

NSF 13-040

Frequently Asked Questions for NSF 13-518, INSPIRE

Date: 01/03/13

FIRST STEPS, GENERAL BACKGROUND

- 1. I have an idea that I think is appropriate for INSPIRE. How should I proceed?
- 2. I have an unconventional interdisciplinary idea that I have been reluctant to submit to a regular NSF review process because I think the reviewers will be too risk-averse to evaluate it favorably. Should I consider submitting this as an INSPIRE proposal?
- 3. Should I or should I not contact NSF program directors to discuss my idea before submitting the letter of intent (LOI)?
- 4. In other solicitations, LOIs are generally for NSF's information only and are not reviewed. That is, a prospective proposal is not ruled out on the basis of the content of the LOI. Is this the case here, or is INSPIRE different in this regard?
- 5. Since the INSPIRE funding opportunities are pilots that may deviate from established policies, are they exempted from the January 2013 revisions of the NSF Proposal & Award Policies & Procedures Guide (PAPPG), or from the PAPPG changes to implement revised merit review criteria?
- 6. Does INSPIRE differ from other NSF programs in its application of the two merit review criteria of intellectual merit and broader impacts?
- 7. Will these pilot INSPIRE review processes displace the standard NSF review process?
- 8. In fiscal year 2012, what fraction of CREATIV inquiries (counterparts of INSPIRE Track 1 LOIs in 2013) resulted in invitations to submit a full proposal? For those that were not invited, what was the most common reason for the non-invitation?
- 9. If I am unable to obtain a full-proposal invitation based on NSF staff review of the content of my LOI, but I still want to submit an INSPIRE proposal, what can I do?

DEADLINES AND SUBMISSION WINDOWS

- 10. Is the December 10, 2012, date in the solicitation a deadline?
- 11. Is there any advantage to submitting a LOI early in the submission window, in order to enter the competition while funds are still available?
- 12. In the deadlines, why are there three full-proposal categories (Track 2, Track 1, Director's Awards) and only two letter-of-intent (LOI) categories (Track 2, Track 1)?

TRACK 1 AND DIRECTOR'S AWARD

- 13. Is there any way to apply directly for a Director's INSPIRE Award?
- 14. How can I designate my Track 1 LOI to be considered for a Director's Award?
- 15. The solicitation notes that Track 1 is essentially a continuation of the fiscal year 2012 pilot CREATIV mechanism. What are the differences?
- 16. How does the INSPIRE Track 1 mechanism differ from the existing EAGER mechanism?
- 17. How can a single investigator propose interdisciplinary work for a Director's INSPIRE Award? Doesn't interdisciplinary research need a team of disciplinary experts?
- 18. Does the Director's INSPIRE Award target early- to mid-career individuals?
- 19. The Director's INSPIRE Award is to support the interdisciplinary research of an individual investigator. Officially, does the award go to an individual or to an institution?
- 20. One of the additional components in a Director's Award candidate proposal, beyond the base Track 1 proposal, is letters of collaboration. However, the Director's Award is only for single investigators, with no co-Pls. Is this inconsistent?
- 21. Can you provide an overview of the review process for Track 1 and Director's Awards?

TRACK 2

- 22. The solicitation describes Track 2 awards as "mid-scale" research projects. What does this mean, and is it related to mid-scale instrumentation?
- 23. What are the differences between Track 2 review and Track 1 review?
- 24. The Track 2 description indicates that expectations for significant broader impacts will be higher than for Track 1. How should I address this?
- 25. Can you provide an overview of the review process for Track 2?

FUTURE INSPIRE FUNDING OPPORTUNITIES

- 26. INSPIRE is an ongoing initiative. As a part of it, will Track 1, Track 2, and Director's Awards continue in FY 2014 and beyond?
- 27. If INSPIRE funding increases until FY 2016 as planned, what other funding opportunities will it include?

INTERDISCIPLINARITY

- 28. The solicitation states that a Track 1 INSPIRE award must be substantially co-funded by at least two (three for Track 2 or larger Track 1 proposals) intellectually distinct NSF divisions or programs. What is meant by "intellectually distinct"?
- 29. In the same vein, what is meant by "substantially co-funded"?
- 30. The Track 2 description further refers to at least three NSF divisions or programs "whose research communities do not have a well-established history of collaboration". How is this criterion defined?

INTERNATIONAL ISSUES

- 31. The Track 2 description specifies that international collaboration may constitute a rationale for submission of a mid-scale proposal, but can Track 1 and Director's INSPIRE Awards contain an international dimension?
- 32. Is the Office of International Science and Engineering considered one of the two (Track 1 and Director's INSPIRE Awards) or three (Track 2) intellectually distinct NSF divisions or programs that are necessary for a full-proposal invitation and subsequently for an award?

BUDGET

- 33. Does the requested duration affect the maximum allowable award? For example, could I request \$1,000,000 for three years in a Track 1 proposal, or does it have to be over five years?
- 34. Could a budget of \$1,000,000 or less (which would be within Track 1 limits) be proposed for Track 2?
- 35. My project requires a level of funding that is greater than the INSPIRE Track 1 two-program limit of \$800,000, and it involves two very distinct research disciplines. Can I apply for the "mid-scale" INSPIRE Track 2 to obtain this greater funding level?
- 36. Are logistics costs such as ship time considered to be part of the maximum award?
- 37. I am trying to determine the scope of my Track 2 project, and one option is to estimate the budget request to be the upper limit of \$3,000,000 in the LOI. Would this put my project at a competitive disadvantage?

APPROPRIATENESS FOR INSPIRE

- 38. I have a proposal that was declined because some reviewers said that the techniques would not work. Can I resubmit this as an INSPIRE proposal?
- 39. I have an award that expires in 2013. Can I apply for renewed funding through an INSPIRE proposal?
- 40. Does an INSPIRE proposal have to address "hot topics" or Administration science and technology priorities for the 2013 budget?
- 41. Can an INSPIRE proposal involve biomedical research?
- 42. Are education projects eligible for INSPIRE?

