

WEBVTT

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00:03:47.130 --> 00:03:52.230

Manish Parashar: Hello and good afternoon, everybody. Let's get started. Welcome to this webinar.

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00:03:54.000 --> 00:04:00.000

Manish Parashar: My name is Manish parish around the office director for the office in advance. I've infrastructure.

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00:04:01.200 --> 00:04:04.050

Manish Parashar: As many of you have heard me say before our

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00:04:05.280 --> 00:04:11.760

Manish Parashar: Mission at Boise is to foster and advanced Cyber Infrastructure ecosystem that can

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00:04:12.930 --> 00:04:17.610

Manish Parashar: Enable and drive innovation across all of science and engineering research.

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00:04:18.480 --> 00:04:30.930

Manish Parashar: Or genetic ation and a critical part of this cyber infrastructure ecosystem is the workforce, which includes students, researchers, practitioners right they form a real essential component

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00:04:31.320 --> 00:04:48.900

Manish Parashar: Of this ecosystem and cyber training is a flagship program in learning and workforce development that addresses that critical, critical gap in education and training for a current and future research work forced it represents an important and growing component of our portfolio.

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00:04:50.250 --> 00:05:05.940

Manish Parashar: Of investments and has received a strong response in the community in the past. It's also an NSF wide program, the sense that will always see is playing a leadership role. It includes involvement from the other directories and offices across the foundation

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00:05:07.050 --> 00:05:13.350

Manish Parashar: So, this webinar will focus on the current cyber trading solicitation and and I

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00:05:15.300 --> 00:05:27.930

Manish Parashar: I'm delighted to welcome you to this webinar. So with that brief introduction. I'm going to turn it over to Dr. Alan Sussman. Who's the LEAD program officer for this program over to you.

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00:05:29.760 --> 00:05:31.320

Alan Sussman: Let me share my slides.

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00:05:43.290 --> 00:05:53.100

Alan Sussman: Okay hello and thank you for your interest in this sauce cyber training solicitation. We're very excited about the scope of this program, as you heard from from Dr. Parish our

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00:05:54.600 --> 00:06:00.300

Alan Sussman: I'm Alan assessment program director and sizes office of the van Cyber Infrastructure always see

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00:06:01.440 --> 00:06:06.720

Alan Sussman: I'm a rotator from the University of Maryland, soon to complete the two years at NSF

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00:06:07.500 --> 00:06:13.800

Alan Sussman: And SF launched last cyber training solicitation for years ago to address a critical gap in the education and training space for our future.

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00:06:14.430 --> 00:06:20.340

Alan Sussman: And current work research workforce and advanced cyber infrastructure and in Computational and Data Driven science and engineering.

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00:06:21.060 --> 00:06:28.920

Alan Sussman: We've had excellent responses over the last couple years since I started participating with multiple awards easier that you can see via the NSF award search mechanism.

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00:06:30.030 --> 00:06:39.540

Alan Sussman: Today I'll summarize the key aspects of the cyber trading solicitation primarily pointing out highlights of the solicitation and several submission requirements.

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00:06:40.380 --> 00:06:52.650

Alan Sussman: I have with me a few other program directors and this list solicitation has participants for many directorates, and I'll talk more about that shortly after our presentation will take any questions via the Q AMP a box and

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00:06:54.480 --> 00:07:03.840

Alan Sussman: One thing to note is that the January 20 submission deadline for this year's competition is a federal holiday that's Inauguration Day. So the deadline is

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00:07:06.300 --> 00:07:12.210

Alan Sussman: Automatically standard by a day or two, and that won't show on the program page because that's the way it is.

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00:07:21.450 --> 00:07:33.030

Alan Sussman: Okay, so this program seeks to prepare nurture and grow the national scientific research workforce for creating utilizing and supporting advanced cyber infrastructure to enable

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00:07:33.420 --> 00:07:40.950

Alan Sussman: And potentially transform fundamental science and engineering research and contribute to the nation's overall economic competitiveness and security.

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00:07:41.910 --> 00:07:50.580

Alan Sussman: It's when goals of the solicitation are one to ensure broad adoption of cyber infrastructure tools methods and resources by the research community.

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00:07:51.090 --> 00:07:58.590

Alan Sussman: In order to catalyze major research advances and to enhance researchers abilities to lead the development of new CI.

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00:07:59.190 --> 00:08:08.010

Alan Sussman: And to to integrate core literacy and discipline appropriately advanced skills in advance CI, as well as Computational and Data Driven science and engineering.

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00:08:08.850 --> 00:08:16.410

Alan Sussman: Into the nation's educational curriculum and instructional fabric standing both undergraduate and graduate courses to advance fundamental research.

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00:08:18.360 --> 00:08:26.880

Alan Sussman: Let me know that for the purposes of this solicitation advanced cyber infrastructure which I will now refer to, from now on, also a CI.

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00:08:27.330 --> 00:08:38.550

Alan Sussman: Is broadly defined as the resources tools methods and services for advanced computation large scale data handling networking and security to enable and transform science and engineering research.

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00:08:39.840 --> 00:08:46.620

Alan Sussman: This solicitation calls for innovative and scalable training, education and curriculum and instructional materials.

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00:08:47.280 --> 00:08:59.970

Alan Sussman: Targeting one or both of the solicitation goals to address emerging needs and unresolved bottlenecks and scientific and engineering research workforce development from the post secondary level all the way up to the level of active researchers

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00:09:01.800 --> 00:09:10.440

Alan Sussman: That's target communities at various stages of their career pipelines comprise undergraduate and graduate students, researchers and educators, as well as the AI professionals.

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00:09:16.800 --> 00:09:22.860

Alan Sussman: So as part of this program, the solicitation also seeks to broaden CI access and adoption.

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00:09:24.150 --> 00:09:39.420

Alan Sussman: Particularly by those scientific disciplines and institutions with lower levels of sale CI adoption with lower levels of currency I adoption and harnessing the capabilities of larger segments of diverse groups historically underrepresented and using advanced CI.

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00:09:40.470 --> 00:09:43.230

Alan Sussman: Proposals involving these communities are especially encouraged.

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00:09:44.340 --> 00:09:52.860

Alan Sussman: In the short term, the projects must either catalyze fundamental research and specific NSF supported disciplines with innovative scalable.

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00:09:53.280 --> 00:10:01.530

Alan Sussman: Training and educational activities or result in curricular instructional material that is integrated into into undergraduate and graduate courses.

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00:10:02.520 --> 00:10:10.410

Alan Sussman: Hopefully, serving as templates for adoption by other institutions and informing and best practices and institutional and disciplinary curriculum that is certainly the intent.

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00:10:12.240 --> 00:10:15.780

Alan Sussman: Is also the long term goal that we are really excited about.

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00:10:16.590 --> 00:10:25.200

Alan Sussman: The projects should aim to contribute to the larger goal of an educational eco system, enabling Computational and Data Driven science for all scientists and engineers.

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00:10:26.010 --> 00:10:40.500

Alan Sussman: This embraces computation as the third pillar and data driven sciences. The fourth pillar of the scientific discovery process. In addition to the traditional first and second pillars of theory and experimentation. As you can see, we're trying to be very ambitious.

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00:10:44.970 --> 00:10:55.470

Alan Sussman: The cyber training program is led by the Office of events cyber infrastructure that's always see in the director for computing. Computing and Information Science and Engineering that's with I'm, I'm the lead.

