



**FUNDING OPPORTUNITY ANNOUNCEMENT
FOA-AFRL-AFOSR-2021-0004
AMENDMENT NO. 1
QUESTIONS & ANSWERS**

The following are the questions and answers received. Duplicated questions were only answered once.

Q. I am considering to be a PI for a proposal, and I have a green card but I am not a US Citizen. Can I be the PI or is US Citizenship required?

A: You do not need to be a US citizen to be part of this effort, but non-US citizens will have challenges accessing the DoD facilities and will add coordination challenges to the program execution.

Q. Can the “primary awardee for the purpose of award execution” be a non-profit institution “dedicated to improving science, mathematics, and engineering education” consistent with section C.1.a?

A. Yes

Q. Would describing a proposer’s qualification status in the proposal text be sufficient, or should proposers provide a copy of their incorporation document to validate that they meet the requirement?

A. It is highly recommended.

Q. On page 15 under “Proposal Format” it lists no page limits. Below under “Proposal Length” it appears there should be a table for what is included and excluded from page limits. Can you please clarify any page limits for each section where needed.

A. There is no page limit for the proposal. Please disregard any reference to page limits.

Q. Can a corporate entity be on the grant?

A. Yes, a corporate entity can be on the grant as a sub award. Please note that the rules of the grant apply to all sub awards. Grants prohibit fee/profit.

Q. For Topic 1, how do you envision industry participation? Are they envisioned as subcontractors of a leading university entity?

A. Yes, the subject opportunity envisions industry participation as subcontractors of a leading educational institution.

Q. Are Military Educational Institutions (e.g. USNA, NPS, USMA, USAFA) eligible (to apply)?

A. Military Educational Institutions are NOT eligible to apply as the primary recipient.

Q. Can an FFRDC or National Laboratory be part of the university team for this proposal?

A. Yes, at the sub level. To further clarify:

Ineligible Entities

None of the following entity types are eligible to submit proposals as primary award recipients under this announcement. These entities may participate at the subaward level.

(1) Federally Funded Research and Development Centers (FFRDCs)

(2) Individual persons or people

(3) Federal agencies (to include Military Educational Institutions)

Q. Can DoD laboratory agencies be part of the proposal?

A. DoD Service Laboratories are NOT eligible to apply as the lead institution but can serve as an unpaid collaborator.

Q. Are the discussions/questions on the technical component of the white paper acceptable after the deadline for pre-proposal inquiries (31 Mar 2021 at 11:59 PM Eastern Time)?

A. We are not accepting questions after 31 Mar 2021. If you submit a white paper you will get feedback on the content of the white paper but this will not be a back and forth discussion.

Q. There are eight research concentration areas listed under both Topic One and Topic Two. Does a proposal need to address all of those research concentration areas for a proposal addressing one of the Topics?

A. No. It is not expected that all research concentration areas will be addressed in any single proposal for either of the two Topics. Furthermore, the proposals are not limited to the listed research concentrations. A proposal that identifies innovative and novel solutions for either of the Topics are of interest.

Q. For the multidisciplinary aspect, can that be met by going across departments or must it be across universities?

A. You can have collaborations across departments but we encourage across universities to get more diverse perspectives.

Q. Should this proposal have a significant amount of 6.1 focused research?

A: Yes. This solicitation seeks novel innovative solutions and not incremental improvements over the current state of the art. The SURF wants to push rapidly the boundaries of S&T and encourages partnerships with AFRL and industry partnerships to foster that push but there

still needs to be a significant basic research focus.

Q. Is the white paper limited to 3 pages?

A. Yes, we anticipate that length is enough for a succinct white paper that addresses the items on page 3. We plan to provide timely feedback on white papers and having them exceed the page limit will slow down the process.

