

>> Welcome to the NSF Convergence Accelerator Q and A webinar. We're glad that you could join us today.

We're going to start off just by introducing ourselves, then we're going to go off-camera again, and we will start answering your questions. I'm Evan Heit.

>> Hi. I'm Nancy Kamei, part of the Convergence Accelerator team.

>> Hi, I'm Lara Campbell, I'm part of the Convergence Accelerator team.

>> Hi. I'm Douglas Maughan. I'm the new office head of the Convergence Accelerator here at NSF.

>> I'm J. P. White, part of the Convergence Accelerator team.

>> Thanks. Camera is off now. Okay, just a few logistical matters. We will be taking questions using WebEx Q and A. If you are connected to this webinar, you're in Listen Only mode. So if you have questions, please submit them to the All Panelists option in WebEx Q and A, and we will reply during this webinar. If you're not getting audio, there's information posted now about how to phone in and get off audio, so that when you start up WebEx, it just gives you video. Also, we have real-time captions available. We will make a video of this whole event available on the Convergence Accelerator webpage. The link is given on the screen right now. What you can see now on the Convergence Accelerator web pages, we have recordings from two previous webinars, last week and the week before, as well as FAQs for the NSF Convergence Accelerator. So we are already accumulating a lot of information.

What we're going to be doing is taking your questions. And the way to give us questions is to type them into the Q and A on our WebEx. We're not going to be giving the whole presentation again, because those are available, as well as the slides, on the Convergence Accelerator webpage.

>> So the first question is, can employees in private companies serve as co-PIs, and if they can, what kinds of expenses can NSF cover for private sector employees? I'll go ahead and answer that. So absolutely, we very much welcome, and actually require non-academic partners to be part of activities afforded by the Convergence Accelerator. So absolutely, a private sector person, could be supported by a for-profit enterprise and could be a co-PI. And NSF can support a full range of salary, travel, and all those types of things. However, if an award is made directly to a private company, they cannot receive fee or profit.

>> The company.

>> The company. The individual gets their expenses covered, but a company cannot receive fee or profit. And there are some additional details about overhead costs that are discussed in the Proposal & Award Policies & Procedures Guide--

the PAPPG. There's a link to the different parts of the PAPPG that are relevant to each part in the FAQs, so you can find that there. But absolutely, we do encourage private sector entities,

and also state and local government, non-governmental organizations -- all the kinds of organizations that would be part of helping to transition to practice the research activities.

>> Is it possible to be listed on more than one project?

>> The answer is yes, it is possible to be listed on more than one project. So you're not going to want to send in the same proposal more than once, however, there are no limitations, either by institution or by individual, in terms of how many projects you could be listed on. With that said, please send us your strongest proposals, and that will help us to give you prompt feedback.

>> What size of private companies are ideal? Are smaller startups okay? Absolutely, small startups are okay. But larger companies are great as well. You should assemble the team that's most appropriate for the work that you want to do, and that includes both the research activities that you'd be undertaking, as well as the transition to practice; putting something into the hands of society and people. So both are possible and welcome.

All right, we've got a follow-up from these questions. This particular team is working on an Open Knowledge Network, and they're concerned that private companies may not want to have all products open and in the public sector. How will NSF respond to these kind of demands from companies?

>> Yeah, so we appreciate that although our goal overall is an Open Knowledge Network, there are elements of these activities that certainly have private sector opportunities. And our plan is to require all the teams to identify what the intellectual property is that all partners are bringing to the table, and what intellectual property they think will be developed. Then have a plan, which may be developed, which will be developed during Phase 1, for how that intellectual property will be protected, and then built upon. And we are not requiring that every element of everything be in the public sector, open for the use of everyone. There certainly will be commercialized activities, and you have Phase 1 to work on that.

Next question. Can projects cross-reference multiple tracks?

>> There are intellectual connections among the different tracks, so if you think about Track A1, it involves data science. So you could well have data science methods in a proposal to Track B1 or B2, and you could come up with various connections among tracks B1 and B2 as well. We do encourage you to choose a single track and make it as clear as possible which track you are submitting to, and how your proposal, how your research concept outline is responsive to that particular track. It's okay if there are also connections to other tracks, but we would recommend that you focus on one particular track per submission.

>> So given that the research concept outlines will continue to be reviewed after the April 15th target date, if a team submits an RCO for the April 15th, date, could they submit -- and it's rejected -- could they submit again?