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00:10:55.980 --> 00:11:06.840

Alan Sussman: Lead program director on it and it has participant, but it has participation across the National Science Foundation from the division of competing and communication foundations that CCF inside

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00:11:07.560 --> 00:11:16.500

Alan Sussman: The division of graduate education in the directory for education, human resources will all the divisions within the directorates for engineering and geosciences

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00:11:17.700 --> 00:11:26.250

Alan Sussman: The astronomy materials and physics divisions and the director for mathematical and physical sciences, as well as the director for social behavioral economics sciences.

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00:11:27.240 --> 00:11:37.260

Alan Sussman: Some of those these directorates and divisions have specific programmatic areas of interest that are describing the solicitation, while all this welcome proposals that broadly enhance their relevant research communities.

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00:11:38.160 --> 00:11:44.670

Alan Sussman: Please consult with a cognizant program officer. The Directorate or division. And if you want to address one of those specific areas.

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00:11:46.170 --> 00:11:53.100

Alan Sussman: I want to highlight that one intent of the cyber training program is to simulate co founding between always see in one or more science and engineering.

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00:11:53.550 --> 00:12:03.180

Alan Sussman: Domain directorates and or divisions therefore perspective P eyes are strongly encouraged to contact the cognizant program officers and always see as well as in the participating

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00:12:03.480 --> 00:12:11.280

Alan Sussman: directorates and divisions relevant to their proposals in order to a certain whether the focus and budget of the host activities are appropriate for this solicitation.

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00:12:20.010 --> 00:12:36.240

Alan Sussman: So the cyber training program focuses on three different scientific communities and they're listed here CI contributors is the community of computational and data scientists and engineers who research and develop new cyber infrastructure capabilities new approaches and new methods.

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00:12:37.470 --> 00:12:46.440

Alan Sussman: CIOs users is the larger community of domain scientists and engineers who want to effectively exploit advanced CI capabilities and methods to do their own research.

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00:12:47.280 --> 00:12:56.940

Alan Sussman: And finally see our professionals is the community of research CEO and professional staff who deploy manage and support effective use of research CI.

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00:13:13.230 --> 00:13:30.390

Alan Sussman: We now review the key provisions for the current solicitation. There are three project classes, defined as pilot projects with total budgets have up to \$300,000 and with duration up to two years. Those are exploratory activities that may lead to implementation projects.

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Alan Sussman: Implementation projects can be either small with a total budget have up to \$500,000 or meeting with total budget up to \$1 million with duration.

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Alan Sussman: With duration up to four years for either kind of implementation project implementation projects make CI training and educational activities are curricular instructional materials broadly accessible to a significant portion of the community for one or more disciplines.

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00:13:55.770 --> 00:14:04.500

Alan Sussman: Medium implementation projects also foster community to catalyze the adoption of advanced CI methods or to incorporate training resources and materials into the curriculum.

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00:14:07.020 --> 00:14:18.540

Alan Sussman: The last category large scale project conceptualization projects with total budgets have up to \$500,000 and duration of the two years or planning grants or potential future large scale cyber trading projects at the level of Institute's

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00:14:19.320 --> 00:14:29.760

Alan Sussman: The product and the conceptualization project will be a strategic plan is expected to service the conceptual design upon which a subsequent large scale cyber training related program proposal could be based.

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00:14:31.830 --> 00:14:42.270

Alan Sussman: As I stated earlier pilot and implementation projects may target one or both of the solicitation goals large scale projects and centralization projects must address both goals.

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00:14:44.070 --> 00:14:53.310

Alan Sussman: We again focus on three these three scientific communities and projects to target one or more of these communities that CI professional CI contributors and CI users.

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00:14:54.630 --> 00:15:02.550

Alan Sussman: An individual may service API or copia on only one pilot or implementation and proposal to the cyber training program per competition.

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Alan Sussman: The large scale project conceptualization projects are not included in this limit.

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00:15:17.580 --> 00:15:31.950

Alan Sussman: Or proposal should have well identified proposal elements that clearly address the solicitation specific criteria specific solicitation specific rule criteria listed here. In addition to addressing the standard NSF intellectual merit and broader impact criteria.

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00:15:33.240 --> 00:15:41.910

Alan Sussman: Reviewers will be asked to evaluate these aspects by addressing the following questions. The first is a rationale for challenges identified for research workforce development.

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00:15:42.930 --> 00:15:51.180

Alan Sussman: The second is the strength of the projects plan to address one or both solicitation goals, namely broadening the use of CI methods and resources by the research community.

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00:15:51.930 --> 00:15:59.550

Alan Sussman: And or integrating skills into the institutional and inter disciplinary curricular instructional fabric.

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00:16:00.270 --> 00:16:06.720

Alan Sussman: note again that at least one goal must be addressed for pilot implementation proposals and both goals must be address for large scale.

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00:16:07.560 --> 00:16:16.440

Alan Sussman: Project conceptualization proposals, the, the third question is the potential for scalability and sustainability and the fourth

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00:16:17.010 --> 00:16:32.130

Alan Sussman: Is the soundness of the participant recruitment and project evaluation plan. The fifth is the effectiveness of the proposed collective impact strategy to establish a coordination network in a backbone organization or the effectiveness and alternative strategy on collective impact.

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00:16:33.390 --> 00:16:36.690

Alan Sussman: The sixth is a sound as a plan for fostering a suitable community.

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00:16:37.200 --> 00:16:43.590

Alan Sussman: The seventh is the feasibility of plans for servings and information hub and for creating information repository infrastructure.

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00:16:43.950 --> 00:16:52.980

Alan Sussman: And finally, the eighth review criteria is the strength of plan to support and guide other cyber trading and relevant projects and the overall community targeted by project.

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00:16:55.620 --> 00:17:09.780

Alan Sussman: pilot projects must address items wanting to small implementation projects must address items one through five and medium implementations implementation projects missile also address item six, in addition to one through five.

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00:17:10.800 --> 00:17:20.490

Alan Sussman: Large scale project conceptualization projects must address all eight items and both solicitation goals. I also want to make clear, as you can sort of see from this list of

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00:17:21.600 --> 00:17:26.190

Alan Sussman: review criteria that research and education is outside the scope of the solicitation.

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00:17:33.420 --> 00:17:35.370

Alan Sussman: So in the solicitation.

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00:17:36.870 --> 00:17:42.630

Alan Sussman: Each participating division or directorate and we're director has included it's programmatic areas of interest.

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00:17:44.070 --> 00:17:56.310

Alan Sussman: So since we're in a way on no AC, AC is concerned about all three communities cyberinfrastructure professionals Cyber Infrastructure contributors and cyber infrastructure users and both current and future generations.

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00:17:57.720 --> 00:18:07.890

Alan Sussman: Away see encourages proposal on technical and research CI professional skills development for future CI professionals as well as on skill refinement and career development for current CI professionals.

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00:18:09.570 --> 00:18:18.600

Alan Sussman: We see also encourages proposals relevant to the science and engineering domain directorates for training as well as cross training of the computational and data scientists and engineers.

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00:18:18.990 --> 00:18:34.050

Alan Sussman: Or current and future CI contributors in contributor level CI topics such as scalable scientific software development and modeling and simulation and advanced science and engineering domain topics such as domain specific CI tools data sets and models.

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00:18:38.610 --> 00:18:49.920

Alan Sussman: Always see is also interested in the larger goal of preparing the nation scientific and engineering research workforce to ensure the workforce as well versed in basic CI and Computational and Data science and engineering methods tools and techniques.

