Questions for NSF

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Questions for NSF

1. Can you provide an update on how budget cuts, especially sequestration, are affecting the NSF ERC program? *For FY 13, budget cuts will not affect any of the NSF Center awards. They may impact how many new Centers are awarded in the future.*
2. When do you expect to be able to fund new ERC's? *FY 2014 (NSF 13-560)*
3. Over the next few years, what are the plans for the Annual ERC meeting and ILO Retreats? *Annual meeting is to be every other year.* The ILO retreat is to be once a year.
4. Because there was no Annual ERC meeting this year, the reasoning was that the money already budgeted for the meeting could be applied to the ILO Retreat. That worked for this year but what about next year when an Annual ERC meeting is planned; will the NSF return to funding the ILO retreat? *NSF will provide a supplement to the organizing ERC to cover ILO travel costs in the years when the ILO travel budget is used to attend the annual meeting.*
5. Will NSF continue to fund ILO consultancy visits? Yes, *but we are concerned about high turnover at some ERCs and are adding a performance criteria to indicate that this reflects poor management. The objective is to encourage the ERC leadership to be more careful when hiring for this position.*

Questions for NSF (cont. 1)

6. Can the NSF commission an update to the 2010 "Post-Graduation Status of National Science Foundation Engineering Research Centers" http://www.erc-assoc.org/topics/policies_studies/Grad%20ERC%20Report-Final.pdf ?
   - It would be extremely helpful if, in addition to an update, the report would focus in depth on a few of the more successful graduated centers. *Good suggestions; I can inquire.*
   - It would also be helpful, in the context of this question, if the NSF could detail what characteristics and, importantly, metrics the NSF might use to determine the success of a graduated ERC. *The above referenced report defines the key characteristics a graduated ERC needs to maintain to be in good standing (see the figure on page 14).*

Questions for NSF (cont. 2)

7. Although the "Post-Graduation Status of National Science Foundation Engineering Research Centers" report is extremely useful, it seems there should be a wealth of real life experience from graduated Centers. This would be especially helpful to later stage ERCs. Can the NSF sponsor some kind of interaction at the ILO and, possibly, director levels to help facilitate an exchange of knowledge and experience? *We are doing this to some extent with the ILO consultants, although the current arrangement helps the new Centers the most, while short changing the Centers as they get ready to graduate. At most ERC Annual Meetings, this type of session can be on the agenda. I will convey to Court Lewis what you would like to see at the 2014 ERC Meeting.*

Questions for NSF (cont. 3)

8. It seems that the NSF has placed an emphasis on training and educating students on entrepreneurship. Outside of hosting discussions via seminars and webinars, or holding Innovation and Entrepreneurship bootcamps, what are your expectations of us? All ERCs are *charged with preparing graduates with the skill sets needed to be effective leaders in technological innovation in industry; in addition, Gen-3 ERCs are charged with preparing graduates ts to be more creative and innovative, in a globally competitive economy. In the context of your technology vision, you, your Center Director and Education Director should figure out what it takes to achieve these attributes and the education and innovation ecosystem programs should be joined to produce* the desired results.
   - Are you expecting formal programs and courses to be developed and for all of our students to participate? That up to the ERC to decide.
   - It's my opinion that the majority of the students are simply not interested in starting their own venture/company and that developing courses or a curriculum is a very time intensive process that may only benefit less than 5% of our student population. Being knowledgeable about innovation and entrepreneurship is a foundation for careers in academe and industry not just for those who want to develop start-ups.
   - What are some acceptable methods that can be implemented to meet the NSF's expectations? A committed effort to meet this dimension of an ERC.

Questions for NSF (cont. 4)

9. Can you please discuss NSF best practices around how to document efforts leading to patentable discovery conducted ***inside*** the ERC versus ***outside***, in particular when a PI or Thrust leader is also involved in a spin-out company interested to commercialize his/her research?
   There are general guidelines in the Best Practices handbook. If your question is about Conflict of Interest that arises when the leadership team has an active interest in a spinout and wants to launch it using ERC funds, this does create a conflict situation where the members of the leadership team are making decisions about the use of government funds that might benefit them financially. That situation must be managed by the PI or Thrust leader's university.

Questions for NSF (cont. 5)

10. Let's explore the case of a small (startup) company that has a new technology and IP protecting that technology, but they don't have the money to develop it fully.
    - In return for access to center resources and infrastructure, the startup offers the ERC the technology to help them develop it. *This is not the kind of question that can be answered in abstract. Generally, the ERCs are pretty good at generating their own IP, so what is the advantage of linking up with a start-up that has no resources of its own and has no basis in the ERC's research program. ERCs are not charged with a mission to help start-up firms.*
    - How do we approach that in terms of bringing the startup's existing IP into the center? Is there a precedent for that? *I see no advantage to bringing existing IP of a startup into the ERC; it would weaken the IP position of the Start-up.*
    - More generally, can we discuss ERC corporate membership in terms of startups vs. large company membership? If a startup wants to join or in some other way become affiliated with the center, and they obviously can't pay much in terms of annual dues, what can they bring to the table? There may be situations where a *Start-up in the ERC's field can bring knowledge of technology development in areas where faculty often have no direct knowledge. In that context, it makes sense to allow them to pay significantly less than other firms and to contribute more in-kind.*
    - For example, are there any examples of startups giving equity to an ERC in order to join the center? *ERC entity cannot own equity and particularly shouldn't hold equity in member firms because it would create a conflict of interest situation. In contrast, the university can hold equity, so there is a possibility that the university could accept equity from the firm in exchange for paying cash to the ERC to cover the dues. In the event the university agrees to pay the firm's dues, the problem is reduced to agreeing on the equity valuation of the firm. Other universitities have used non-profit foundations to perform this function (see for example* http://www.warf.org/ *)*