developed during the site experience, so having that academic year follow-on plan with the teachers is important but it won't actually be the hands-on research experience that they are getting in the summer.

>> [Indiscernible] excited about the I.T. grant [Indiscernible] student industry partner. Can they be both a grad student and an industry partner for the grant in conjunction with the faculty PI?

We do have specific requirements about the lead PI which you can see in the solicitation but otherwise [Indiscernible]. Nathan asks, do you approve of an approach amongst participants on a particular research

project and another with multiple participants work together on a project?

I would say yes but I would caveat it. It is important. One of the fundamental aspects of the RET program that I think is pretty unique to RET versus other professional development opportunities for K-14 educators often is the authentic research component and so making sure that teachers have at least an aspect of a research project they are genuinely getting participation in and have ownership over is really an important part of it, so can they work in the same lab and work on different aspects of the same research project and that might help in terms of support and that cohort building, but making sure they are not sort of all duplicating the same thing or working on something that is too narrow for them to really get to sink their teeth into authentic engineering or computer science research. David asks, are we allowed to include selection criteria that would take into account underrepresented groups impacted.

Selection of the participants?

Yes, I think so.

Go ahead, Allyson.

I would say yes you can. It is important if you are in your proposal you want to recruit specifically individuals from underrepresented groups it is just important to outline what that strategy will be and how you will do that. If there is a selection criteria explaining the rationale behind that and how you are going to implement that criteria. I think it is fine to include in a proposal.

Scott asks [Indiscernible] professional development for teachers, faculty, or students? Sure. I think what Amelia was discussing in her slides was professional development for the teachers and making them feel a part of the lab environment. Certainly graduate students and faculty mentors also can have professional development folded into that especially as it pertains to working with educators, DI training, sexual harassment policy that we have, all of those things are important in a cohesive site.

Sorry for the confusion. The section I mention that participant national development is exactly what she just clarified that is really focused on what is the professional development that we are -- for the participants, sort of there is another section where we will talk about the mentoring and sort of how you will support the mentors so either graduate students or faculty and what you will do to structure and train them so they are able to work effectively with the educators.

>> This is regarding the requirement for prior experiences [Indiscernible] of the PIs and is there a plan to train all PIs, is

the proposal acceptable when most of the PIs do not have prior experience?

I would say yes, but then it is even more important that you provide enough detail that NSF and reviewers can tell that there is training in place that will support the new mentors in sufficiently mentoring and working with educators so we understand this is a training opportunity especially if you are involved with graduate students or earlier career faculty as mentors, but if they have never worked with educators, actually, even if they have worked with educators, we want to make sure that any to spend in an RET site is getting the same quality of support and attention and mentorship. >> For those of us with a background in engineering and S.T.E.M. education there interesting research questions that can be addressed. To what degree [Captioner cannot get audio--unclear].

Great question. There is actually quite a bit of flexibility in the RET budget and there are a couple of hard and fast numbers which Allyson mentioned so for the RET site that looks hundred thousand dollars sort of maximum over three years or \$200,000 maximum per year is a hard and fast cap. Typically the guidance is \$100,000 for teachers, at least, so if you have 10 teachers, \$10,000 per teacher and the rest of the budget is actually pretty flexible so that can go towards supporting mentors, supporting training, supporting some of the other research. The reason we give the guidance of \$3000-\$5000 is again because of the logistics involved in the RET site, that may be a good guideline but at least that is my sense. Allyson?

Yeah. I sort of had a different interpretation of the questions why am not sure if that answered it, great, but also if your question was around how much of the site can participants be involved in education research as a research focus, absolutely that is within scope as long as it is authentic and career-based research. We have had proposals do that in the past so it is not something we have not seen before so that is certainly something you could do if you are interested in it.

We would love for teachers to be able to expose their students too to what education research with as a career path.

Is external evaluator external to the project were external to the University?

External to the project. It can be someone from the University, just not within the PI team. >>

Typically details of how many research project examples should be included or should all of them be fully fleshed out?