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00:18:50.820 --> 00:19:02.490

Alan Sussman: To see our user workforce preparation begins with undergraduate students across all disciplines and continues to graduate students postdoctoral fellows and professionals, particularly in disciplines and areas with low levels of CI adoption.

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00:19:03.990 --> 00:19:11.250

Alan Sussman: We see also encourages relevant proposal with overlapping concerns with other programs such as but not limited to

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00:19:11.850 --> 00:19:27.330

Alan Sussman: The Big Data Regional Innovation Hubs that's BD hubs campus cyber infrastructure that CC star cyber infrastructure for sustained scientific innovation, the CSI program and cyber security innovation for cyber infrastructure and the Ci, Ci program.

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00:19:38.160 --> 00:19:47.910

Alan Sussman: We have from one of our from our engineering colleagues, we may have description their program of their particular interests in the cyber training program.

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00:19:49.260 --> 00:19:55.440

Alan Sussman: The program supports activities that enable the engineering CMI that's civil mechanical manufacturing innovation.

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00:19:56.280 --> 00:20:04.380

Alan Sussman: Division of the Engineering Directorate and see about the chemical bioengineering trend environmental and transport systems division of engineering

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00:20:04.740 --> 00:20:21.360

Alan Sussman: Those communities to lead development of new CI that catalyzed his major fundamental research advances in the CMA and event related research fields and more effectively UCI to address fundamental knowledge gaps for topics, supported by CMS and see that

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00:20:28.800 --> 00:20:39.660

Alan Sussman: To finish up, I'll do small number of frequently asked questions that come up. Haven't risen over the last couple years quite frequently. So we'll talk about those a little bit

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00:20:40.740 --> 00:20:49.500

Alan Sussman: Many cognizant program directors could not be here, but they're directorates and divisions programmatic areas of interest or in the solicitation and we encourage you to read the solicitation carefully.

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00:20:50.490 --> 00:20:56.970

Alan Sussman: So here are some of those frequently asked questions. The first one is, is consultation with a cognizant program officer required

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00:20:58.230 --> 00:21:05.700

Alan Sussman: That's not a requirement, kids. We can't require that. But it is strongly encouraged that you consult with me as the always see lead on the solicitation.

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00:21:05.970 --> 00:21:14.160

Alan Sussman: And any other cognizant program officer by sending a one page project summary containing sections on a project overview intellectual merit and broader impact.

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00:21:14.700 --> 00:21:25.920

Alan Sussman: And a few keywords, at least a month in advance of the solicitation deadline include include this and include this information that you that you contacted us in a single copy documents submitted as part of your proposal.

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00:21:31.590 --> 00:21:39.270

Alan Sussman: The second question is, Can my project primarily train or retrain for jobs in the IT industry.

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00:21:39.780 --> 00:21:51.210

Alan Sussman: So talking about industry jobs and the answer is no. All proposal's including cyber security proposals to the cyber training program must be relevant to the scientific to scientific research workforce development.

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00:21:51.720 --> 00:21:58.860

Alan Sussman: And to advanced cyber infrastructure so cybersecurity proposals that needs must be relevant to the scientific research workflow.

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00:21:59.430 --> 00:22:10.350

Alan Sussman: This relevance will of course vary from undergraduate students and graduate students and postdocs to CI professionals and across disciplines. But the key is, is that it has to be scientific research workforce development.

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00:22:16.410 --> 00:22:25.170

Alan Sussman: Our third and last frequently asked question is, do you need a small size implementation award before proposing a medium sized implementation project.

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00:22:25.680 --> 00:22:33.360

Alan Sussman: Or do you need a cyber training award at all before doing a large scale project conceptualization submission and there's a very simple answer that and the answer is no.

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00:22:33.780 --> 00:22:39.630

Alan Sussman: There's no requirements. This is not a progression. They're just different sized projects with different different goals.

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00:22:45.420 --> 00:22:52.470

Alan Sussman: So this has been a very short presentation. This completes our slide presentation and note that these slides and the transcript for this webinar.

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00:22:52.950 --> 00:23:01.920

Alan Sussman: As well as an audio recording will be available@www.sec.gov slash events and will also be linked from the cyber training program web page in the near future.

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00:23:03.600 --> 00:23:17.220

Alan Sussman: Now, we welcome your questions. There are four of us here, including Mark Hurwitz Joe Whitmire and stuff on robiola. You may also email at the address shown here. La su ssm@nsf.gov for offline questions. That's me.

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00:23:18.780 --> 00:23:24.930

Alan Sussman: And now please ask your questions via the zoom Q AMP a box and we'll do our best to answer them. Thank you.

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00:23:31.350 --> 00:23:43.590

Stefan Robila: Ellen. There is a question about the number of copy is that are allowed on a proposal and I just wanted to

check with you. I don't think there is any limit beyond what NSF is putting on says regularly meet. I think for KPIs.

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00:23:45.360 --> 00:23:51.930

Alan Sussman: That's right. There's no limit beyond what what NSF allows, which I think is it max. I think for copia is, I think,

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00:23:53.190 --> 00:23:55.560

Joseph Whitmeyer: Yeah, and the Pepsi one P is for code.

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00:23:56.880 --> 00:23:59.370

Alan Sussman: That's in that's in the top three. Okay, good.

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00:24:12.930 --> 00:24:14.670

Alan Sussman: Try just try going through them in order.

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00:24:17.310 --> 00:24:33.690

Stefan Robila: You can I would say if your question is very specific to a project, then you may want to seek communication directly with Eleanor was one of us. And then maybe set up a short call rather than and have us assume things in providing general answers.

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00:24:35.280 --> 00:24:41.220

Stefan Robila: So if you have a very specific question about your project, then that may help if you know we we can talk to you directly

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00:24:41.640 --> 00:24:50.730

Alan Sussman: That's right, doing those through the webinar might reveal more than you care to about your project and the public. So we tend to want to do those sort of offline.

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00:24:56.670 --> 00:24:58.410

Alan Sussman: So I see a question.

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00:24:59.790 --> 00:25:11.160

Alan Sussman: About envisioning open access entry level workforce training institutions such as community colleges participating in the cyber training program and supportive its long term goals and actually

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00:25:12.690 --> 00:25:24.120

Alan Sussman: As long as you can make an argument that there is that there is research that this has relevance, a risk to the research with the scientific research workforce in some manner, then yes, we can do that. And if you look at

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00:25:24.690 --> 00:25:29.760

Alan Sussman: Recent awards recent awards in this arbitrating program there have been community colleges involved.

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00:25:31.020 --> 00:25:35.340

Alan Sussman: And other arm and certainly not on our one institutions for sure.

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00:25:48.450 --> 00:25:49.980

Stefan Robila: I see a question about the

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00:25:51.030 --> 00:25:55.650

Stefan Robila: page limit on the proposals, again, I don't think there is any deviation from Pepsi.

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Alan Sussman: Though it's exactly the same as for any other NSF proposal, according to the PA P P g, which is a project description is limited to 15 pages. Thank you.

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00:26:14.280 --> 00:26:17.610

Stefan Robila: I have, I believe I have answered the question, but I see it again.

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00:26:18.060 --> 00:26:30.090

Stefan Robila: Let me read it to you, Alan, what do you specifically mean about research and education being outside the scope of this solicitation and I'm sorry I will, I will answer that. I think that you meant the Research in Education right

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00:26:31.080 --> 00:26:44.160

Alan Sussman: Yes, it's actually Research in Education. If I said if I did, if that's not what I said. And when I said that. That's what I meant. Research in Education. This is not an education program. This is just training, training and

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00:26:45.390 --> 00:26:48.030

Alan Sussman: Research Workforce Development Program.