>> What a great question. I think yes. There is nothing that would prohibit somebody from submitting another RCO. But if you don't respond to our comments, it won't review favorably the second time.

>> That's true. Also regarding the research concept outline, does the two-page RCO need to include budget? No. It does not need to include the budget. Tell us about your idea.

Next. You've indicated that teams would reform, recombine, continue to develop during Phase 1. Can we discuss some of the ways and events that NSF would use to facilitate team-building?

>> Well, we imagine that in the period of September 2019 to March 2020, there will be at least three times when the entire cohort will be together as a group, as a cohort. And there will be training opportunities during those in-person events, and there will be other opportunities at least once a month throughout that six-month period to interact online.

>> We do anticipate that as the Phase 1 grantees are developing their Phase 2 plans, that there may be re-combination of those teams to result in new and exciting teams.

All right. So how solid do the partnerships need to be at the two-page submission stage? So for instance, if the team has a sense of who their partners are, but is still figuring out details for roles and responsibilities?

>> Just tell us what you know now, at the two-pager stage. We just want to know how you're thinking about your project team, and what each member on the team is going to be bringing to the project.

>> And honestly, we hope that your sense of what you could do and how you would do it will expand further in Phase 1, and that additional team members might be identified during that process.

>> Between the time that you put in the RCO and the time that you would put in the full proposal, we'd expect that teams will continue to build out.

>> Absolutely, thank you, Evan. And the ideas will evolve over that timeframe as well. Exactly. So how specific should the deliverables be at the research concept outline stage?

>> I have that the Dear Colleague Letter right in front of me, and what it says is that RCOs must contain the following information, and then it says, "Discuss the intended practical application or useful resolvable and the potential timeframe for the deliverables." So we would stick with those instructions, keeping in mind that you will only have two pages to talk about all the things that we're asking for. And as we're saying, we expect that people's ideas will continue to evolve.

>> Does the research concept outline need to specifically address the standard Broader Impact and Intellectual Merit sections that are standard in an NSF proposal?

>> I would follow just what it says in the instructions in the Dear Colleague Letter, which does not say you should have separate sections for Intellectual Merit and Broader Impacts. When

people submit invited full proposals, what you'll see is that there's an expectation of a section for Intellectual Merit and Broader Impacts for full proposals. With all of that said, when we read the research concept outlines, we will keep in mind NSF's merit review criteria for the Intellectual Merit and Broader Impacts, because that is part of everything we do at NSF.

>> Exactly. But you don't need to have a heading that says "Intellectual Merit" and a heading that says "Broader Impacts." We'll be considering those as we review it.

All right. Is Track A1 limited to only the domains that were listed; geoscience, education, et cetera, or can other domains be considered? For goodness' sake, every domain can be considered. Bring it.

>> All right. In the description of the Phase 1 Open Knowledge Network, we mentioned that teams need to identify the development paths, and this questioner wants to know, what do we mean by the "development paths" for Open Knowledge Networks? Are we talking about concrete steps of implementing an Open Knowledge Network, or identifying domains for development?

>> Did you hear the question? Do you want to hear it again?

>> Yeah, if you could please repeat it, that would be great.

>> All right. In our description of the Open Knowledge Network, we mentioned that the teams need to identify the development paths for developing an Open Knowledge Network. What do we mean by that? Do we mean the concrete steps of implementing the Open Knowledge Network? Or does that include identifying domains for development?

>> Right. So it could be either. The idea of network is that there is a core functionality that the Open Knowledge Network would need, that you could develop. For example, how do you input the data? How do you identify whether this data source is trustworthy and secure? Those type of principles, are things that apply across domains. But then there might be teams who want to focus on certain domains, where they want to develop knowledge graphs for their own domains; for example, manufacturing and, as Lara was saying, any of the domains that you're thinking of. So you could take one of the paths through either the horizontal, which is core concepts that apply to all types of knowledge graphs, or you could take a path where you're developing certain knowledge graphs for a particular domain. So it could be either of them.

>> All right, next question. Do we have any formatting recommendation, like headings, for the research concept outline, aside from what is in the Dear Colleague Letter? No. Please use what's in the Dear Colleague Letter, and especially make sure you identify the PI, because we have sorting that we have to do. If you don't give us the PI, it's going to be really problematic. So we want a PI, we want a title --

>> And the track.