ELIGIBILITY

- 43. Is there a limit on the number of PIs and co-PIs?
- 44. Can I be the PI on a Track 1 letter of intent (LOI) and on a Track 2 LOI?
- 45. I expect to have co-PIs on my full proposal, if I am invited to submit one. The FastLane letter of intent (LOI) form allows only one PI and does not have a field called "co-PIs". How should I list the co-PIs?
- 46. If I submit a Track 1 LOI as the PI and I list some other people as "Other Senior Project Personnel", is it possible that program directors will choose to nominate me for candidacy for a Director's INSPIRE Award as a separate individual?

- 47. I work at a national laboratory (federally funded research and development center (FFRDC), not sponsored by NSF) or a private company, and I have an adjunct appointment at a university. Can I be the PI on an INSPIRE proposal?
- 48. Can a PI or co-PI be located at a non-U.S. organization?
- 49. Can a subaward be made to a non-U.S. organization?
- 50. Can an institution that only awards undergraduate degrees submit an INSPIRE proposal?
- 51. Can a non-profit organization submit a proposal? Will those proposals be reviewed differently?
- 52. Can a postdoc be the PI on an INSPIRE proposal? Does it matter whether the postdoc is a U.S. citizen?
- 53. Can an INSPIRE proposal be interagency?

LETTER OF INTENT (LOI) SUBMISSION

- 54. There are two parts to the letter of intent (LOI): the directly-submitted FastLane form and the offline Supplemental Form sent to inspire@nsf.gov . What are the reasons for this complication, and how will NSF put the two parts of my LOI together?
- 55. What is the overall limit on the length of the letter of intent (LOI)?
- 56. Is the LOI Supplemental Form required?
- 57. Can I submit a letter of intent early in the submission window, and then modify it later in the window and resubmit it, or does this violate the LOI limit for a single PI?
- 58. Can an LOI be submitted through Grants.gov?
- 59. Does the LOI have to incorporate the Intellectual Merit and Broader Impacts review criteria and follow the new guidance on Merit Review Principles and Criteria (http://www.nsf.gov/nsb/publications/2011/meritreviewcriteria.pdf)? Will the Solicitation Specific Review Criteria be used to evaluate the Letters of Intent?
- 60. When will I hear whether my LOI has been invited for submission of a full proposal?

FULL PROPOSAL SUBMISSION

- 61. I submitted a Track 1 LOI as a single investigator. Now, program directors have informed me that they intend to nominate me as a candidate for a Director's INSPIRE Award. What do I do? Do I have to accept the nomination, or do I have the option of submitting a regular Track 1 full proposal instead?
- 62. If I submit a Director's Award candidate full proposal without letters of collaboration or without an interdisciplinary publication among the Supplementary Documents, does this put me at a disadvantage?
- 63. If I submit a candidate proposal for a Director's Award and do not win one of these awards, does this put me at any disadvantage for a Track 1 award?
- 64. The solicitation notes that invited candidate full proposals for the Director's INSPIRE Award that do not receive that award remain eligible for support through Track 1 on the basis of the invited full

proposal. Yet Director's INSPIRE Award proposals receive not only program director review as INSPIRE Track 1 awards, but also blue-ribbon panel review for a Director's INSPIRE Award. What happens if these two reviews are in conflict?

- 65. Can the content of a full proposal differ significantly from that of the LOI that led to the corresponding invitation?
- 66. When submitting my INSPIRE Track 1 full proposal, I have to choose a primary program in FastLane. Does it matter which of the interested programs I choose?
- 67. How long should my Track 1 Project Description be? Will I be penalized if it is less than 15 pages?
- 68. Why is a Track 1 full proposal submitted to one of the prospective co-funding programs, while a Track 2 full proposal is submitted to the INSPIRE program under the Office of Integrative Activities (OIA)?
- 69. What happens if I forget to include "INSPIRE Track 1:" or "INSPIRE Track 2:" in the title of my invited full proposal? Will it be returned without review?
- 70. Does the title of my invited Director's INSPIRE Award full proposal award simply start with "INSPIRE Track 1:" or do I need to include "INSPIRE Track 1 Director's Award:" or something similar?

FULL PROPOSAL REVIEW

- 71. For the additional INSPIRE intellectual merit criteria relating to interdisciplinarity, does my proposal have to respond to the four specific items ("Combining concepts/methods ...", etc.) listed in the solicitation?
- 72. How important is it that an INSPIRE proposal be potentially transformative?
- 73. Do I need to include preliminary data to show feasibility?
- 74. How will the internal review process for INSPIRE proposals work?
- 75. What is the role of the blue-ribbon panel in the review of Track 2 and Director's Award proposals, and what type of backgrounds should I expect its members to have?
- 76. If my Track 2 proposal is subject to a reverse site visit after the blue-ribbon panel, how will this work?
- 77. When will I hear whether my INSPIRE full proposal is awarded or declined?
- 78. My INSPIRE proposal was declined, and I do not agree with the reasons for the decision. What can I do?

FIRST STEPS, GENERAL BACKGROUND

1. I have an idea that I think is appropriate for INSPIRE. How should I proceed?

Well before the formal process begins with submission of a FastLane letter of intent (LOI) for INSPIRE solicitation NSF 13-518, you should put considerable thought and planning into your proposal idea. Define the size and scope of your project, in order to determine which of the two basic INSPIRE funding opportunities (Track 1 and Track 2) to pursue, and to estimate the

total funding request as required by the LOI. (The third INSPIRE funding opportunity, Director's Awards, is available only indirectly by submitting a Track 1 LOI as a single investigator.) Identify at least two (for Track 1) or three (for Track 2) appropriate NSF **program directors** to evaluate your LOI. Do this thoughtfully; carefully consider the program directors you name for their relevance to the project - naming program directors who are far removed from your topic will lead to delays and unproductive effort both for you and for them. **Do not name senior managers** (director, deputy director, office head, office director, assistant director, deputy assistant director, division director, deputy division director, section head). If you need assistance in finding appropriate program directors, some keyword searching of the NSF web site may be helpful in finding appropriate NSF divisions and programs, for example by using the "Search Funding Opportunities" box in the left-hand column of the NSF home page, or the "Search Award For" box in the Award Search database. Another potential resource is the NSF Interdisciplinary Research web site, http://www.nsf.gov/od/iia/additional resources/interdisciplinary research/, where the Contact Options page suggests various approaches, and the Points of Contact page lists people who can be helpful at the directorate level.