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00:26:50.670 --> 00:26:50.880

Joseph Whitmeyer: And

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00:26:52.200 --> 00:26:58.680

Joseph Whitmeyer: What about scientific research carried out in industry as encouraged and drug companies material science companies.

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00:27:00.120 --> 00:27:09.360

Alan Sussman: As so research workforce development there clearly is research going on industry, but it would have to be shown that it's relevant, and that it would be publicly available research.

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00:27:10.410 --> 00:27:12.660

Alan Sussman: Where you can't be, can't be proprietary research.

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00:27:15.060 --> 00:27:27.540

Stefan Robila: So let me piggyback on Joe's question related to research in industrial partners and I see a question that is asking if we are collaborating with industry partners do we need letters of intent and, if so, is there any specific format.

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00:27:28.770 --> 00:27:30.150

Alan Sussman: You need letters of collaboration.

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00:27:30.240 --> 00:27:32.790

Stefan Robila: I, I assume, so I just read the question. Yes, I'm

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00:27:32.790 --> 00:27:43.530

Alan Sussman: Going to assume that means yes so so letters of collaboration are encouraged and there is a standard format for a letter collaboration and that's for pretty much really all NSF programs.

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00:27:44.370 --> 00:27:54.930

Alan Sussman: So the letter collaboration basically only states that the collaborator will do what they say they're what they say what the rest of the proposal in the body of the proposal says that they will do as part of the project.

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00:27:55.470 --> 00:28:10.800

Alan Sussman: The letter of collaboration is not a place to add additional content to the proposal. So the nature of the collaboration should be describing either the project description or in the resources in the resources section of the of the proposal.

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00:28:13.260 --> 00:28:18.000

Alan Sussman: Because it sometimes there are collaborators actually providing resources.

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00:28:25.680 --> 00:28:32.730

Joseph Whitmeyer: Must all programs provide training at the graduate and undergraduate levels are just one of these two levels.

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00:28:33.390 --> 00:28:50.520

Alan Sussman: One is enough. It really depends on the on the project. Some projects will focus on undergraduate education on undergraduate education and training. Some will focus on graduate. Some will focus on both. And again, some will focus on professionals. Right, so it has to be at least one and

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00:28:52.140 --> 00:28:57.840

Alan Sussman: At minimum, but targeting multiple of those audiences is also okay but it has to be at least one

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00:29:04.800 --> 00:29:13.440

Joseph Whitmeyer: Well, this funding mechanism only support new training programs are can be is also submit to support pre existing programs.

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00:29:14.610 --> 00:29:26.400

Alan Sussman: So again, there's no requirement that it'd be a new program, but it's you're going to have to show that the project will actually have an impact in terms of beyond what it's already doing.

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00:29:26.760 --> 00:29:36.390

Alan Sussman: So that's what's going to be harder about an existing program. But again, if you look at some of the projects that have been funded recently they are part of bigger programs bigger projects.

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00:29:37.830 --> 00:29:49.920

Alan Sussman: That have been ongoing so we have funded both kinds of completely new completely new training programs and ones that are continuations expansions of existing programs.

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00:30:02.520 --> 00:30:13.200

Stefan Robila: So that is a question related to to the focus of the program. Is it the research driven or education driven. Which one is more appropriate for us to understand

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00:30:15.180 --> 00:30:21.000

Alan Sussman: That's not an easy question to answer. So we're looking at is training, training and

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00:30:23.040 --> 00:30:33.360

Alan Sussman: Not recent you can't do research in education. Okay, but we want the training to be relevant to doing science and engineering research right so

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00:30:33.780 --> 00:30:44.730

Alan Sussman: That we're all using advanced Cyber Infrastructure right again. So the, the training the educational activities curricular activities happen to be in service of training and

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00:30:45.630 --> 00:30:53.790

Alan Sussman: Increasing the capabilities of the research workforce science and engineering research workforce. So again, I don't want to say

151

00:30:55.140 --> 00:31:00.210

Alan Sussman: Both there are multiple activities, many kinds of activities that can fall within that that scope.

152

00:31:05.070 --> 00:31:06.330

Mark Hurwitz: Is. Here's a question.

153

00:31:06.900 --> 00:31:22.680

Mark Hurwitz: I'm sorry, it's not a question that says, I'm from medium implementation funding in terms of the requirement for being broadly accessible to the community. How broad is this is it required to be nation right wide or broad in terms of the material access or training activity and so

154

00:31:23.640 --> 00:31:33.750

Alan Sussman: I think that the community in terms of a broad community. It's not going to be just a single research

group. It's not going to be just a very small community of, you know, 20 or 30 people there has to be a large community.

155

00:31:34.080 --> 00:31:41.130

Alan Sussman: For, you know, a project a medium implementation project can be up to a million dollars in four years that has to have a significant impact.

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00:31:41.760 --> 00:31:54.780

Alan Sussman: Right. And that means reaching out to a larger community than a smaller project. And that's really what it means is that there has to be a community that actually will be impacted by by the activities that are proposed.

157

00:31:57.210 --> 00:31:59.730

Alan Sussman: So it's just that the scope of the project has to be large.

158

00:32:01.800 --> 00:32:14.130

Mark Hurwitz: Here's one that's a little bit related to that. Well, pilot projects are not required to address all the solicitation specific review criteria would it be helpful to address some of those to highlight their visibility or assisting

159

00:32:15.780 --> 00:32:20.580

Alan Sussman: Of course, so the requirement is is that the projects, you know, the pilot projects.

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00:32:21.840 --> 00:32:28.530

Alan Sussman: Address the first two and then the implementation projects address some of the others, and that the large scale conceptualization product.

161

00:32:29.040 --> 00:32:37.020

Alan Sussman: Projects so address all of those eight criteria, but that doesn't mean that proposal, a pilot project proposal couldn't address some of the other criteria.

162

00:32:37.440 --> 00:32:47.730

Alan Sussman: Right, because that just makes maybe a stronger proposal, so right so it's not it's not a requirement, but that doesn't mean it's not not necessarily something that you want to do as part of your proposal.

163

00:32:50.370 --> 00:32:52.200

Joseph Whitmeyer: Several asked about

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00:32:54.690 --> 00:32:56.640

Joseph Whitmeyer: Targeting high school students.

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00:32:59.040 --> 00:33:07.710

Alan Sussman: So again, the main focus of the solicitation is on the research scientific and engineering research workforce development.

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00:33:08.220 --> 00:33:14.220

Alan Sussman: What that means is high school students are that's quite early in the pipeline. So it could be part of your project.

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00:33:14.670 --> 00:33:28.680

Alan Sussman: But the main focus should be on again on students farther along in their, in their careers, where they were they, they, you'll have it's makes it easier to make the case that you're going to have an impact on the scientific and engineering research workforce.

168

00:33:33.990 --> 00:33:44.820

Alan Sussman: So it's not that you can't do it, but it's it's certainly going to be a harder case to make that that your own have an impact on the scientific and engineering research workforce. If you're focusing on high school students.

169

00:33:47.250 --> 00:33:54.420

Alan Sussman: Which is similar to the question that was asked earlier about community colleges. And again, it's just that you have to make that argument that

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00:33:54.840 --> 00:34:02.550

Alan Sussman: What you're doing in terms of whether it's training or curriculum development that it's going to have an impact on the scientific research workforce.