>> Do your best guess. You know, you may be between Track B1 and B2, but what are you doing mostly? Then of course tell us about your team, and tell us about your idea and where you think it can go, and how you're going to make it amazing.

>> What sort of commitment is necessary for or among the team members? There are lots of different ways that partnerships can be formed. So for instance, you can have, of course, a lead institution and a lead PI, and then there can be sub-contracting and sub-award arrangements under that. There could be other kinds of partnerships that don't necessarily involve the flow of funds, that involve sharing ideas, meeting together to develop strategies. So almost any way that you interact with your partners is possible. You just need to choose what's most appropriate for the work that you intend to do.

>> So I'm reading this question slightly differently.

>> Is there a minimum time commitment required?

>> Or a money commitment.

>> Well, in terms of time -- so we should say, first of all, that the Convergence Accelerator is not necessarily business as usual for NSF; that compared to many of our research grants, for example, that they are two to three years, four years. There's not as quick a pace, they might even have a smaller budget for three to four years, but then for Convergence Accelerator the potential maximum budget of a million dollars in six to nine months. So relatively speaking, Phase 1 awardees, we would expect to be committed in effort to an extent that that would potentially go beyond effort on -- if you just look at the total effort on the team -- that might be on a typical NSF research grant. Also, as my colleague, Nancy, mentioned, we're going to have the expectation that team members will meet three times during that six to nine month period at NSF, or some other location. We also expect to have webinars and other online events for teams. So there's going to be a substantial time commitment.

>> Exactly. And academics in previous webinars have asked if it is possible to exceed the standard limit in an NSF -- across your NSF proposals for only two months of faculty time. And yes, it is absolutely possible. This effort will take a significant time commitment, given the pace of acceleration that we intend. So check the FAQs. There's more information on how to do that. It's in the PAPPG, basically.

Can we address both horizontal and vertical challenges together in one proposal, or does the team have to choose just one of those? Vandana, do you want to answer that?

>> Yes. Ideally, there may be teams who are focusing on the core functionality on how knowledge graphs interact with each other. How, let's say, interfacing with the knowledge graphs will work, and you want to have a deeper dive on that. That said, you might have examples of domains where you are showing the functionality. So it's not out of the ordinary if you're showing such an example. But essentially, you want to have deeper dives into domains or horizontals, as well as strongly integrated proposals. And Evan or Lara, do you want to add anything to that?

>> Yeah, that's exactly -- I mean, the answer is both. But you will probably dive deeper into one or the other.

>> All right. So here's a new question. This team is exploring a business incubator linking universities, city and county sectors, and private sector relationships. Are there restrictions in Phase 1 or Phase 2 that could limit funding to municipalities?

>> Well, in the FAQ, number 37 of the FAQ, outlines the answer there. It specifically states that it is possible for state and local government agencies to serve as a sub-awardee on proposals. Obviously, there'd be an expected percentage of their time and funding that they would receive, but they can receive a sub-award as part of the activity.

>> Let me add to that. It's also possible to partner with municipalities, or local government organizations, and so on, in other ways, as Lara was saying. So there could be a flow of funds. There could also be some shared resource, for example, there could be some shared facility, so that there would be other ways of making local partners.

>> Just as a reminder, a few things. You can go to the Convergence Accelerator webpage at NSF. We have videos of the two previous webinars, where we had a lot of good questions. There's also a presentation that we gave last week and two weeks ago, that's available online. Between now and Monday, which is the target date for the research concept outlines, we have the C-Accel@nsf.gov email address open. We'll be happy to respond to questions online as well, or by email as well.

>> Great. All right, to follow up, do for-profit companies have to be part of a university-led project? Or can they submit by themselves? That's an interesting question. Yes, in theory, a for-profit entity could submit as the lead entity. But there are a couple of bureaucratic challenges -- they're not philosophical challenges, we welcome all sectors. But there's a bureaucratic challenge, because there's a fairly quick timeframe between when you would submit a full proposal on June 3rd, and when we need to make awards in July or August. So if you have not previously submitted to NSF, then there can be some fairly challenging -- I mean, maybe not hurdle-level, but some fairly challenging paperwork to be certified as a grantee. And in addition, you either have to have a federally-negotiated rate, overhead rate, or take the de minimis rate of 10 percent. So those obstacles may mean that a for-profit entity prefers, at least for Phase 1, to work with an academic organization instead, just because there's some paperwork involved in being eligible to receive an award.