2. I have an unconventional interdisciplinary idea that I have been reluctant to submit to a regular NSF review process because I think the reviewers will be too risk-averse to evaluate it favorably. Should I consider submitting this as an INSPIRE proposal?

Yes, if your description is accurate, this is a primary type of proposal that INSPIRE is intended for. As explained above, identify the appropriate number of program directors and submit a letter of intent to start the process.

3. Should I or should I not contact NSF program directors to discuss my idea before submitting the letter of intent (LOI)?

This depends on your specific circumstances. Program directors welcome inquiries as to whether a particular topic is of interest to their program(s), and they will readily discuss this briefly with you, but they field a large number of similar inquiries and this is not a necessary step for INSPIRE. Your objective is to identify the most appropriate program directors to evaluate your LOI, and then to make the case to them for your project in the submitted LOI itself. Any pre-submission contact should be to aid in identifying appropriate program directors, not to make the case for funding your project.

4. In other solicitations, LOIs are generally for NSF's information only and are not reviewed. That is, a prospective proposal is not ruled out on the basis of the content of the LOI. Is this the case here, or is INSPIRE different in this regard?

INSPIRE is different, and prospective proposals will be ruled out on the basis of review of the content of the LOIs by NSF staff. Thus, you must make a substantive scientific case in the LOI. The INSPIRE funding opportunities are being offered as approved pilot activities that deviate in certain ways from established NSF policies.

5. Since the INSPIRE funding opportunities are pilots that may deviate from established policies, are they exempted from the January 2013 revisions of the NSF Proposal & Award Policies & Procedures Guide (PAPPG), or from the PAPPG changes to implement revised merit review criteria?

No. The revisions and changes explained in the Important Information and Revision Notes section of the solicitation, with links to the relevant NSF documents, apply fully to INSPIRE. Since all submissions in response to the solicitation are due later than January 14, 2013, the latest revisions and changes apply to all INSPIRE proposals. The earlier revisions regarding

Data Management Plans and Postdoc Mentoring Plans apply as well.

6. Does INSPIRE differ from other NSF programs in its application of the two merit review criteria of intellectual merit and broader impacts?

No, not at a basic level, though the Additional Solicitation Specific Review Criteria section elaborates on the two criteria in the INSPIRE context. As for all NSF programs, both criteria are important in the evaluation of INSPIRE letters of intent and proposals. For further information, you can consult the recent National Science Board report on review and revisions of the NSF merit review criteria, NSB 12-11, http://nsf.gov/nsb/publications/2011/nsb1211.pdf. Specifically with regard to broader impacts, the report states that: "NSF projects, in the aggregate, should contribute more broadly to achieving societal goals. These 'Broader Impacts' may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project."

7. Will these pilot INSPIRE review processes displace the standard NSF review process?

This program and its review processes will never displace the standard NSF "gold standard" review process. INSPIRE represents a small (less than 2%) part of the NSF portfolio and is an experiment, intended only for bold, exceptional proposals that may be at a disadvantage in the standard process, perhaps because they are viewed as too speculative. In fact, established NSF policy already allows programs to obligate up to 5% of their funds to EAGER and RAPID proposals that are exempt from external review. Thus, the notion of alternative mechanisms for unusual proposals is not new. However, note also that INSPIRE Track 2 and the Director's INSPIRE Award will have external review as part of their processes.

8. In fiscal year 2012, what fraction of CREATIV inquiries (counterparts of INSPIRE Track 1 LOIs in 2013) resulted in invitations to submit a full proposal? For those that were not invited, what was the most common reason for the non-invitation?

About one-eighth of the inquiries resulted in an invitation - the program directors functioned as a strict, rigorous filter. The most common reason for non-invitation was that the program directors found the inquiry to be suitable for a submission to a regular research program utilizing a standard review process, possibly involving multi-program co-review. INSPIRE is intended for proposals that may be thought to be at a disadvantage in standard review processes due to their bold, interdisciplinary approaches.

9. If I am unable to obtain a full-proposal invitation based on NSF staff review of the content of my LOI, but I still want to submit an INSPIRE proposal, what can I do?

If you submit the INSPIRE proposal without the written invitation, it will be returned without review. You could possibly reformulate your proposal idea, or consider other submission mechanisms.

DEADLINES AND SUBMISSION WINDOWS

10. Is the December 10, 2012, date in the solicitation a deadline?

No. This is the first date within the submission window during which LOIs can be submitted. The LOI deadlines are in February and March 2013.

11. Is there any advantage to submitting a LOI early in the submission window, in order to enter the competition while funds are still available?

No. In 2012, CREATIV was managed on a rolling basis, with an open submission window. This year, for all INSPIRE funding opportunities, there is a single LOI deadline, single round of full-proposal invitations, and contemporaneous review of full proposals.

12. In the deadlines, why are there three full-proposal categories (Track 2, Track 1, Director's Awards) and only two letter-of-intent (LOI) categories (Track 2, Track 1)?

There is no Director's Award LOI, because the Director's Award funding opportunity is available only by submitting a Track 1 LOI as a single investigator.

TRACK 1 AND DIRECTOR'S AWARD

13. Is there any way to apply directly for a Director's INSPIRE Award?

No. You submit a Track 1 LOI as a single investigator. NSF program directors will decide whether to nominate you for candidacy for a Director's Award. Once nominated, you will be asked to submit supplemental information in support of your nomination.

14. How can I designate my Track 1 LOI to be considered for a Director's Award?

All single-investigator Track 1 LOIs will be considered. These are LOIs that do not list any other people as "Other Senior Project Personnel".