171

00:34:08.670 --> 00:34:22.950

Stefan Robila: Ellen I'm typing an answer, but they will also need the question there is a question in which is one of the attendees is asking about examples of a good project and I'm, I don't know if you want to give examples. I'm just going to send the link to the to the words.

172

00:34:24.300 --> 00:34:32.160

Alan Sussman: I don't want to highlight any any specific project in this webinar. I don't think that would be fair to the other projects large number of other projects.

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00:34:32.670 --> 00:34:49.830

Alan Sussman: And besides, I naming them off the top of my head is not going to be so easy. Anyway, but you can do a search on for us. Recent cyber training awards on the NSF Standard the award search web page and look at the over whatever time period you want

174

00:34:50.970 --> 00:35:01.320

Alan Sussman: This program that has been going for for you. This is the fourth year so you can go back three years and look at all the awards that were made over the last since since the program began, if that's what you want.

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00:35:03.150 --> 00:35:03.480

And

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00:35:04.530 --> 00:35:08.280

Alan Sussman: So there are a non trivial number of awards over the last three years.

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00:35:08.970 --> 00:35:25.230

Stefan Robila: So I based it both in chat in in the answers the direct link to the word search exactly focused on the sidebar training. You can also access the same information from the program page. The bottom you'll see another link that says what was funded under this program.

178

00:35:25.590 --> 00:35:36.270

Alan Sussman: Right, the cyber training program page does have a link at the bottom. Unfortunately, it's still point that the program page is still pointing at the previous webinar web page hasn't been updated.

179

00:35:37.950 --> 00:35:53.670

Alan Sussman: At least as last time I looked at it, but that will be updated. That will be a pointer. So the webinar to the webinar page from the program page. And there's also right pointers to go towards recent the recent awards and to where those awards were made, and it's on now.

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00:35:54.870 --> 00:35:59.220

Alan Sussman: Those are standard links on program on in this program pages.

181

00:36:02.670 --> 00:36:09.180

Joseph Whitmeyer: Well, NSF support programs that have an international component or must they focus on the US alone.

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00:36:10.680 --> 00:36:19.890

Alan Sussman: So as with really all NSF programs can only fund us based P eyes and individuals.

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00:36:20.520 --> 00:36:37.350

Alan Sussman: So that doesn't mean that there can't be an international component, but we can't, you can't ask for funding for international participate participants in the in our proposal that's not allowed. So the funding has to go to us, institutions and people at us institutions.

184

00:36:42.420 --> 00:36:50.070

Alan Sussman: Again, that doesn't mean you can't collaborate internationally, but funding for the international harbors would have to come from elsewhere, not for the National Science Foundation.

185

00:36:53.940 --> 00:36:56.130

Stefan Robila: And there is a question related to

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00:36:57.360 --> 00:37:01.290

Stefan Robila: You know we noted that it would be helpful to to focus on

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00:37:02.820 --> 00:37:09.450

Stefan Robila: Very specific focus on general questions. But in general, when you are building a pilot or when you're building a smaller project.

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00:37:11.520 --> 00:37:17.550

Stefan Robila: Can the P is talk about plans for future projects or how would they generalize for bigger things

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00:37:19.140 --> 00:37:19.770

Alan Sussman: So,

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00:37:19.830 --> 00:37:23.520

Alan Sussman: Any, anything like that that speculative is generally does not

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00:37:24.840 --> 00:37:31.710

Alan Sussman: Reviewers do not tend to a kind, it's hard to understand what that really means because it's kind of speculative so

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00:37:33.600 --> 00:37:42.300

Alan Sussman: You know, you can talk about future plans and or put to put a particular product in a bigger context of, you know, have a research.

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00:37:42.990 --> 00:37:47.730

Alan Sussman: Or research and education plan for, you know, a longer term research, education plan, but

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00:37:48.510 --> 00:38:00.510

Alan Sussman: In terms of evaluating proposal, it's that particular project that's being that's that's the funding is being requested for, that's what, that's what's going to be evaluated as part of in the in the review process.

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00:38:01.500 --> 00:38:08.910

Alan Sussman: So again, it may help set the context. But that's not going to be part of the evaluation of the project.

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00:38:09.930 --> 00:38:10.980

In the review process.

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00:38:15.960 --> 00:38:19.350

Stefan Robila: Can we support graduate students to help training activities.

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00:38:20.220 --> 00:38:32.460

Alan Sussman: Oh, absolutely. Absolutely. Many of the projects support graduate students just because there's training and curriculum development doesn't mean that this is something that graduate students can absolutely participate in

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00:38:33.750 --> 00:38:47.970

Alan Sussman: We have, you know, faculty, staff, the projects again funding funding can be whatever whatever you think is needed to actually perform the activities that you propose to do in your project. Okay. We don't tell you. And again,

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00:38:48.840 --> 00:39:01.470

Alan Sussman: We nobody's going to tell you what who the right people are to participate in your project. That's really up to the psi and hope he is as to how to how to allocate resources. Again, you do have to argue that's part of the

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00:39:03.000 --> 00:39:08.460

Alan Sussman: budget justification as to what each of those people are going to be responsible for doing and why they're the right people to do it.

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00:39:11.400 --> 00:39:11.970

Alan Sussman: So,

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00:39:13.170 --> 00:39:23.850

Alan Sussman: That's what matters but yes graduate students can definitely visit these activities and some of the activities. But that's after a while, maybe a good thing. In some cases,

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00:39:24.810 --> 00:39:30.570

Stefan Robila: So I have a question that I can answer. Do we have access publicly available publicly available privately funded proposals.

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00:39:31.050 --> 00:39:39.480

Stefan Robila: And the answer is, we do not provide direct public access you have various mechanisms, you can reach out to the API's and see if they can share the proposal with you.

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00:39:39.960 --> 00:39:48.480

Stefan Robila: And there is also a mechanism to the Freedom of Information Act, but we do not have a server or website that provides access to the proposals write

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00:39:48.900 --> 00:40:08.100

Alan Sussman: proposals are actually owned by the p is not by NSF, the ultimate up that and I said loans is for awarded projects the abstract and the title and all that that that was made public, but the proposals themselves are all proprietary they're owned by the the P is

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00:40:10.860 --> 00:40:21.150

Stefan Robila: A may ask you if the proposed idea must use cyber infrastructure or if it is enough that our proposed idea can solve the concerns of CI professionals contributors in users.

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00:40:22.320 --> 00:40:27.720

Alan Sussman: So I, I did talk about that. And it's very important that

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00:40:28.770 --> 00:40:36.840

Alan Sussman: That the projects actually focused on advanced Cyber Infrastructure right this is this is cyber training that cyber means cyber and

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00:40:37.230 --> 00:40:53.160

Alan Sussman: Cyber Infrastructure. This is not general training in science and engineering research methods and methodologies. This is about how to using and developing advanced training people and using a developing advanced cyber infrastructure in the service of science and engineering research.

212

00:40:54.510 --> 00:41:10.200

Stefan Robila: So I'll pick up another question quickly and then I'll stop. Is it required that the p it members be from multiple research institutes or universities, the answer is no. Is there a specific portion of the budget that should be allocated for participant support.

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00:41:11.100 --> 00:41:18.090

Alan Sussman: And the answer is no, because if you think about one of the activities could be curriculum development.

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00:41:18.570 --> 00:41:29.730

Alan Sussman: And that wouldn't necessarily have participants sport. Of course, if you're doing training activities and you have people traveling to training activities, maybe not now, but maybe sometime in the not too distant future.