>> If you're an academic, you have to be partnering or collaborating with other types of institutions. Similarly, if you're a for-profit company leading the proposal, you'd have to partner with some other kind of entity. So all of the proposals are being put forward by teams.

>> Perfect. They can submit, but not by yourself. Well, no one can submit by themselves.

>> Exactly.

>> Everyone's got to be part of a team.

>> So you understand that we're looking for teams from a mix of disciplines. This questioner points out that they work in an interdisciplinary department with many different people, with different kinds of degrees and focus areas. Could that translate as different disciplinary focuses? Could that cover our requirement for interdisciplinary? Nancy, do you want to answer that one?

>> Yes. I believe that that could fulfill the interdisciplinary requirements; however you still also have to have the multi-institutional part of the team, or of the requirement. So you would need something more than just academics.

>> So just to agree with everything my colleague, Nancy, has said. Ultimately, at NSF, we are looking to fund convergent research in the NSF Convergence Accelerator. So we welcome investigators with degrees in different disciplines, but ultimately what we will be looking for in the proposal itself is that you are proposing to do convergent research that's going to take a highly interdisciplinary approach. But having investigators in different disciplines, it should be extremely helpful towards that end.

>> So how do we see the outcomes of Track 1 being different from a particular website called USAFacts.org? Is this a useful model to use in thinking about the activities of the Open Knowledge Network? Vandana, do you want to try to address that? Are you familiar with USAFacts.org?

>> Yeah, I just actually pulled it up just to look at it quickly. So there are many sources of data and information, and some of them are actually going beyond that, and answering questions such as USAFacts does relating to the U.S. government. Other areas as well in scientific domains have already created a knowledge graphs. The longterm vision is if you are able to link these type of knowledge repositories and knowledge ontologies to have an Open Knowledge Network, where you can have dynamic answers as well. So in some cases, sources may give you answers which are pre-formed for one specific domain. But in the Open Knowledge Network, you should be able to ask questions of multiple sets of data, or multiple types of data dynamically as well. So it goes beyond static answers, if you will. But it goes into the connections as well, that you are now linking multiple knowledge graphs to find semantically, meaningful, rich information. I hope that answers the question.

>> All right, the next question. Could we perhaps point to an existing collaboration that might exemplify a good fit for this program? And was there a certain collaborative project or activity that inspired this program? Evan?

>> Let me say that we really do appreciate all these questions coming in. That is another good question. The NSF Convergence Accelerator is not only a new activity at NSF, but it's also a pilot activity that we are hoping to learn from. So we can't point to particular awards that have previously been made under the NSF Convergence Accelerator. What we can do is talk about some of the roots of this activity. So certainly, the Convergence Accelerator is closely-connected to NSF's 10 Big Ideas. If you look at one of the Big Ideas, Growing Convergence

Research, and in fact if you look that up in the NSF website, you will be able to see previous projects that have been funded under convergence research. You will see convergent teams, convergent research teams, that are not necessarily doing exactly what we're doing here. But it would give you some idea of the convergent approaches, if you look at award abstracts there. Likewise, if you look at awards that have been funded under the Harnessing the Data Revolution Big Idea, and the Future of Work at the Human Technology Frontier Big Idea, you will see examples not only of convergent research, but research that's addressing some issues that are related to what we are looking for in the Dear Colleague Letter. So if you're asking for what the inspiration -- and I would also add another source of inspiration has certainly been what NSF has funded in other programs addressing commercialization such as I-Corps SBIR. So if you ask what our inspiration is, we're very happy to say that the projects that we've funded, that the field has conducted in relation to Big Ideas, in relation to convergent research, in relation to various core programs at NSF and finally, other commercialization programs, such as I-Corps and SBIR.

>> So this questioner understands that some team members have to be non-academic. But is it required that some co-PIs be from a non-academic entity? Basically, is there a difference between a co-PI or some other form of team member?

>> We didn't make that distinction. So as long as you have team members that are from more than one type of institution, that will qualify for the team part of the research concept outline.

>> That's a great question. So our April 15th deadline is not actually a deadline, it's a target date for the research concept outlines. So then we'll be receiving research concept outlines rolling thereafter. So when's the absolute last date to submit a research concept outline?