15. The solicitation notes that Track 1 is essentially a continuation of the fiscal year 2012 pilot CREATIV mechanism. What are the differences?

Scientifically, and in terms of review criteria and award specifications, it is the same. It is being managed differently in 2013. Instead of an open inquiry window with rolling review and funding commitments as in 2012, there is a single LOI deadline, single round of full-proposal invitations, and contemporaneous review of full proposals. The funding will be coordinated with the management of Track 2 and Director's Awards, which had no counterparts in 2012.

16. How does the INSPIRE Track 1 mechanism differ from the existing EAGER mechanism?

EAGER projects are limited to two years' duration and \$300,000 in funding. As explained in the Grant Proposal Guide,

http://www.nsf.gov/pubs/policydocs/pappguide/nsf13001/gpg_2.jsp#IID2, EAGER supports exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches. EAGER awards are typically supported by one disciplinary program, entirely with its own funds. The INSPIRE Track 1 mechanism allows for increased project scope, beyond the exploratory stage in both duration and funding level. Track 1 requires interdisciplinarity in both content and co-funding, in keeping with the goals of INSPIRE. Also, the FY 2013 INSPIRE budget request provides NSF-wide funding to leverage the investments of the co-funding programs in Track 1 awards.

17. How can a single investigator propose interdisciplinary work for a Director's INSPIRE Award? Doesn't interdisciplinary research need a team of disciplinary experts?

The intent of the Director's INSPIRE Award is to highlight those exceptional individuals who can propose potentially transformative science that meets the review criteria.

18. Does the Director's INSPIRE Award target early- to mid-career individuals?

The solicitation notes that such individuals are especially encouraged to submit Track 1 LOIs that would make them eligible for consideration for Director's Awards. All investigators at all career stages are encouraged to consider this possibility if they have appropriate bold, interdisciplinary project ideas. The particular encouragement for early- to mid-career investigators is to help them overcome any reluctance to pursue such research at their particular career stage.

19. The Director's INSPIRE Award is to support the interdisciplinary research of an individual investigator. Officially, does the award go to an individual or to an institution?

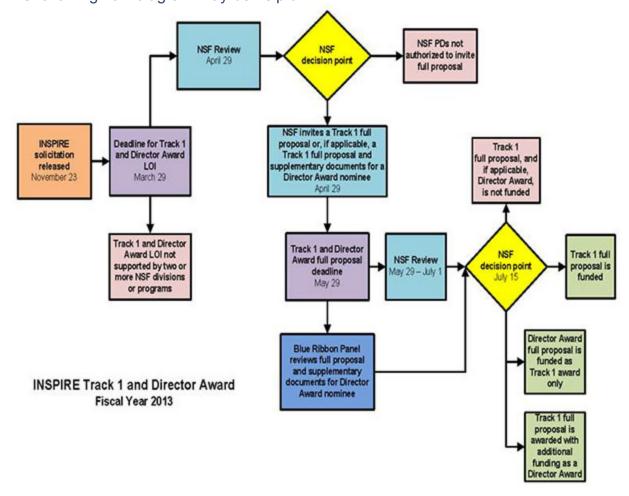
Similarly to CAREER awards, the award officially goes to the PI's institution, but is primarily viewed as an award to the individual.

20. One of the additional components in a Director's Award candidate proposal, beyond the base Track 1 proposal, is letters of collaboration. However, the Director's Award is only for single investigators, with no co-Pls. Is this inconsistent?

The Director's Award is for interdisciplinary research by an individual investigator. The individual should be making intellectual contributions to multiple fields, but some of these contributions could depend on collaborations with other researchers (whose research will not be directly supported by the Director's Award, i.e., they will be unfunded collaborators). This should be addressed fully in the Supplementary Documents submitted along with the base Track 1 proposal.

21. Can you provide an overview of the review process for Track 1 and Director's Awards?

The following flow diagram may be helpful:



22. The solicitation describes Track 2 awards as "mid-scale" research projects. What does this mean, and is it related to mid-scale instrumentation?

In 2012, the National Science Board issued a report on NSF support of unsolicited mid-scale research, NSF 12-22 (http://nsf.gov/nsb/publications/2012/nsb1222.pdf). That report elaborates on this concept. Mid-scale instrumentation is a separate issue, on which the National Science Board reported to Congress in late 2011. As the solicitation explains, Track 2 proposals can request substantial funding for instrumentation if this is justified by the needs of the research, and if the instrumentation itself is highly innovative.

23. What are the differences between Track 2 review and Track 1 review?

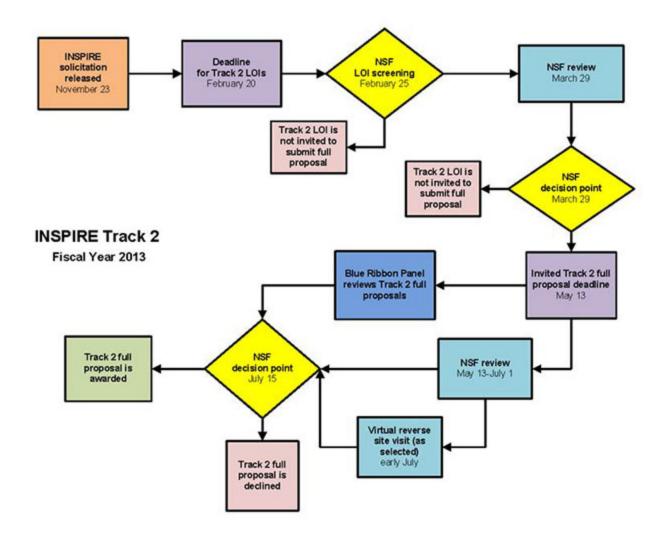
As with CREATIV in 2012, only internal review is required for Track 1. On the basis of the LOI, program directors will determine whether to invite a full proposal, which they can subsequently review internally. The process is relatively straightforward, and the split funding commitments are at a level that programs can typically invest comfortably. In view of the greater magnitude of Track 2, its process is necessarily more complicated. Beyond scientific backing of LOIs by program directors, full-proposal invitations require potential support such that a strong full proposal would have a reasonable prospect of being awarded at or near the LOI's requested budget level; INSPIRE Track 2 does not seek to make awards with greatly reduced budgets. Thus, the LOI review entails assessment of resource interest as well as scientific interest. Subsequently, invited full proposals are reviewed externally by a blue-ribbon panel of broad scientific thinkers, as well as internally for more specialized expertise by program directors (and by external *ad hoc* reviewers, as needed). Pending availability of funds, we anticipate that most Track 1 full proposals will result in awards, as was the case for CREATIV in 2012 (and for EAGER proposals in recent years); Track 2 invitations will be calibrated to create a healthy competition for available funds.