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00:41:31.320 --> 00:41:42.480

Alan Sussman: Then of course, you can have participant support costs, but that's not required. Again, the budgets are really have to fit with, you know, the requirements of your project.

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00:41:43.020 --> 00:41:58.290

Alan Sussman: And that's something that you have to work out with your institution with your, your PR is your Kochi is that how to actually allocate the budget and SF, doesn't the program and NSF don't require any there's no requirement as to how to how to allocate funds in your budget.

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00:42:01.980 --> 00:42:12.600

Mark Hurwitz: Somewhat related must all prod must all proposal's include P eyes from multiple directorates are fields or can proposal succeed with one p i just want to feel

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00:42:14.340 --> 00:42:27.930

Alan Sussman: Again, you have to make the argument that that PCI is capable of doing all by themselves, the activities that are proposed in the in the in the project in the project description. So what you know.

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00:42:29.610 --> 00:42:34.080

Alan Sussman: First smaller projects you would imagine pilot projects because they're small.

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00:42:34.440 --> 00:42:42.810

Alan Sussman: Both in duration and in dollars are going to have fewer people involved then bigger projects, the small mentation or the medium implementation projects.

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00:42:43.200 --> 00:42:54.480

Alan Sussman: There's no requirement for multiple institutions multiple P eyes. Again, you want your, your goal should be to have the right people to perform the activities that you want to perform as part of the projects.

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00:42:54.990 --> 00:43:01.680

Alan Sussman: As part part of your project and NSF is not going to tell you, and what what what what that is.

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00:43:03.030 --> 00:43:14.730

Alan Sussman: But you do have to make the argument, whoever you have on the proposal is able to do what the proposal, what the proposal activities are, whether it's training activities, whether it's curriculum development, that's what you have to make the argument.

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00:43:16.020 --> 00:43:21.630

Alan Sussman: That the people involved in the project that you say are involved in the project are able to do what you want the project as wants to do.

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00:43:23.400 --> 00:43:28.680

Mark Hurwitz: And this is actually written in the solicitation. I'm quoting here and I'll put this in the answer as well.

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00:43:29.010 --> 00:43:41.490

Mark Hurwitz: To ensure relevance to community needs and to facilitate adoption these proposals of interest to one or more domain divisions must include at least one PCI or copia with expertise relevant to the targeted research discipline.

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00:43:41.880 --> 00:43:49.230

Mark Hurwitz: All proposal shall include at least one PII or KPI with expertise relevant to always see. Yes.

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00:43:49.290 --> 00:43:54.420

Alan Sussman: And that just sort of codified. If you're doing something that's about advanced fiber infrastructure.

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00:43:55.290 --> 00:44:01.320

Alan Sussman: Just about cyber, cyber infrastructure training or whatever, then you have to have somebody who does cyber infrastructure.

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00:44:01.890 --> 00:44:07.680

Alan Sussman: If you have a proposal that doing I'll pick you know geosciences, you know, whatever.

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00:44:08.070 --> 00:44:14.160

Alan Sussman: You have to have an expert in geosciences to do if you're going to be training people in geoscience advanced CI for geosciences

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00:44:14.550 --> 00:44:19.560

Alan Sussman: Then you have to have somebody who's an expert in geosciences who can tell you what that training, whether that training makes sense.

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00:44:20.070 --> 00:44:25.950

Alan Sussman: You also have to have somebody who's involved in advanced CI to understand what that means, be able to

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00:44:26.490 --> 00:44:31.050

Alan Sussman: So, so again, it gets back to having the right people to do what you want to do.

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00:44:31.500 --> 00:44:40.590

Alan Sussman: And that that that particular part of the solicitation just sort of codified exactly what that means in terms of if there's domain specific part scientific domain or engineering domain.

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00:44:41.280 --> 00:44:53.850

Alan Sussman: Engineering domains, you have to have an expert in that area. You always for any cyber, cyber training project, you have to. It's about advanced cyber infrastructure. So you have to have an expert in cyber infrastructure as part of the project team.

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00:44:56.580 --> 00:45:00.420

Thank you for that was hope that was useful to point out a portable solicitation.

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00:45:09.210 --> 00:45:13.290

Stefan Robila: I see a couple of questions related to the definition of cyber infrastructure so

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00:45:14.040 --> 00:45:21.030

Stefan Robila: I will, I will read them both and then we'll see. Maybe we can answer them both. So the first question is, do we need to use already funded NSF CI.

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00:45:21.540 --> 00:45:33.990

Stefan Robila: Or we can build a new one. As part of the grant. The other one is, can you define CI in the context of domain science does it include how to use the existing or developed code infrastructure to domain specific CI.

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00:45:38.190 --> 00:45:53.340

Alan Sussman: So I'm trying to find how I just there was a definition of cyber infrastructure. So, we define it broadly as cyber characterize the resources tools methods and services for advanced computation.

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00:45:54.270 --> 00:45:59.280

Alan Sussman: Large scale data handling networking and security to enable and transform science and engineering research.

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00:45:59.730 --> 00:46:12.750

Alan Sussman: If you want a definition, you should the perhaps the best definition of advanced Cyber Infrastructure is on the OTC core research program page again maybe Stefan somebody can put a link to that that

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00:46:12.810 --> 00:46:13.890

Alan Sussman: Talks about the title.

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00:46:14.100 --> 00:46:24.660

Alan Sussman: The types of research, scientific research that always see supports and that talks about, you know, cyber infrastructure research I'm trying to remember what the other part of that question was,

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00:46:25.080 --> 00:46:30.030

Stefan Robila: If that has specific things, you know, domain specific things. The main cis things

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00:46:31.140 --> 00:46:39.810

Alan Sussman: So again for domain scientists, the training could be in using advanced cyber infrastructure to do the scientific research within that domain.

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00:46:40.110 --> 00:46:48.360

Alan Sussman: That's that's fairly typical but it could also be part. So this is not a software development or data collection program.

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00:46:48.840 --> 00:46:59.970

Alan Sussman: Right, so it's a training and workforce development program. So any any any software development or data collection is going to have to be in service of those goals. The goals of the solicitation.

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00:47:00.960 --> 00:47:07.620

Alan Sussman: It doesn't mean you can't do that. But it has to be in service of the larger goals of research workforce development.

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00:47:11.610 --> 00:47:13.470

Stefan Robila: Because there are other programs that support at

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00:47:13.470 --> 00:47:15.180

Alan Sussman: All but to software and data tools.

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00:47:16.710 --> 00:47:24.510

Stefan Robila: There is a question I think I can answer it will AI related techniques, be considered as advanced cyber infrastructure. I think this is a loaded question.

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00:47:24.960 --> 00:47:34.260

Stefan Robila: It really depends. What you understand by AI by the number of proposals, we see everything is AI on us, but you have to look at what does it mean that respect to the cyber infrastructure itself so

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00:47:34.680 --> 00:47:40.530

Stefan Robila: Techniques running on cyber infrastructure that involve artificial intelligence may or may not be advancing

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00:47:42.240 --> 00:47:53.100

Alan Sussman: Again, you know, advanced the I definitely includes, you know, modern modern machine learning and other AI techniques deep learning and things like that and how those are used again.