Yeah, we realize there is limited room in your proposal and we are already asking for quite a number of elements, so chances are you would not have room to include a fully fleshed out project description for

all 10 of the projects would be involved in so choose a subset that is representative . Again, the idea behind this piece is to give NSF and the reviewers enough information that we know A the teachers are dissipating in authentic research, B, what will their role be so we know they are actively going to be doing that research, and not just sort of a side thing. And that is it appropriate so we can get a sense of what of that participant professional development sort of peace will be there to support them and facilitate them doing that research. So a subset, we leave it up to you the number.

What if your program does not have graduate students and only works with undergraduates?

That is fine. Undergraduates can be mentors and they can be involved in the project. Absolutely. >> Should teachers selected for the RET become same state?

Great question. You will notice in the solicitation we strongly encourage local school districts and part of this gets to the thing that Allyson mentioned and I sort of mentioned in passing as well, that this goal of fostering this robust education ecosystem , so often local school districts can be a good way to go about that and we also understand especially if your site is focused on rural educators, that they might be recruiting from different states and that is okay too, again, the thing we want to see is enough detail that we understand why you are making the decision you're making and how you plan to support the educators you are bringing in. It will look really different if educators have to come and spent six weeks on campus than if they get to commute half an hour and can live at home.

Make sure you take that into account and you are making recruitment decisions and we can see why and that you have thoroughly thought about it.

Thanks for the introduction. His graduate student tuition and/or stipend allowed in the budget?

No.

Stipends, yes. Tuition , no.

Is there a number of research projects recommended for number of teachers?

I'm not sure I understand the question but I would think you would have one research project per teacher .

Unless it is the other way around and you're wondering how many individual teachers should work on a research project. In that case I would say different sites that found success with different numbers of teachers for the project but again this gets back to one of the earlier questions I think we answered, making sure that teachers

can have ownership over at least an aspect of the research project so if you have two or three teachers that are working on an individual project, does that project have enough components that teachers get to have a truly authentic experience and own a portion of their research project. >> The solicitation states CBS4 engineering will be okay for a project to have both disciplines?

Sure.

How many co-PIs can be included in the proposal and can each PI in PI each have one month salary support.

Yeah. There is a good bit of flexibility with this for the RET program. So how you divvy out the salary is really up to you as long as there is that 100 K per year that is allotted specifically for the teachers, the remainder of 100 K is up to you how it is allotted.

You mentioned a S.T.E.M. ecosystem and can that ecosystem be created between multiple campuses across the region or state as opposed to just one campus?

Yes. Yes, you can submit a collaborative proposal for an RET site and certainly you can work with other universities within our region.

If other PIs and other disciplines on campus have or had a prior site do new PIs proposing a new RET site for the first time do they need to include [Indiscernible] from other projects at that institution?

So I believe the definition [Indiscernible] the way it is for you in that if there has been an RET even if it is a different PI but from the same unit or department in the last five years than we consider it a renewal. So that would be when you would need to include the results from prior support. If it is a completely different department or subunit in your university, then it is not a renewal and you don't need that section. >> Is the program during the summer or during the year or both? If the deadline is November 16th when do we expect to get NSF permission ?

Go ahead.

I was just going to say that after a program deadline, NSF awards are typically made within 6 to 7 months after that, so that is something to consider when you are developing your timeline for an award. You have the ability to put a start date in the future if you would like. You also have the ability to once you have an award ask for an extension of that award should you not be able to recruit in time so there is a lot of flexibility around the timeline of the award. I think the other question had to do with the summer experience, academic year or both. Just a reminder again that for an RET site the research experience happens during the summer only and there is follow-up activities during the school year. Just to clarify. Whereas the supplement you could

bring a teacher onto an existing research project at any time during the academic year or the summer.

I would recommend in terms of timeline think about your ideal timeline it's a myth that as your proposal. There is a lot of flexibility down the line in terms of changing it so if we reach out to you in preparation of potentially recommending an award and it feels too late to follow the timeline you posed, then you can sort of think about how you will adjust that and change the requested start date, but think about what your ideal would be because that is what reviewers at NSF will be looking at.

Additional questions on evaluators. The evaluation amount is tiny. Is it okay to allocate larger amounts and does the evaluation include the implementation of the curricular modules?