24. The Track 2 description indicates that expectations for significant broader impacts will be higher than for Track 1. How should I address this?

As a starting point, you can consult the recent National Science Board report on review and revisions of the NSF merit review criteria, NSB 12-11, http://nsf.gov/nsb/publications/2011/nsb1211.pdf.

25. Can you provide an overview of the review process for Track 2?

The following flow diagram may be helpful:



FUTURE INSPIRE FUNDING OPPORTUNITIES

26. INSPIRE is an ongoing initiative. As a part of it, will Track 1, Track 2, and Director's Awards continue in FY 2014 and beyond?

These three funding opportunities are pilots that will be evaluated as experience is gained with them. The current expectation is that they will continue.

27. If INSPIRE funding increases until FY 2016 as planned, what other funding opportunities will it include?

Future INSPIRE funding opportunities are under discussion by NSF management and staff. For FY 2013, Track 1, Track 2, and Director's Awards will be the only funding opportunities under INSPIRE. There are no current plans to expand this portfolio further.

INTERDISCIPLINARITY

28. The solicitation states that a Track 1 INSPIRE award must be substantially co-funded by at least two (three for Track 2 or larger Track 1 proposals) intellectually distinct NSF divisions or programs. What is meant by "intellectually distinct"?

The intent of this criterion is that the project be interdisciplinary, in a manner that attracts support from multiple programs that extend beyond the scope of one (or two for Track 2 or larger Track 1 proposals) field(s). The NSF organizational structure is not the primary determining factor, because some divisions cover multiple disciplines, and some disciplines

are supported by more than one division. NSF staff will judge whether a proposal meets this criterion. If there are doubts or ambiguities, principal investigators should discuss this issue with NSF staff early in the process, before committing significant effort to writing a letter of intent or a proposal. If two co-funding programs are from the same NSF division, it would be useful for the proposal to argue that the programs represent distinct disciplinary communities.

29. In the same vein, what is meant by "substantially co-funded"?

This criterion is meant to require serious interest from the co-funding programs, i.e., "token" contributions are discounted for this purpose.

30. The Track 2 description further refers to at least three NSF divisions or programs "whose research communities do not have a well-established history of collaboration". How is this criterion defined?

Like the term "intellectually distinct", NSF staff will judge this. The LOI or full proposal should make a case for this criterion. Possible arguments could be based on the communities not attending the same conferences, not publishing in the same journals, and so on.

INTERNATIONAL ISSUES

31. The Track 2 description specifies that international collaboration may constitute a rationale for submission of a mid-scale proposal, but can Track 1 and Director's INSPIRE Awards contain an international dimension?

International participation is welcome and encouraged in any INSPIRE proposal where it advances the intellectual merit and broader impacts of the proposal.

32. Is the Office of International Science and Engineering considered one of the two (Track 1 and Director's INSPIRE Awards) or three (Track 2) intellectually distinct NSF divisions or programs that are necessary for a full-proposal invitation and subsequently for an award?

Not for Track 1 and Director's INSPIRE Awards - there must be at least two other disciplinary sponsors in order to meet the interdisciplinary criterion. Where there is significant international engagement, to be determined upon consultation with an OISE program director, OISE participation as a third program sponsor will allow these proposals to be considered at a funding level of \$1,000,000 instead of the two-program limit of \$800,000. For Track 2, the answer can be "yes" in the following restricted sense. There must be at least three disciplines involved in the overall project. If the international component is contributing to the intellectual merit of the project by engaging a third discipline outside the U.S., OISE may be considered as one of the three intellectually distinct NSF divisions or programs for Track 2. The case for this must be made in the letter of intent and the full proposal. If the international component is of a more typical nature, such that it is mainly a broader impact, OISE can be a fourth program sponsor, but not one of the three that are required for an invitation or an award.

BUDGET

33. Does the requested duration affect the maximum allowable award? For example, could I request \$1,000,000 for three years in a Track 1 proposal, or does it have to be over five years?

The requested duration does not affect the maximum allowable award. You could request

\$1,000,000 over three years in a Track 1 proposal, if you have written authorization from at least three intellectually distinct divisions or programs (with two, the limit is \$800,000). The analogous flexibility holds for Track 2.

34. Could a budget of \$1,000,000 or less (which would be within Track 1 limits) be proposed for Track 2?

Yes. Note that this will lead to a more complicated review process than Track 1, under more demanding review criteria.

35. My project requires a level of funding that is greater than the INSPIRE Track 1 two-program limit of \$800,000, and it involves two very distinct research disciplines. Can I apply for the "mid-scale" INSPIRE Track 2 to obtain this greater funding level?

To apply for Track 2, you will need to engage a third intellectually distinct division or program, to the extent that this third source would consider substantial co-funding. It could come from the same division as one of the first two co-funders, if a case can be made that the third funder represents a distinct research community that does not have a well-established history of collaboration with the first two.

36. Are logistics costs such as ship time considered to be part of the maximum award?

This will be determined on a case-by-case basis, in consultation with the involved NSF organizations. In some cases, they may be permitted to add such non-research costs to the overall budget, independent of the research funding.

