Ratanesh Srivastava

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Cc: Dr. Dhananjay Tiwary; Singh, Gurdip

Subject: Updates and Requests: DCL release and workshop input (important and time

sensitive)

Attachments: Timeline for TIH input 2022-01-26.docx

Importance: High

Dear colleagues at IIT Delhi, Bombay, Madras, Jodhpur, BHU, and IISc Kolkata,

We have a number of important and <u>time sensitive requests for input</u> and updates to share with you regarding our NSF-TIH collaborative research plan (summary of timeline in attached). Thanks in advance for your quick response to Gurdip, Dhananjay, and me. We are excited to be so close to supporting joint US-India research with you!

Request for Proposals (aka Dear Colleague Letters)

On Friday the NSF Dear Colleague Letter (DCL) will enter its final step in the approval process. We are prepared to release our DCL the week of February 7, and we would like to coordinate with you, so that we can time the releases within couple days of each other. Status update request by <u>Jan 28</u>: Where is your hub in the process for approval of your DCL/request for proposals? Can you be ready to release it as soon as <u>February 7</u>? Has anything changed that we should be aware of?

Building Collaborations PI Workshop

NSF has been working with the Indo-US S&T Forum and Know Innovation to design a two-day virtual workshop where our research communities will come together to meet potential collaborators and share ideas on projects. The goal of the workshop is to catalyze new research collaborations that would lead to competitive research proposals (i.e., supplement requests in response to NSF's DCL, and proposals to six DST-funded TIH). Day 1 will include welcoming remarks by DST and NSF, an overview of the TIH research themes, and breakout sessions organized/hosted by each TIH. Day 2 will include opportunities for discussion on research topics suggested by the day 1 participants, and opportunities for potential applicants to speak with NSF or TIH program officers. We will share the agenda next week.

In advance of the workshop, we have four requests of TIHs:

- 1. Prepare a slide deck for the workshop registration website by <u>February 4</u>. Slide-decks will be released on the workshop website the week of Feb 7 to coincide with the release of the DCLs. The target audience is U.S. researchers interested in identifying which TIH are a good match for their expertise and research interests. The 15-20 slides should cover the following topics. Recommended numbers of slides for each topic are included in parentheses, though TIHs may modify this.
 - 1. Overview: Mission/ Vision/ Goals of the TIH, URL (3)
 - 2. Research: Grand Challenges, AI and related topics, Application Areas (4)
 - 3. Collaborations: Industry, Academia Partners (2)
 - 4. Key Research Personnel: Faculty affiliated with the TIH and/or invited to the workshop and their research interests [This list could include the 4-6 PIs the TIH are planning to invite] (3)
 - 5. Timeline, Plan for new research activities, and Milestones (1)
 - 6. Priority Areas for new US India Collaborations (3)
 - 7. Keywords: Using the agreed upon taxonomy (1)

Additional TIH material (video, manuscripts) may also be uploaded to the workshop website.

- 2. Identify workshop participants by <u>February 28</u>. Each of the 6 Indian TIHs are invited to identify <u>a members of the leadership team</u> (e.g., CTO and professor who serves as director), and <u>4-6 PIs</u> looking to start research collaborations. NSF will have an open call for U.S. participants, and select from those.
- 3. Prepare 2 slides on your TIH's research themes by <u>February 28</u>, and select 1 TIH rep to present them on day 1 of the workshop.
- **4. Give input on keywords by** <u>February 1</u>**.** Participants will be asked to select from a menu of keywords to describe (a) their areas of expertise and (b) their interests in collaboration. NSF has this initial list, but welcome additions by TIH.

Applications/Platforms:

- Agriculture
- Health
- Smart Cities
- Environment
- Robotics
- Autonomous Vehicles / UAVs

Research Areas:

- AI/ML
- Edge computing
- Next-G communication
- Controls
- Sensors/Actuators/IoT
- Embedded Systems
- Vision/AR/VR/XR
- Data science and analytics

Tentative Workshop Dates: March 15 (Tuesday), 10am-12pm EST (7-9am PST and 7:30-9:30pm IST)

March 22 (Tuesday). 10am-12pm EST (7-9am PST and 7:30-9:30pm IST)

Note: We may make the workshop a week to 10 days later. Dates will be finalized next week.

Proposal Soft Deadline

We proposed making the soft deadline / target date for proposal submission by PIs to NSF and TIH one month after the second day of the workshop. *Does April 25, 2022* work as a deadline for proposal submissions for the TIH schedule? Here is how we have phrased it in our DCL:

The deadline for submission of supplemental funding requests for consideration is within a week of submission of a proposal to the collaborating TIH. NSF-funded PIs are encouraged to submit by the target date of April 25, 2022, though supplemental funding requests will still be considered beyond that date.

NSF-TIH Meeting

We propose meeting next week as a group to review the plan for the workshop, answer questions, and begin discussions on the coordination of review processes. We can hold two (identical) 60-minute meetings if necessary to accommodate schedules. *Please let me know if you have any conflicts with the following times:*

Feb 2, 8:30-10am EST (7-8:30pm IST)

Feb 3, 8-9:30am EST (6:30-8pm IST)

Feb 4, 8-9:30am EST (6:30-8pm IST)

Websites for Consolidated DCLs

We now have the link to the <u>website where info on all 7 DCLs will be consolidated</u>. It is hosted by the Indo-US S&T Forum's Al Initiative site, which will already be familiar to PIs interested in US-India engagement in related topics. It is also the website that will have workshop information. **Please include the link in your DCL too**. Here is how that info appears in our DCL:

Each of the participating TIHs has a corresponding call for proposals to inform its respective research community of its intention to pursue US-India collaborative research, and these documents are posted at https://usiai.iusstf.org/building-collaborations. Each of the Indian calls for proposals defines eligibility, proposal formats, topical areas, selection criteria and mechanisms for funding the joint work.

For additional guidance on the scope, please email the NSF-India program team at <u>india-collaboration@nsf.gov</u>. There will be a virtual workshop on March XX and YY, 2022, with presentations from the participating TIHs and opportunities for networking. NSF-funded researchers are encouraged to utilize the information provided at https://usiai.iusstf.org/building-collaborations to learn about specific topics, workshops, and networking opportunities.

TIH names and websites

Here are the TIH names and website as they appear in NSF's DCL. If there is a better URL to use or an error in the TIH name, please let me know by <u>January 28</u>. This is the same as you saw in our original DCL, however the IIT Delhi link has been updated.

- I-Hub Foundation for Cobotics (Indian Institute of Technology, Delhi)
- <u>Technologies for Internet of Things and Internet of Everything</u> (Indian Institute of Technology, Bombay)
- <u>Pravartak Technologies Foundation for Sensor, Networking, Actuators and Control Systems</u> (Indian Institute of Technology, Madras)
- <u>iHub Drishti for Computer Vision, Augmented and Virtual Reality</u> (Indian Institute of Technology, Jodhpur)
- <u>TIH on Data Science, Big Data Analytics and Data Curation</u> (Indian Statistical Institute, Kolkata)
- <u>IDAPT (Data Analytics and Predictive Technology) Hub Foundation</u> (Indian Institute of Technology (BHU) Varanasi)

This is a lot of information (though you will have seen much of it in my Dec 22 email, just with an earlier anticipated timeline) and just as many requests! Please email me any time with questions, ideas, or concerns. We are looking forward to bringing our science and engineering communities together to do great work.

Happy Republic Day! Bridget

Bridget M Turaga, PhD

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