Q. For the white paper guidance on page 3 of the proposal, what is meant by “specific proposed activities”?

A. This should include details of your technical approach (deeper than just a list of the technical components) and why this approach is different and better than the current state of the art in meeting the needs highlighted in the topic. This should communicate the general technical feasibility of the approach. A description of technical maturation during the proposed effort and the end results anticipated will help communicate the value proposition. References to peer reviewed research papers are encouraged and are not part of the page count.

Q. If a proposal is awarded to a team that does not have an existing relationship with AFRL, will AFOSR help the PI establish those relationships?

A. Yes, a principal objective of SURI is to establish a close collaboration between researchers at the performing Universities and the relevant AFRL Directorates. Please note access to government facilities will be a challenge for non-US citizens and may add a layer of complexity to collaborations.

Q. Will the basic research results of this effort be eligible for publication in public journals?

A. Yes. Please refer to page 12 of the solicitation for more details on public dissemination of research results.

Q. Will DoD resources be available under this potential award?

A. Some non-financial DoD resources may be available to awardees and AFOSR will help identify and work with awardees for access. These may include access to AFRL facilities, use of supercomputing resources, and use of specialized resources.

Q. What kind of team is expected?

A. We anticipate teams will be made up from multiple universities, not just different departments from the same university, bringing multidisciplinary expertise to the problem set.

Q. What is the level of maturity expected at the end of the award?

A. The SURI solicitation is looking for innovative solutions that have the potential to transition to operations. Any innovative solution that can solve some of the challenges in the topic are of interest. There also needs to be both 6.1 and 6.2 research. Rapid prototyping or demonstration during the effort is a plus.

Q. What type of innovative solution are you looking for?

A. If what you are proposing is not an incremental improvement but a new approach that achieves the goals of the SURJ, then that is of interest. We do not have a preconceived idea of the solution. We are looking at the academic community to provide technology innovation.

Q. Is a prototype required at the end of the effort?

A. A prototype at the end of the effort would be great, but providing an innovation solution that may need further maturation after the grant is complete is reasonable. Collaboration with AFRL will help with this and this also often changes as a program progresses.

Q. Is it possible to exceed the seven PI limit?

A. If there is a compelling reason that more than seven PIs are needed it can be communicated in the white paper for feedback from the topic leads. A white paper is optional but strongly encouraged.

Q. What data is available from current sensors, what are the data formats, and what is the rate/schedule of data transfer from satellites to ground?

A. The most likely data sources would be those publicly available, for example on space-track.org, or from the variety of sources available on the Unified Data Library. The latter holds a wide range of government, commercial, and other SDA data along with a wide variety of other things – like Seradata’s historical launch/anomaly/etc database. Things on UDL aren’t necessarily public or free, as the government is just the storefront, and commercial entities are free to use it as they please, but groups have previously engaged in fruitful agreements with data providers. AFOSR may be able to help gain access to data.

Q. If a system is developed under this effort, who will be the end users of the transitioned system?

A. The answer to this depends on the specific application. Potential end users include organizations within the Space Force that track space objects or fly satellites, among other possibilities.

Q. How critical is it that the research results and simulation architecture are made available to the community in a modern open-source manner? This may definitely help the transition process from academia to industry implementation.

A. We are very interested in open-source ideas where applicable as we don’t want to build a vendor-locked or a bespoke logistics architecture that will limit engagement and integration with the larger community. However, we must carefully select where the open-source elements are required for interoperability as we are also cognizant of commercial elements and the requirement for commercial entities to be profitable. Open interfaces are a major focus, but there are other areas where open source elements may also make sense.

****Tweet Event Transcript is provided on the next page.****

Tweet Event Transcript

AFRL/AFOSR #BasicResearch Chatter SURI FOA

Grants.gov FOA: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=332151>

Pre-event Tweet Friday, March 30th

Join us on Tuesday, March 30th for our next #BasicResearch Chatter hour! We'll highlight the New! **Department of Defense** Space University Research Initiative (SURI) for U.S. Universities. @AFResearchLab #AFOSRBoldResearch #SpaceScience #HighRiskHighReward

#BASICRESEARCH Chatter

Tuesday, March 30th 3:00PM EDT

DO YOU HAVE QUESTIONS ABOUT THE LATEST INITIATIVE FROM SPACE FORCE AND AFRL/AFOSR? ASK THEM HERE!