37. I am trying to determine the scope of my Track 2 project, and one option is to estimate the budget request to be the upper limit of \$3,000,000 in the LOI. Would this put my project at a competitive disadvantage?

Beyond scientific backing of LOIs by program directors, full-proposal invitations require potential support such that a strong full proposal would have a reasonable prospect of being awarded at or near the LOI's requested budget level; INSPIRE Track 2 does not seek to make awards with greatly reduced budgets. Thus, the LOI review entails assessment of resource interest as well as scientific interest. This means that a larger request will face a higher threshold of support to be viable. On the other hand, the first consideration for prospective co-funders will be the level of excitement conveyed by the science, which may be a function of the scientific scope. This is a judgment call for you to make.

APPROPRIATENESS FOR INSPIRE

38. I have a proposal that was declined because some reviewers said that the techniques would not work. Can I resubmit this as an INSPIRE proposal?

First, you should discuss this with appropriate program directors, probably including someone from the program that handled your declined proposal. As the solicitation describes, an INSPIRE proposal is different from a regular program proposal, and is subject to additional review criteria. If your idea attracts the required interest from program directors who evaluate the content of a letter of intent, you could write a new INSPIRE proposal on the basis of that invitation.

39. I have an award that expires in 2013. Can I apply for renewed funding through an INSPIRE proposal?

You can, in principle, though it is unlikely that this will be appropriate. As the solicitation indicates, projects that continue well-established lines of research, or that can be expected to receive an appropriate evaluation through external review in regular programs, should go through a regular NSF review process and are not appropriate for submission as INSPIRE proposals. You should only consider the INSPIRE mechanisms if there is something exceptional about your "renewal" request. If your request is for a conventional renewal, and you submit an INSPIRE letter of intent, program directors will inform you that your proposal should go through a regular external review process instead.

40. Does an INSPIRE proposal have to address "hot topics" or Administration science and technology priorities for the 2013 budget?

No. There are no favored topics. In terms of review criteria, unusual promise for societal benefit can contribute to the broader impacts of a proposal. For further discussion of this point, see the recent National Science Board report on review and revisions of the NSF merit review criteria, NSB 12-11, http://nsf.gov/nsb/publications/2011/nsb1211.pdf.

41. Can an INSPIRE proposal involve biomedical research?

Yes, under the same limitations as any NSF proposal, as explained in the Grant Proposal Guide, http://www.nsf.gov/pubs/policydocs/pappguide/nsf13001/gpg_1.jsp#IB. Discussion with program directors will clarify this point.

42. Are education projects eligible for INSPIRE?

Yes, education projects are eligible but must address STEM subject matter and must focus on *research* on education or learning. A number of programs in addition to those in the Directorate for Education and Human Resources also fund research on the science underlying learning. Proposals focused on implementation activities (e.g., the provision of student support, teacher professional development) are discouraged. Like all INSPIRE proposals, prospective principal investigators must obtain through a letter of intent the interest of program directors in two or more intellectually distinct divisions or programs, leading to a written invitation to submit a full proposal. In the case of projects in research on education and learning, this will typically mean programs from different directorates or offices of NSF.

ELIGIBILITY

43. Is there a limit on the number of PIs and co-PIs?

Because INSPIRE does not accept multi-institution collaborative proposals (i.e., a multi-organization project must be submitted as a single proposal, including requests for subawards), at most five investigators can be listed on the cover sheet of a full proposal. In principle, there is no limit on the number of senior personnel on an INSPIRE project. Generally, it is expected that Track 1 awards will support an individual PI or a small team. A Director's Award is for an individual PI only.

44. Can I be the PI on a Track 1 letter of intent (LOI) and on a Track 2 LOI?

No. The PI limit is a total of one LOI to all INSPIRE funding opportunities. However, you can be the PI on one LOI and a collaborator or co-PI (listed under "Other Senior Project Personnel") on others.

45. I expect to have co-PIs on my full proposal, if I am invited to submit one. The FastLane letter of intent (LOI) form allows only one PI and does not have a field called "co-PIs". How

should I list the co-Pls?

List them under "Other Senior Project Personnel". If you are invited to submit a full proposal, the co-PIs can be listed as usual on the proposal cover sheet.

46. If I submit a Track 1 LOI as the PI and I list some other people as "Other Senior Project Personnel", is it possible that program directors will choose to nominate me for candidacy for a Director's INSPIRE Award as a separate individual?

No. Only the PIs of single-investigator Track 1 LOIs, with no one listed as "Other Senior Project Personnel", will be considered for Director's INSPIRE Award nominations.

47. I work at a national laboratory (federally funded research and development center (FFRDC), not sponsored by NSF) or a private company, and I have an adjunct appointment at a university. Can I be the PI on an INSPIRE proposal?

The proposal must be submitted by a U.S. academic institution, by a U.S. non-profit, non-academic organization, or by an NSF-sponsored FFRDC. A non-NSF-sponsored FFRDC or a private for-profit organization cannot submit a proposal. If the institution where you hold the adjunct appointment will submit a proposal on which you are the PI, NSF will accept it for review.

48. Can a PI or co-PI be located at a non-U.S. organization?

Proposals must be submitted by a U.S. academic institution, by a U.S. non-profit, non-academic organization, or by an NSF-sponsored FFRDC. It is up to the submitting organization to decide who is, or is not, eligible to serve as a PI or co-PI. As the position of PI or co-PI is an administrative role, different organizations may have different rules regarding individuals from outside their organization serving in these roles.

49. Can a subaward be made to a non-U.S. organization?

Yes, although indirect costs cannot be charged by the non-U.S. organization unless it has a negotiated indirect cost rate.

50. Can an institution that only awards undergraduate degrees submit an INSPIRE proposal?

Yes, the rules are the same for all eligible institutions, and colleges awarding only undergraduate degrees are eligible.

51. Can a non-profit organization submit a proposal? Will those proposals be reviewed differently?

Yes, non-profit, non-academic organizations are eligible for the INSPIRE mechanisms. All proposals from these and other eligible organizations (which include many non-profits) will be evaluated equally.