>> Let me just suggest that an absolute last date is probably in the May 20th timeframe, because we would have to have time to review your research concept outline, turn it around to you, and you would have to be able to submit a proposal by June 3rd, because that is a hard deadline. So I would encourage you to submit early. I think kind of a May 20, give or take a couple of days, is probably the absolute latest that we would be able to receive an RCO and review it, and turn it around in time for you to actually respond.

>> And remember, you have to write a research proposal by June 3rd.

>> Fifteen pages. Well, I mean, you don't have to use all 15 pages, but other people will. So consider how yours will look if it's only five. Keep in mind the additional work that you need to do to prepare, if you were to be invited to prepare a proposal by June 3rd.

Now a track question. Is the goal of Track B2 to create a talent ecosystem for skills that specifically target the mentioned work areas; AI, data science, et cetera? Or is the suggestion that the talent ecosystem consider and be compatible with those fields?

>> I'll read from the Dear Colleague Letter: "The ultimate goal of Track B2 is to support research and development leading to innovative approaches for employers to support workers seeking the skills required for twenty-first century work related to AI, data science, predictive analytics,

and other technologies of the future." So I would say that the key word in that sentence is "other," namely, "other technologies of the future." So we're certainly not limiting Track B2 to AI, data science and predictive analytics; those are important examples, but we will be open to other technologies of the future. Do you think that responds to the question?

>> I think it does. Do teams need to meet the multi-institutional requirement at the RCO stage? Or can they state the organizations that they're envisioning partnering with, but don't yet have a signed on the dotted line, or actually on the page?

>> Absolutely, you can state organizations you're in discussion with. You can even name organizations that you hope to be in discussion with, at this stage. But you do have to explain how each participant on this team is going to be making a contribution to the convergent research.

So FBO.gov provides a way for interested parties to declare themselves, and help build teams for larger solicitation. Given the need for multi-disciplinary teams that can include non-research entities, is there some way to do this for this particular solicitation? Doug, do you want to try for that?

>> I am aware of the FBO mechanism. We have not considered that as a way for teaming. We can go back and look at that, but I think in the short timeframe given when RCOs are going to be due, that might be something for our next phase.

>> Exactly. What we hope, in the RCO, you'll be able to do is, indicate what types of organizations, and specific organizations you think would be valuable parts of your team, to do the work that you're envisioning. But Phase 1 is about identifying the problem and building the team. So we want you to already have a sense of what you're trying to do, and what kinds of players you would need. But if you're invited, there are going to be several months and a lot of activities that will help you identify exactly who you need to partner with.

>> And I just want to get to the multi-disciplinary part of this question -- because it's true that in the academic setting, there's a lot of researchers. But you could definitely have researchers that are in a corporate environment. So I just want to make that clear.

>> Well, and I think in today's world, a few Google searches will get you a long way towards finding people that you might actually be able to partner with.

>> In Track B1 and 2, can we target general basic skills-slash-education that will prepare people better for future work? Or does it have to be domain-specific type of training?

>> I would say that to have a good job in the future in the workplace, there's going to be a mix of skills that are needed. You're going to have some technical skills, you're going to have some general skills, you know, teamwork, communication, and so on. I would say both those kinds of skills, technical or domain-specific, and just more generic work skills that would both be relevant to these tracks. With that said, I would expect that strong proposals are going to have some particular focus. And in the Dear Colleague Letter, we do invite proposals that focus on

particular industries, focus on particular populations, regions and so on. We do expect that there will be some focus in particular proposals, and they're not going to be just generally about skills that will prepare people for work without any connection to any domain at all.

>> Is there an email newsletter that advertises entrepreneurial opportunities, such as this one, because this particular participant in our webinar heard about this activity at the Venturewell open conference that was a couple of weeks ago. Nancy, what would you say about other ways to find out about entrepreneurial opportunities?

>> Well, you can definitely, besides this program, you could watch the SBIR website, which is America'sSeedFund.gov. There's lots of information there for entrepreneurial programs that are funded by the NSF. Government-wide, there's also the SBIR website for the entire government.

>> Also, let me just broaden this a bit. If you would like to know about all NSF funding opportunities, it is possible to subscribe to our mailing list. You just go to look for Find Funding under NSF, and there will be an option to subscribe by email, either to programs for particular directory searches, or get a list of everything. We do publish all of our funding opportunities on the NSF website as well.

>> So a questioner asks, is it safe to assume that submitting a research concept outline on, say, April 30th would not make it any less favorable in terms of our evaluation of that RCO, than something that was submitted on April 15th?