AIR FORCE RESEARCH LABORATORY (AFRL)

AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)

JOIN THE CONVERSATION ABOUT THE NEW SPACE UNIVERSITY RESEARCH INITIATIVE (SURI)

Pre-event Tweet Monday, March 29th

Join us tomorrow for our next #BasicResearch Chatter hour! We'll highlight the New! Department of Defense Space University Research Initiative (SURI) for U.S. Universities. @DeptofDefense @AFResearchLab #AFOSRBoldResearch #SpaceScience #HighRiskHighReward

Pre-event Tweet Tuesday, March 30th

Join us at 3PM EDT for our next #BasicResearch Chatter hour! We'll highlight the New! Department of Defense Space University Research Initiative (SURI) for U.S. Universities. @DeptofDefense @AFResearchLab #AFOSRBoldResearch #SpaceScience #HighRiskHighReward

Tweet 1: Tuesday, March 30th

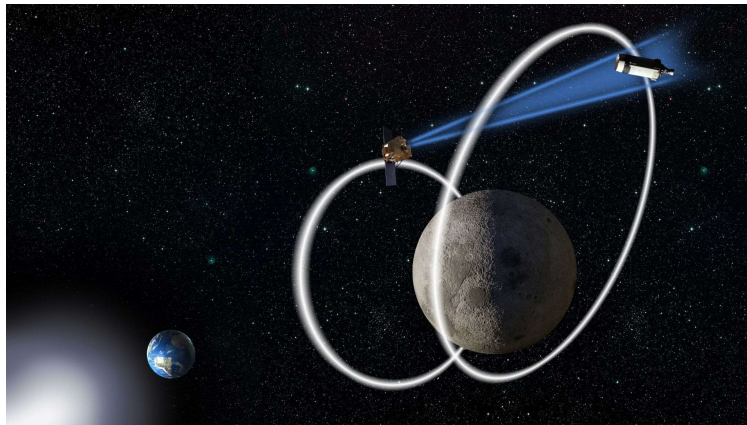
We launch 🚀 today's #BasicResearch Chatter hour with Dr. Stacie Williams, AFRL/AFOSR's Space Architect, & science and contracting SMEs. Have questions about @DeptofDefence's SURI FOA? Reply with your questions or include #AskAFOSR in your tweet. #AFOSRSURI #SpaceScience #Grants

Tweet 2

AFRL/AFOSR's new special funding opportunity announcement (FOA) @DeptofDefense Space University Research Initiative (SURI) for U.S. Universities AFRL-AFOSR-2021-0004 can be found on @grantsdotgov! Apply at <https://go.usa.gov/xsu8R> @AFResearchLab #SpaceScience #Grants #AFOSRSURI

Tweet 3

The FY21 SURI program is focused on directing basic research toward applications that meet US Space Force (USSF) needs and challenges. @AFResearchLab #BasicResearch @SpaceForceDoD #AFOSRSURI #SpaceScience #Grants

**Tweet 4**

SURI is part of the bold #HighRiskHighReward transformational basic research efforts enabling @AFResearchLab to continue to shape disruptive technologies so @usairforce and @SpaceForceDoD can lead ahead of our adversaries. We are building momentum to accelerate future success...

Tweet 5

SURI was initiated as a pilot program to foster engagements between @DeptofDefense agencies & the academic community in a developing @SpaceForceDoD University Consortium to improve transition of critical concepts from the academic sector into revolutionary new military tech.

Tweet 6

Pre-proposal inquiries and questions must be received by email no later than March 31, 2021. The current closing date for applications is June 16, 2021.