It does not include the curricular modules. I suppose it could. You could add evaluation questions around the implementation of that and similar to what Amelia said earlier about the budget, outside of the teacher participant cost the rest of the budget and how you allocate it is sort of up to you. We do suggest that 3000 to 5000 but you could do more than that if you want to do a more robust evaluation of your site but again, providing the rationale and justification for that.

You mentioned prior experience of PI and mentoring is working with other undergraduate students enough experience?

I would say working with undergraduate students and working with professionals is a professional educator is a bit different and what we require in the trans-an RET site the component and translation to curriculum and classroom component is quite a bit different than working with an undergrad student who is actively taking courses, actively majoring even in the research you are bringing into your lab, so that doesn't mean that that isn't important and relevant experience, but I think that underscores the need for there to be some concrete mentor training as a part of your site. So if you have experience working with undergrads that is terrific. What mentor training would be put in place for experts who have experience working with educators when you bring it to be a part of your leadership team for your site so that you can sort of bridge that gap and make sure that everyone will be sort of ready support the educators you are bringing on. >> Whether industrial connections connections are needed since they previously submitted and received feedback that implied this.

They are still not a requirement but they are strongly encouraged. Again, it gets at this idea of helping to foster this robust ecosystem and exposing educators to the industry that is most closely related to the research they are participating in and it allows them to take it to their students. We strongly encourage it but it is not required. If you got feedback on it, it may be something to consider because maybe it was a missed opportunity but it is not required.

Someneone asks, if some of the potential PIs are teachers, educators, program managers without PhD's Kenny Stills service PIs on the proposal without reducing the strength or viability of the proposal?

They can't serve as the lead PI because the lead PI will pretty specific requirements that they be -- well, the degree is not the requirement but the lead PI must be tenured or tenure-track faculty with an engineering or science department with a focus on engineering or computer science research as opposed to being an administrative role. So that is the lead PI. The rest of the leadership team is really up to you. So I would say it does not necessarily weaken it and could strengthen it because if they have expertise that is going to flush out and support the participants and the running of the site, then certainly. >> Can we get more clarification on NSF expectations for follow-up activities for RET sites? Continuing research for follow-up if the teachers have implement research?

The follow-up activities are primarily about implementation of the curriculum and sort of refining that throughout the year. This kind of extends the discipline knowledge that teachers are receiving too, so refining that piece as well but it is not additional. It is not bringing them back into the lab to do additional research questions. That is not part of the follow-up activity.

There could be follow-up activity in terms of involving them in the technical conference or something like that so certainly that could be it but that is not a requirement of the site. The really required follow-up year activity is the curriculum piece or the implementation of the curriculum.

Can you talk about the relationship the research projects should have with existing take-up standards to be mapped to particular courses. Do you want to see a tight or loose coupling?

A great question.

This will be something you should be working with your educators on, I would say. Yeah. The teachers and the school districts that you work with, there's a pretty large range in the K-14 space and making sure that the curriculum your teachers are developing and you are supporting your participants to develop, can be implemented in a realistic way in the classroom environments that they are in, is an important thing. For school district that is going to require the curriculum be closely coupled with NGSS, that is something you should be thinking about. That would be my two cents on that. It is not explicitly required in the solicitation but again if you are thinking about this and you're thinking about sort of implementation of the aspects of the RET site, it is a good thing to be thinking about and it is good to be bringing in people that have expertise in this area.

Can allow post both an RET student or do they get just one?

Absolutely you can host both.

We definitely support our RET joint sites for mixed sites or settings in the same lab. Yes.

As a follow-up, does information on past our EUs need to be included or just RET program ?

Just RET or grams.

Is an RET supplement [Captioner cannot get audio--unclear]

The RET supplement will be to the ERC award. All of our RET supplement will be to the original award which is why it's important to talk to your cognizant managing director for the award you are hoping to submit a supplement to.

If you want to submit another RET proposal after completion of the first one should be related to the previous effort? Can you give some examples of scope of the new project?

This is a renewal asking about a renewal request? You can keep the same scope different projects. You can change scope entirely. We have seen that before. It's really up to you and like Amelia and I keep saying, it is providing the justification for why you are making those decisions and providing the evidence that the teachers are going to have an authentic, inquiry-based research experience.