>> We intend to have the same review criteria, whenever --

>> For all RCOs.

>> -- for all RCOs, as my colleague, that Doug mentioned. There are practical constraints in terms of how much time we have to conduct the review process, and how much time you would have to submit a full proposal, if invited. But in terms of the criteria, we will apply the same criteria to all research concept outlines.

>> Yeah, if we get a thousand of them on April 30th, we will not be able to review them very quickly. Just keep that in mind. We're reviewing these across NSF, so this workload you should consider.

All right. In the description of Track A1, of building up the Knowledge Network, we see that we mentioned exploiting publicly-available U.S. government and similar public datasets. Does that data.gov is highly recommended? Or is that just one example? Vandana, would you like to take this?

>> That's a very good question. In fact, the Dear Colleague Letter refers to U.S. government agency data, and also references to funding-based data. For example, NSF funds several projects and they generate a lot of data, maybe creating either semantically-rich data, from published articles and public datasets. That's not just NSF, there will be other agencies, like NIH, USDA, -- many of these other agencies are funding research which are generating data. The data.gov website is definitely just an example. And there's lots of other rich, scientific,

semantically-rich datasets that are already out there that can be used. The one thing that you don't want to do is use proprietary or any restricted, classified data on the Open Knowledge Network.

>> Thank you very much. If two or more team members have existing projects and partnerships that have generated intellectual property, can derivative work created as part of this project leave the existing work that's already been created protected?

>> Yes. So the intellectual property discussion, I believe, is FAQ number 52. But the expectation is that what we call "background intellectual property," which is intellectual property that you bring to the project, would certainly be protected as part of the project. And that new intellectual property that gets created as part of the project would be, again, determined by the team. You want to think about that as you do your full proposal, and how new IP will be shared amongst the team, et cetera. But in almost all cases, the approaches for the teams to move forward and take, as part of the Accelerator, is to take advantage of the intellectual property that they have both brought into the project, but also created as part of the project.

>> The Dear Colleague Letter specifies that we expect to award approximately 50 Phase 1 grants. Do we have a sense for how many research concepts outlines we'll get, and how many will receive an invitation to submit a Phase 1 proposal? So basically, they're trying to judge their odds.

>> So as Evan mentioned earlier, this is a brand new thing at NSF, never been done before. So right now we don't have a good number to judge how many RCOs will it take to get an invitation. We can say that we've had two other webinars, each webinar had close to 200 people in the webinar. I think at the peak today, we were at about 70.

>> Eighty-eight.

>> Oh, 88, sorry. I was looking at the questions. So we don't have any good numbers there, but we certainly expect it to be competitive, and we are hoping to get more, rather than less, in order to find the best ideas that we can.

>> I will say that overall, NSF's average success rate is in the 20 percent range. So I think it is unlikely that, for instance, if we were going to make 50 awards, we wouldn't invite more than five times that many RCOs, because we don't want to have somebody go to the effort of writing a full proposal, and then only have eight percent of them succeed, or something like that.

>> This is exciting, isn't it? So a question was asked a second time about whether the research concept outline needs to have an Intellectual Merit section and a Broader Impact section. You'll definitely have to do that for the full proposal, but at the research concept outline stage, you should address the topics that are described in the Dear Colleague Letter. And you do not have to have a specific section that says, "Intellectual Merit," and then a second section that says, "Broader Impacts." Although as Evan pointed out, we will be evaluating your research concept outlines, keeping those two merit review criteria, of course, always in mind.

>> Will 50 projects be evenly distributed in the three tracks?

>> The current strategy is that the A's and the B's would be more evenly distributed. So we're not necessarily saying how many will be awarded in each track. Some of that will be very dependent on the RCOs for each track, and the invitations and the full proposals. But ideally, we're hoping to have it more evenly balanced between A and B, as opposed to A1, B1, B2.

>> But it totally depends on what ideas you send us. So if all of the great ideas are in B1, well, then, you know --

>> Then we'll have more B1 proposal awards.

>> Great. Since research concept outlines are submitted via email, is there anything we need to do in Fastlane at this point? Or do we even need to involve the university's grant administrators? The good news is that you do not have to involve your university grant administrators at this point. It's just a submission by email; it's just a two-pager. You're just giving us an idea. I mean, maybe you might want to talk with your dean. But no, you don't have to involve Fastlane or your grant administration office. Send us your two-pager. Please make sure you address the points that are discussed in the Dear Colleague Letter, so that we can reply and understand it. But this is only if you are invited to submit, would you need to go to your grant's administration office.