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=332151> @DeptofDefense @SpaceForceDoD @AFResearchLab #BasicResearch #SpaceScience #AFOSRSURI

Tweet 7

The SURI program is an exciting new space research opportunity that supports multidisciplinary research efforts, ideally creating synergies to speed DoD-relevant research and development. @DeptofDefense @SpaceForceDoD @AFResearchLab #BasicResearch #SpaceScience #AFOSRSURI

Tweet 8

Eligible applicants are Public and State controlled institutions of higher education and private institutions of higher education. @DeptofDefense @SpaceForceDoD @AFResearchLab #BasicResearch #SpaceScience #AFOSRSURI

Tweet 9

Q: Who is eligible to be the lead of a proposal submission?

A: If your institution is a qualified & responsible educational institution in the United States as defined at 10 U.S.C. 2194.

@DeptofDefense @SpaceForceDoD @AFResearchLab #AFOSRBoldResearch #SpaceScience #AFOSRSURI

Tweet 10

Q: Define educational institution?

A: A local educational agency, college, university, or any other nonprofit institution dedicated to improving science, mathematics, & engineering education. No other entities are eligible to submit applications under this competition. #AFOSRSURI

Tweet 11

Q: Can an industry be listed on the proposal?

A: Yes, a small business or a business that does not meet the small business requirements can be part of the proposal but an industry organization cannot be the lead.

@DeptofDefense @SpaceForceDoD @AFResearchLab #AFOSRSURI #Grants

Tweet 12

Q: Can non-US citizens apply or be part of a SURI application?

A: You do not need to be a US citizen to be part of this effort. For a more information, visit: <https://www.grants.gov/web/grants/view-opportunity.html?oppld=332151> @DeptofDefense @SpaceForceDoD @AFResearchLab #AFOSRSURI #SpaceScience #Grants @grantsdotgov

Tweet 13

Q: Should this proposal have significant 6.1 focused research?

A: Yes. Seeking innovative solutions, not incremental improvements over the current state. SURI pushes boundaries of S&T & encourages partnerships with @AFResearchLab & industry with significant #BasicResearch focus.

Tweet 14

The establishment of @SpaceForceDoD creates a critical need & prime opportunity to continue to invigorate basic scientific research. That is why AFRL/AFOSR is expanding investments to support our new sister service with programs like SURI. @AFResearchLab #BasicResearch #AFOSRSURI

Tweet 15

AFRL is committed to being the research arm of both @usairforce and @SpaceForceDoD— one AFRL, two services, in both word and deed. Within AFRL, AFOSR supports basic research, a critical first step along the path of new capability development. @AFResearchLab #BasicResearch #Grants

Tweet 16

Don't forget! Pre-proposal inquiries and questions must be received by email no later than March 31, 2021. The current closing date for applications is June 16, 2021. <https://www.grants.gov/web/grants/view-opportunity.html?oppld=332151> @DeptofDefense @SpaceForceDoD @AFResearchLab #BasicResearch #SpaceScience #AFOSRSURI

Tweet 17

All questions & answers will be posted on Grants.gov in the weeks following today's chatter hour. <https://www.grants.gov/web/grants/view-opportunity.html?oppld=332151> @AFResearchLab #Grants #FundingOpportunities @DeptofDefense @SpaceForceDoD @AFResearchLab #BasicResearch #SpaceScience #Grants #AFOSRSURI

Tweet 18

Thank you for joining us to learn more about the @DeptofDefense Space University Research Initiative (SURI) for U.S. Universities. We hope we made doing business with us a little more transparent. <https://www.grants.gov/web/grants/view-opportunity.html?oppld=332151> @AFResearchLab #SpaceScience #Grants #FundYourScience

Join us for our next AFOSR #BasicResearch Chatter hour in April! @AFResearchLab #AFOSRBoldResearch #HighRiskHighReward #Grants #FundYourScience