52. Can a postdoc be the PI on an INSPIRE proposal? Does it matter whether the postdoc is a U.S. citizen?

That is up to the proposing institution. NSF will accept proposals from postdocs if the proposing institution submits them. Before submitting a letter of intent (which can be done without involving the institution's sponsored research office), the postdoc should check with the SRO to find out whether they will permit submission of a full proposal. If not, there is no reason to submit an LOI.

53. Can an INSPIRE proposal be interagency?

At the program level, INSPIRE is solely an NSF activity, and does not involve coordination with budgets, management, and staff from other federal agencies, though this may change in some future year. Thus, an INSPIRE proposal to the current solicitation should be formulated as an NSF proposal. At the level of an award to a particular project, an INSPIRE award budget can have the same types of flexibility as a typical NSF research grant, in particular through the subaward mechanism. Depending on approval by NSF and the lead institution, such a project might include, as one example, support for a university postdoc to work at a laboratory sponsored by another federal agency.

LETTER OF INTENT (LOI) SUBMISSION

54. There are two parts to the letter of intent (LOI): the directly-submitted FastLane form and the offline Supplemental Form sent to inspire@nsf.gov. What are the reasons for this complication, and how will NSF put the two parts of my LOI together?

There are technical restrictions on the FastLane LOI form - the "Synopsis" and "Other Comments" data fields are limited to 2,500 characters each, and they accept *plain text only*. This means that within the FastLane form, your space to make a scientific case for your project idea is limited to 5,000 plain-text characters. The Supplemental Form allows you more space, and enables you to send formatted text, tables, figures, etc. NSF will put the two pieces together by referring to your FastLane LOI ID number (9 characters - "L" followed by 8 digits). Make sure to submit the FastLane LOI first, get the LOI ID number, and then put that LOI ID number in the Subject field of the e-mail to inspire@nsf.gov to which you attach your completed INSPIRE Letter of Intent Supplemental Form. This will assure that your complete LOI reaches the program directors who will evaluate it.

55. What is the overall limit on the length of the letter of intent (LOI)?

For the descriptive material about your project, you are limited to 5,000 plain-text characters in the FastLane form (2,500 each for the Synopsis and Other Comments data fields), plus 10,000 characters (approximately 2 single-spaced pages) in the Supplemental Form for Track 1, or 15,000 characters (approximately 3 single-spaced pages) in the Supplemental Form for Track 2. If you include figures or tables in your Supplemental Form, NSF will estimate the number of characters that would occupy a comparable space on the form and will subtract that amount from your character limit. The character limits on the Supplemental Form are exclusive of spaces.

56. Is the LOI Supplemental Form required?

No. If you can make your case within the 5,000 plain-text characters provided by the directly-submitted FastLane form, you need not submit the Supplemental Form.

57. Can I submit a letter of intent early in the submission window, and then modify it later in the window and resubmit it, or does this violate the LOI limit for a single PI?

Yes, you can do this. However, there is no way to formally withdraw an LOI in FastLane.
Therefore, when you resubmit, you must include at the beginning of the "Synopsis" data field
the note: "Replaces LOI ID L", filling in the 8 digits of the previous LOI's ID number
If NSF is unable to make this connection, your revised LOI may be rejected for violating the
limit on LOIs from a PI.

58. Can an LOI be submitted through Grants.gov?

No, LOIs must be submitted through FastLane.

59. Does the LOI have to incorporate the Intellectual Merit and Broader Impacts review criteria and follow the new guidance on Merit Review Principles and Criteria (http://www.nsf.gov/nsb/publications/2011/meritreviewcriteria.pdf)? Will the Solicitation Specific Review Criteria be used to evaluate the Letters of Intent?

NSF staff will evaluate the LOI from the perspective of its potential to lead to a full proposal worthy of an INSPIRE award. Because all of the review criteria and the new guidance will apply to any INSPIRE full proposal, the LOI should address them as best it can within the space available. The Supplemental Form contains a template that should be helpful.

60. When will I hear whether my LOI has been invited for submission of a full proposal?

For Track 1 (LOI deadline March 29, 2013; full proposal deadline May 29), you should hear by April 29. If you are a single investigator, you should also hear about nomination for candidacy for a Director's INSPIRE Award by that date. For Track 2 (LOI deadline February 20, full proposal deadline May 13), you should hear by March 29.

FULL PROPOSAL SUBMISSION

61. I submitted a Track 1 LOI as a single investigator. Now, program directors have informed me that they intend to nominate me as a candidate for a Director's INSPIRE Award. What do I do? Do I have to accept the nomination, or do I have the option of submitting a regular Track 1 full proposal instead?

You may choose whether to submit a regular Track 1 full proposal, or to submit a Director's Award candidate proposal. The program directors' nomination carries with it the implication that you are invited to submit a Track 1 full proposal. The candidate proposal consists of a Track 1 full proposal, plus the Supplementary Documents described in the solicitation (vision statement, letters of collaboration, interdisciplinary publication) and a budget for the additional Director's Award funds, so it does involve more work on your part.

62. If I submit a Director's Award candidate full proposal without letters of collaboration or without an interdisciplinary publication among the Supplementary Documents, does this put me at a disadvantage?

If you have collaborators outside the single-investigator INSPIRE project whose contributions and/or resources are essential to achievement of your scientific vision, their commitments to work with you should be included, and the absence of these commitments will put the proposal at a disadvantage. There is no disadvantage in not having such collaborators, if your scientific case is compelling without them. Any disadvantage in not including an interdisciplinary publication lies in the possibility of a missed opportunity to strengthen your case.

63. If I submit a candidate proposal for a Director's Award and do not win one of these awards, does this put me at any disadvantage for a Track 1 award?

No, it will not. By nominating you for a Director's Award, the program directors indicate that your LOI was sufficiently compelling that it stood out from other LOIs, some of which may have been invited to submit full Track 1 proposals without being nominated for Director's Awards. Regardless of the outcome of the Director's Award competition, the program directors should evaluate your underlying Track 1 full proposal on its merits as a Track 1

project.