>> And let me add that when we receive, as we receive emailed research concept elements, we do acknowledge them over email.

>> Will there be a rolling decision review on the research concept outlines as they are submitted? Or will they be held to certain dates before we provide feedback?

>> Well, what we've said on previous webinars is that we intend to get feedback on RCOs submitted by April 15th within two weeks. It's going to depend a bit on how many we get, and as we receive research concept outlines after April 15th, the feedback might be somewhat delayed relative to the ones that we get on April 15th. But we don't have specific plans right now, in terms of holding things to a certain date. We're going to do our best to get feedback to the field that's high-quality and prompt.

>> All right, so we have a couple more. In the research concept outline, we need to outline the milestones. What is the required time interval between milestones? Every three months? Every month? Is there any sort of time duration? And if Phase 1 is only six to nine months, what deliverables are we expecting during Phase 1, in terms of proof of concept. Nancy?

>> So the Phase 1 period is actually more of a planning period for you as a team. So it's a time for you to give us your ideas to develop your team, and go out and develop the partnerships that you're going to need to execute. So you could do some work in Phase 1. But we're really anticipating that the deliverables are going to be worked on during the two-year Phase 2 period. Did that answer all those questions?

>> I think so. Oh, and then milestones. Phase 1, well, you're going to be meeting with us a lot, because we've got all kinds of exciting training and ideation that we want to help you do. But the milestones that you would be envisioning would be for your Phase 2 activity, and it depends on what you're trying to do. So some things could be accomplished in just a couple of weeks, and other things might take several months. So the milestones will largely be based on your project. And you will have the lead in defining them.

Then once awards are granted, will all of the tracks be combined into one cohort? Or will there be separate cohorts for each track, or A and B? Nancy, did you want to talk about that?

>> In these times when you will be meeting as a cohort, there is some content and curriculum that will be delivered to the entire cohort, so that is across both Tracks A and B. Then there will be some domain-specific content that will be delivered only to Track A, and only to B1 and B2. So there's some of each.

>> Exactly.

>> But the whole -- anybody who responds with an RCO in this timeframe will all be part of what we're calling the "pilot cohort."

>> So it's all one cohort.

Can we talk about the expected team compositions? For instance, grad students, industry people, or faculty?

>> Well, it really depends on the work that you want to accomplish. So we want you to define what you think your deliverables are going to be at the end of Phase 2, and then design your team to be able to deliver those deliverables. So you're going to have to tell us what types of skills and how many people you're going to need to accomplish what you set out to do.

>> Yeah, I think that's good. If you look in the FAQs, there's some discussion of what types of people will be involved, in terms of who partners might be. That would be what source of organizations, I'd say non-academic organizations, also what disciplinary fields might be covered. So I think that there's some ideas there. We are not telling our teams that your compositions should be this many grad students, this many post docs, et cetera. One comment that we can make, just to repeat earlier, is that NSF Convergence Accelerator is not business as usual, compared to other NSF research programs. The timing is a particular, that we're looking for projects to start approximately in September of this year, and they're going to be an intensive effort. And the Phase 1 projects will go for six to nine months. So it would be something to think about, if you were thinking of supporting a graduate student or a post doc, for example, on that project, how that would fit into the timetable for their own work, and whether that would be feasible.

>> The answer is absolutely that it depends.

>> Can I just add one thing there? I think you also need to think about the potential end users of the project. I think you'll have a different set of end users of the B1 and B2 than you might

out of the A1. And as many of those end users as you can have in the project, the sooner the better, that will also impact kind of how your team forms, and who's on the team.

Okay, we'll just quickly do a last chance. Are there any final questions? We really do appreciate your interest in the NSF Convergence Accelerator. And these have been wonderful questions that have not overlapped too much with what we had last week, or two weeks ago.

>> Great. And we're looking forward to receiving your research concept outlines. Please send us your best ideas. We're looking forward to them.

>> Okay, well, this seems like a good time to stop. We will also be available on email after this webinar. Thank you very much, everybody.

>> Would you say one more time what the email address is?

>> The email address is C-Accel, C A-C-C-E-L, at NSF.gov.

>> Thank you very much.

>> Thank you, everybody.