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00:47:53.640 --> 00:47:57.570

Alan Sussman: It's all about advanced fibrosis or two houses, even those are going to be used in service of

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00:47:58.110 --> 00:48:14.760

Alan Sussman: Science scientific and engineering research right that's what, that's what's going to matter to test any training or education curriculum development activities. It's all going to have to be in service of workforce development and for science and engineering research so

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00:48:16.080 --> 00:48:18.990

Alan Sussman: It's not just general AI training, whatever.

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00:48:23.580 --> 00:48:29.820

Stefan Robila: Joseph. Do you want to mention the I see one. Did you markers on setting life in terms of the educational workshops

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00:48:32.970 --> 00:48:43.320

Stefan Robila: Is the hosting of some kind of educational workshops considered essential to any of the proposal categories or with curriculum development infusion be sufficient by itself.

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00:48:43.770 --> 00:48:54.660

Alan Sussman: So for the implementation and pilot projects you can do one either training or a curriculum development director, the educational fabric that's what

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00:48:55.140 --> 00:49:06.330

Alan Sussman: You can do one or the other. For the large scale conceptualization projects, you have to do both. You have to address both. And again, and that's very explicit I've said dying multiple times. And it's in the slides for sure.

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00:49:09.240 --> 00:49:16.020

Joseph Whitmeyer: What is the relative importance given to process versus outcome is metrics in a proposal is evaluated.

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00:49:19.020 --> 00:49:24.030

Alan Sussman: I, I think that most people are much more interested in terms of evaluation and the outcomes.

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00:49:26.100 --> 00:49:31.980

Alan Sussman: Processes are notoriously hard to evaluate and in an objective way.

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00:49:33.330 --> 00:49:38.670

Alan Sussman: But again, you have to make an argument. It's actually very important for for for the cyber training.

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00:49:39.840 --> 00:49:49.380

Alan Sussman: Projects to have an evaluation plan right it's explicitly called out in the solicitation and evaluation plan to show that, you know,

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00:49:50.040 --> 00:49:55.920

Alan Sussman: Whatever you do, you're actually going to evaluate whether have some criteria against to measure success of the project and that

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00:49:56.340 --> 00:50:08.670

Alan Sussman: Clearly has to have something to do have something to do with outcomes because you could have the best process in the world. But if the outcomes are not so good, then, something, something is wrong somewhere. So, so we do care about outcomes.

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00:50:10.800 --> 00:50:21.270

Stefan Robila: And I will add another question related to measurement and assessment. Do you need to see it to have an advocate an indication evaluator involved in the project. Again, this depends really on the project and on

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00:50:21.630 --> 00:50:31.530

Alan Sussman: Again, it really depends on the project army of depends on the size of the project and how much effort, you're willing to expend and dollars in your project actually do the evaluation.

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00:50:32.490 --> 00:50:43.530

Alan Sussman: If it makes sense within the context of your project, having a having an independent evaluator essentially an education expert is not a bad thing, but you have to decide if that's how you want to spend part of the resources in your project.

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00:50:45.210 --> 00:50:48.420

Stefan Robila: And I will, I will pick up another question.

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00:50:49.950 --> 00:50:59.610

Stefan Robila: Can you define what an expert in advance the, I mean, and this relates to to the, you know, this relates to the nature of the research that that person has done.

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00:51:00.270 --> 00:51:09.390

Stefan Robila: To the nature of the project that the person is involved, and so on. So, so expert in CI means expert in the area that is covered by, let's say always see for example.

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00:51:11.160 --> 00:51:22.260

Alan Sussman: That's right. Again, what it means is it's harder to make the case that physicist is a CIA export, even if they're used car lot right

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00:51:22.860 --> 00:51:28.260

Alan Sussman: So you have to make that case that that whoever's whoever if you're going to be training people using certain

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00:51:28.590 --> 00:51:39.450

Alan Sussman: For certain technology certain types of cyber infrastructure that cyber infrastructure, you better have be able to make the case that that person is an expert in that area to teach it, you have to be an expert so

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00:51:40.350 --> 00:51:55.080

Stefan Robila: So to clarify, an earlier question related to, they have a waiter. We are not advising you to have one or not to have one and that's such a I see a question later he said it should be external not internal really it is up to the project and up the approach to how you said to them,

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00:51:55.320 --> 00:52:08.490

Alan Sussman: And be careful. It definitely should be somebody. It's best if it's somebody external to the to the project actually doing the the time actually performing the project that doesn't necessarily mean external to the institution where the product of the person is

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00:52:09.060 --> 00:52:13.410

Alan Sussman: Where the people are doing the project. So, gotta be a little careful about that distinction

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00:52:14.730 --> 00:52:24.750

Stefan Robila: There is a question about the and I'm not sure if I understand correctly, can you clarify the point made about PDF that should be included in the proposal or in the email to the program officer.

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00:52:25.530 --> 00:52:29.130

Alan Sussman: I think that's about. So, this I think that gets to

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00:52:30.600 --> 00:52:32.700

Alan Sussman: If you send us a one page project summary.

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00:52:33.810 --> 00:52:38.100

Alan Sussman: Okay, which we're saying, that's a good idea. We can't require it. But it's a good idea.

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00:52:39.510 --> 00:52:53.190

Alan Sussman: Then in your proposal, you should include as a as a single copy document a statement that says I contacted this particular content this program officer as part of you know with with my project summary and got feedback from them.

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00:52:54.000 --> 00:52:58.590

Alan Sussman: Okay, this or these to write this may be you know me as as a

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00:52:59.100 --> 00:53:05.700

Alan Sussman: Person and maybe somebody from a science domain somebody from physics or somebody from astronomy, or somebody from one of the engineering directorates

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00:53:06.090 --> 00:53:15.450

Alan Sussman: So basically you're just telling us as part of your proposal that you did this so that we don't have to go back through our emails and figure out, oh yes, this person actually submitted it wasn't contact with us.

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00:53:17.700 --> 00:53:21.960

Alan Sussman: That, that's all. So it's just, it's an additional yes it will be a PDF document.

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00:53:22.290 --> 00:53:31.920

Stefan Robila: So So Ellen. I do have to read this question because I'm sure you would like to answer it. Can you define workforce and does this only refer to industry private sector or does it include academia, as well.

293

00:53:32.460 --> 00:53:45.390

Alan Sussman: Oh, it definitely include that it definitely include because we're talking about training graduate students, which who are potentially part of the future research workforce, they may go into into industry, they may go into academia, they may go to

294

00:53:46.260 --> 00:53:50.940

Alan Sussman: Government labs wherever they go. The research work for us again is very broadly construed

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00:53:51.450 --> 00:54:01.620

Alan Sussman: Okay, but at the point is is that these are people who are eventually you're training people who are eventually or currently doing research in science, science and engineering research which can include computing

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00:54:02.190 --> 00:54:07.470

Alan Sussman: Cyber Infrastructure research is one of those areas, not the only, but by far not the only one.

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00:54:09.000 --> 00:54:23.430

Alan Sussman: There all areas of science and engineering research. But that's when we talked about research work for us. We're talking about, again, that's very broad, but people who were doing research, as opposed to people who are doing software development and industry or you know it or whatever.

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00:54:27.360 --> 00:54:36.000

Joseph Whitmeyer: Can one submit a large scale conceptualization proposal or implementation proposal with the current cyber training project that's in its last year.