64. The solicitation notes that invited candidate full proposals for the Director's INSPIRE Award that do not receive that award remain eligible for support through Track 1 on the basis of the invited full proposal. Yet Director's INSPIRE Award proposals receive not only program director review as INSPIRE Track 1 awards, but also blue-ribbon panel review for a Director's INSPIRE Award. What happens if these two reviews are in conflict?

The task of the blue-ribbon panel is not to evaluate the issues that would be of most concern to the program directors, i.e., whether the science of the proposal is worthy of support from their programs. The panel is seeking to evaluate the potential for high-level transformative impact, from a positive rather than a critical perspective. For a Track 1 award, the program directors will make their own determination independent of the panel's findings.

65. Can the content of a full proposal differ significantly from that of the LOI that led to the corresponding invitation?

Yes. In terms of process, the full proposal is independent of the LOI (though the full proposal must contain the corresponding invitation as a Supplementary Document). However, you should bear in mind that the program directors who authorized the invitation will also be involved in the evaluation of the full proposal.

66. When submitting my INSPIRE Track 1 full proposal, I have to choose a primary program in FastLane. Does it matter which of the interested programs I choose?

The one that you choose will be the one that handles some of the internal "paperwork". In most cases, the natural choice would be the program of the person that you listed as the Managing NSF Program Director on your letter of intent. Scientifically, it should not make a difference. Make sure to list all of the other interested programs on the cover sheet.

67. How long should my Track 1 Project Description be? Will I be penalized if it is less than 15 pages?

The Grant Proposal Guide states that an EAGER Project Description is expected to be brief (five to eight pages). As explained above, INSPIRE Track 1 proposals have some features in common with EAGER proposals, but could be substantially deeper and more complicated. The appropriate length is best left to the judgment of the submitters, based on the particular characteristics of the proposal ideas. The maximum is 15 pages.

68. Why is a Track 1 full proposal submitted to one of the prospective co-funding programs, while a Track 2 full proposal is submitted to the INSPIRE program under the Office of IIntegrative Activities (OIA)?

The review of Track 1 proposals is decentralized, as it was in the FY 2012 CREATIV activity. Award recommendations are made by the co-funding programs, and the involvement of the INSPIRE management team is limited to high-level oversight of the appropriateness of the project for INSPIRE. The Track 2 review includes an NSF-wide external blue-ribbon panel, and the potential commitment of this larger magnitude of resources requires significantly greater coordination across the Foundation. Thus, the INSPIRE management team coordinated by IIA has a more integral role to play in the management of Track 2.

69. What happens if I forget to include "INSPIRE Track 1:" or "INSPIRE Track 2:" in the title of my invited full proposal? Will it be returned without review?

No, but this may delay the process of forwarding your proposal to the NSF staff who need to

manage it, which in turn could affect the timeliness of the review process.

70. Does the title of my invited Director's INSPIRE Award full proposal award simply start with "INSPIRE Track 1:" or do I need to include "INSPIRE Track 1 Director's Award:" or something similar?

"INSPIRE Track 1:" is sufficient. The program directors will be expecting it as a Director's Award candidate proposal, and the augmented budget request and the Supplementary Documents including the vision statement will make it clear that it is a Director's Award candidate proposal.

FULL PROPOSAL REVIEW

71. For the additional INSPIRE intellectual merit criteria relating to interdisciplinarity, does my proposal have to respond to the four specific items ("Combining concepts/methods ...", etc.) listed in the solicitation?

No, these are examples. However, a compelling case for interdisciplinarity must be made.

72. How important is it that an INSPIRE proposal be potentially transformative?

It is essential and critical. For any NSF proposal, the standard National Science Board-approved intellectual merit review criterion now includes: "To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?" Thus, in a "regular" proposal, "potentially transformative" is a positive consideration; in an INSPIRE proposal, it is a requirement.

73. Do I need to include preliminary data to show feasibility?

Not necessarily. INSPIRE projects may be bolder and more speculative than typical NSF proposals, so an argument for scientific plausibility could be made in other ways. If you have preliminary data that is helpful to your case and is available, you should certainly include it.

74. How will the internal review process for INSPIRE proposals work?

As indicated by the additional review criteria relating to interdisciplinarity and transformative potential, it will be a very rigorous process. For an INSPIRE award, multiple program directors from intellectually distinct programs must independently conclude that the review criteria are met. Furthermore, an NSF-wide INSPIRE management team must also agree that the recommending programs are committing substantial funds and are sufficiently distinct intellectually to make the proposal appropriate for INSPIRE.

75. What is the role of the blue-ribbon panel in the review of Track 2 and Director's Award proposals, and what type of backgrounds should I expect its members to have?

The panel's responsibility is to evaluate the high-level scientific impact, excitement, transformative potential, and interdisciplinarity of the proposals. Its members are to seek such big-picture strengths in the projects. A Track 2 project and a Director's Award winner should show unusually strong impact and transformative potential that will stand out to scientific leaders from fields that may not be directly advanced by the project. The panel members will be broad-thinking scientific leaders who can provide this kind of perspective well beyond their own specialties. The more specialized novelty, strengths, and weaknesses of the proposals will be assessed concurrently by program directors, possibly with the aid of external *ad hoc* review; this is not the charge of the blue-ribbon panel.

76. If my Track 2 proposal is subject to a reverse site visit after the blue-ribbon panel, how will this work?

This will be a brief virtual meeting with program directors and/or members of the INSPIRE management team, for clarification and elaboration purposes only.

77. When will I hear whether my INSPIRE full proposal is awarded or declined?

You will most likely hear in July 2013, at the latest by mid-August.

78. My INSPIRE proposal was declined, and I do not agree with the reasons for the decision. What can I do?

As explained in the solicitation, by choosing the alternative pilot INSPIRE review mechanisms, you waive the option of asking for reconsideration. The program director who handled your proposal should be able to advise you on possible further steps, such as a revised INSPIRE proposal, a regular proposal, etc.