Given COVID, is it necessary to include a section within a proposal describing lab request and research conditions?

No, you do not have to do that in your proposal. During the review process we give a lot of guidance to our reviewers to review these as though COVID is not happening. Should we want to recommend the site for an award and we are still dealing with COVID precautions, at that point we will discuss that with you sort of one-on-one in the negotiation phase of an award.

Do we need to have letters of support from high schools? If yes, how many?

This is actually one of the required elements of an RET site proposal, is making sure you have letters of support from either the school districts or the schools or the institutions. If it is community colleges, that you plan to recruit from, so essentially you should have as many as the number of schools or school districts you plan to be partnering with. And this is to underscore that this is a relationship that is legitimate that you have built and the chances of recruitment are feasible and there is a high likelihood of success in you being able to recruit from those school districts or schools and that the

leadership of those schools or school districts is aware their teachers will be bringing information back to their schools.

Does the cohort of teachers chosen for one specific year need to be from different levels on the K-14 system or do the teachers recruited and one specific year, to the all have to be from the same level?

It is totally up to you. You can recruit exclusively high school teachers for your site or you can recruit exclusively middle school or exclusively community college or range. Provide enough information that we know why you are making the decision to recruit the population or the pool of participants that you are targeting and how you are going to support them.

We haven't had an RET site before but we have had RET supplements. Do we have to mention that in the NSF in Pryor? Mike I would say no because the NSF prior support is specifically for renewal proposals but you may want to mention it for the section of the qualifications of the RET management because it means you have experience working with educators.

Regarding the auto state question our previous proposal was criticized for having low URG participation but our entire state has low URG therefore other proposals -- neighboring state and is this an acceptable reason for recruiting outside the local community?

I would say that is fine.

Paul asks, will graduate students be considered as [Indiscernible] include their stipends under participant cost budget?

No. There is a separate budget line for graduate student stipends.

Yeah, so the only budgetary costs or line items that should be in that part is Vince for cost are specifically related to [Indiscernible].

Is it okay to budget for childcare for the teachers?

Sure. That is a great question. I would say yes. Yeah. In the new version of the PAPPG there is some language which I guess this will fall under the new PAPPG in the beginning of October. There is language about family support and that sort of thing.

Someone asks, how many proposals have you received in the last two years and can you provide numbers and how many were selected? We are not allowed to talk about the number of proposals we received. We can, I guess we can talk a little bit about the number of awards because that is mentioned for the number of projected awards per year because

that is mentioned in the solicitation so typically , although budgets change and every year is a little bit different, typically we have enough to support nine new sites per year. And that is in size and engineering.

Somenone asks, how many hours per week is needed during the summer?

We don't have a specific requirements but again, I think whatever your plan is , making sure the teachers are there to have enough of an authentic research experience and have a good time to develop their curriculum so there is quite a lot to be done but we don't have a specific hourly requirement and we understand that this is a little different than bringing undergraduates in and bringing undergraduates in as residents on the campus for the summer. Educators often have other obligations and so we need to work around their schedules but it should be enough that they really benefit from the experience.

Canha letters of support be more descriptive in the general pedagogy?

I would say no. The bulk of the relationship should be in the body of the proposal, not in the letter. So the letters really should stick to something very similar to what is in the pedagogy which is not very informative but essentially just says we will do this in the proposal.

Do the letters of support need a specific format?

So this gets at the PAPPG so if you look in the PAPPG there is a specific pamphlet for with the letter should be and it looks like you're right it 4:00 so in the interest of being mindful of everyone's time, we should probably draw this to a close but we strongly encourage you to come back for the office hours or email us if you have questions. I don't know if we mentioned it but I manage the engineering site and Allyson mentions manages the computer sites so if you have questions for engineering or computer science you can talk to one of us or email us and all of our information is on the solicitation on the website on the webinar slides. Thank you all for joining us. We really appreciate it.

Yes, join us for office hours should you want to discuss more about your questions. Yeah, thank you for joining us today.

[Event Concluded]