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00:54:37.980 --> 00:54:47.700

Alan Sussman: Um, again, there's nothing stopping you from doing that. But you will as part of any NSF proposal, you're going to have to describe your car, your

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00:54:48.570 --> 00:55:00.120

Alan Sussman: Recent NSF projects. And so you would need to make a good argument why that project was successful and why it needs to why you would need to do a follow on

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00:55:01.830 --> 00:55:13.230

Alan Sussman: The, the conceptualization projects large scale conceptualization projects. Those are really a different beast or social looking at, you know, potentially doing planning for a much larger type of project and so

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00:55:15.120 --> 00:55:26.220

Alan Sussman: It would be, it's possible, but it would be a little unusual to propose one of those without having already had a cyber training or project or something similar to actually do some of the initial work on

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00:55:27.420 --> 00:55:29.460

Alan Sussman: Whether it's curriculum development or

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00:55:30.600 --> 00:55:34.170

Alan Sussman: You know, training, training programs in

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00:55:35.250 --> 00:55:37.230

Alan Sussman: Cyber Infrastructure in research.

306

00:55:38.730 --> 00:55:40.110

Alan Sussman: Research workforce development.

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00:55:42.630 --> 00:55:52.140

Stefan Robila: So I see two questions related to meet medium projects that they're not necessarily related, but they are related in terms of medium projects. So the first one is related to

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00:55:52.440 --> 00:56:04.950

Stefan Robila: For medium implementation funding in this in terms of requirements of broadly accessible to the community. How broad is this is it required to be nationwide broad in terms of the material access to the training activity itself.

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00:56:05.640 --> 00:56:09.000

Alan Sussman: So I think we did this earlier. We did a question like this earlier.

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00:56:09.480 --> 00:56:10.500

Mark Hurwitz: It's the same question.

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00:56:10.500 --> 00:56:22.020

Stefan Robila: Okay, so I market my phone the other medium project is do we need to include software release plans in terms of CI infrastructure release plan timeframe open source license type of communities audience, etc.

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00:56:23.790 --> 00:56:32.340

Alan Sussman: Um, that's not required, but if you're going to develop software as part of as part of a cyber training project EDM or whatever.

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00:56:33.240 --> 00:56:37.950

Alan Sussman: You should describe how it's going. You know, first of all, why are you developing it as part of the cyber training.

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00:56:38.340 --> 00:56:53.250

Alan Sussman: Program when not not through some other means. And second, why you know how you're going to actually reach out how that's going to actually enable of the research workforce development that that the project is targeted targeted.

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00:56:56.010 --> 00:57:04.380

Alan Sussman: Again, it's not, this is not a software program a software development program. So we're not going to talk about software engineering processes open, you know, open source licenses. That's

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00:57:04.800 --> 00:57:10.650

Alan Sussman: It's something that's important. If you are developing any software, but that's not part of the requirements of the program.

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00:57:13.560 --> 00:57:15.900

Alan Sussman: Or any of our proposal to the program.

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00:57:21.600 --> 00:57:23.370

Alan Sussman: How many are we down, we started

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00:57:23.430 --> 00:57:27.900

Stefan Robila: Almost a few more, but you can start seeing them we cleared them off for you and then

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00:57:29.070 --> 00:57:35.490

Stefan Robila: So there's a question that you can. I can get it for you are related to I think Joe you're answering the question in terms of pilots.

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00:57:35.550 --> 00:57:38.580

Joseph Whitmeyer: Yeah, but we, you can do it live. I thought, go ahead. Well,

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00:57:38.730 --> 00:57:39.390

Alan Sussman: Last night, what

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00:57:39.570 --> 00:57:51.180

Alan Sussman: Other projects are not required to address all late solicitation specific reports here would be helpful to

address some of those to highlight their viability sustainability and I think I already did respond to this or something so

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00:57:51.390 --> 00:57:52.230

Mark Hurwitz: We answered this.

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00:57:52.620 --> 00:57:58.650

Alan Sussman: And and again I'll just quickly, the answer is yes, you can to make a better argument for your

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00:57:59.460 --> 00:58:12.300

Alan Sussman: Proposal, but it's not required. Right. Again, the pilot projects are only required to address the first two of those location specific criteria that doesn't mean they can't also address some of the others if it makes sense in the context of their project about project.

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00:58:13.710 --> 00:58:22.110

Stefan Robila: So I see two more questions that related to working with teachers. So I'll read them both and then we'll try to see if we can answer them both with working with teachers be possible to

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00:58:22.980 --> 00:58:32.280

Stefan Robila: I will ignore the training ideas part. And the other question is, is it appropriate to include activities training programs for high school students and teachers in K 12 in the proposal.

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00:58:33.090 --> 00:58:44.250

Alan Sussman: Yeah, so I think, again, this is we did at least touch on this earlier. I think that going down into high schools and secondary schools or even below.

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00:58:45.030 --> 00:58:52.860

Alan Sussman: The argument, you have to make is that that's still going to have an impact on the research or research workforce, because again this is a research workforce development program.

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00:58:53.730 --> 00:59:08.670

Alan Sussman: So that's harder to make when you go farther down into the other into secondary schools or even earlier in the pipeline. So it's, I think that those could be possible additional activities as part of a project, but those should be the primary activities with a project.

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00:59:09.990 --> 00:59:11.820

Alan Sussman: That's gonna be a much harder connection to me.

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00:59:13.800 --> 00:59:15.450

To research workforce development.

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00:59:19.650 --> 00:59:21.120

Alan Sussman: Is that the last of the questions.

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00:59:21.240 --> 00:59:29.910

Stefan Robila: Well, I was trying to answer it by text, but there is a question about a person asking for one of the attendees asking for opportunities grants scholarships available.

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00:59:30.480 --> 00:59:39.240

Stefan Robila: At the doctoral level and then I would say that this particular program. It doesn't offer scholarships. It offers you know it it welcomes proposals for programs.

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00:59:39.960 --> 00:59:48.270

Stefan Robila: And what we advise in general. Any questions like this is to really look at the funding opportunities available through the NSF website through fund find funding.

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00:59:48.870 --> 01:00:00.600

Stefan Robila: It's sometimes daunting, because you have 10s of different solicitations but you can search by keywords on the area that you are interested in you can look at maybe a specific director, it's focused on educational foundations to

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01:00:01.170 --> 01:00:04.860

Stefan Robila: To identify your area or search through the woods and the area that

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01:00:06.090 --> 01:00:06.990

Stefan Robila: Right, it's 100

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01:00:07.140 --> 01:00:18.150

Alan Sussman: And if you're really desperate. Then you have email addresses, you can try emailing our program officer in an area that you think is relevant and they may be able to give suggestions, whether it's me or one of the other program officers.

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01:00:19.350 --> 01:00:21.930

Alan Sussman: We can perhaps point you in the right direction.

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01:00:25.110 --> 01:00:27.030

Alan Sussman: So wonderfully

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01:00:27.120 --> 01:00:27.870

Stefan Robila: Perfect timing.

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01:00:28.170 --> 01:00:30.390

Alan Sussman: I was gonna say I think with that.

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01:00:31.740 --> 01:00:41.040

Alan Sussman: I think. Is everybody okay. I think that was the last of the questions. It looks like all of you did such an

excellent job of answering the questions and clearing them out the ones that I didn't answer.

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01:00:41.490 --> 01:00:53.430

Alan Sussman: So I guess with that, I'd like to thank everybody for attending the webinar and I hope we will see lots of really good lots of really good proposals that that makes our life easier.

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01:00:54.570 --> 01:00:55.380

Alan Sussman: So, thank you.

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01:01:03.840 --> 01:01:06.780

Edgar Huertas: I'll go ahead and stop the recording and end the meeting.

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01:01:08.190 --> 01:01:08.610

Thank you.