



National Science Foundation



INDUSTRY UNIVERSITY COOPERATIVE RESEARCH CENTERS (IUCRC) PROGRAM

August 23, 2021 Informational Webinar

NSF Solicitation 20-570

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20570

<https://iucrc.nsf.gov>

A cross-NSF Team supports IUCRCs

ENG

Engineering



Dr. Prakash Balan
ENG Directorate
Phone: 703-292-5341
Email: pbalan@nsf.gov

Dr. Crystal Leach
ENG Directorate
Phone: 703-292-2667
Email: crleach@nsf.gov

MPS

Chemistry



Dr. Kenneth Moloy
MPS Directorate
Phone: 703-292-8441
Email: kmoloy@nsf.gov

CISE

Computer Info Science & Eng.



Dr. Behrooz Shirazi
CISE Directorate
Phone: 703-292-8343
Email: bshirazi@nsf.gov



Dr. Ann Von Lehmen
CISE Directorate
Phone: 703-292-4756
Email: avonlehm@nsf.gov

SBE

Social Behavioral &
Economic Sciences



Dr. Rebecca Ferrell
SBE Directorate
Phone: 703-292-7850
Email: rferrell@nsf.gov

GEO

Geosciences



Dr. Barbara Ransom
GEO Directorate
Phone: 703-292-7792
Email: bransom@nsf.gov

IUCRC NSF 20-570

Upcoming Important Dates:

- September 8, 2021 – Preliminary Proposal (PreProposal) Due Date
- December 8, 2021 – Full Proposal Due Date

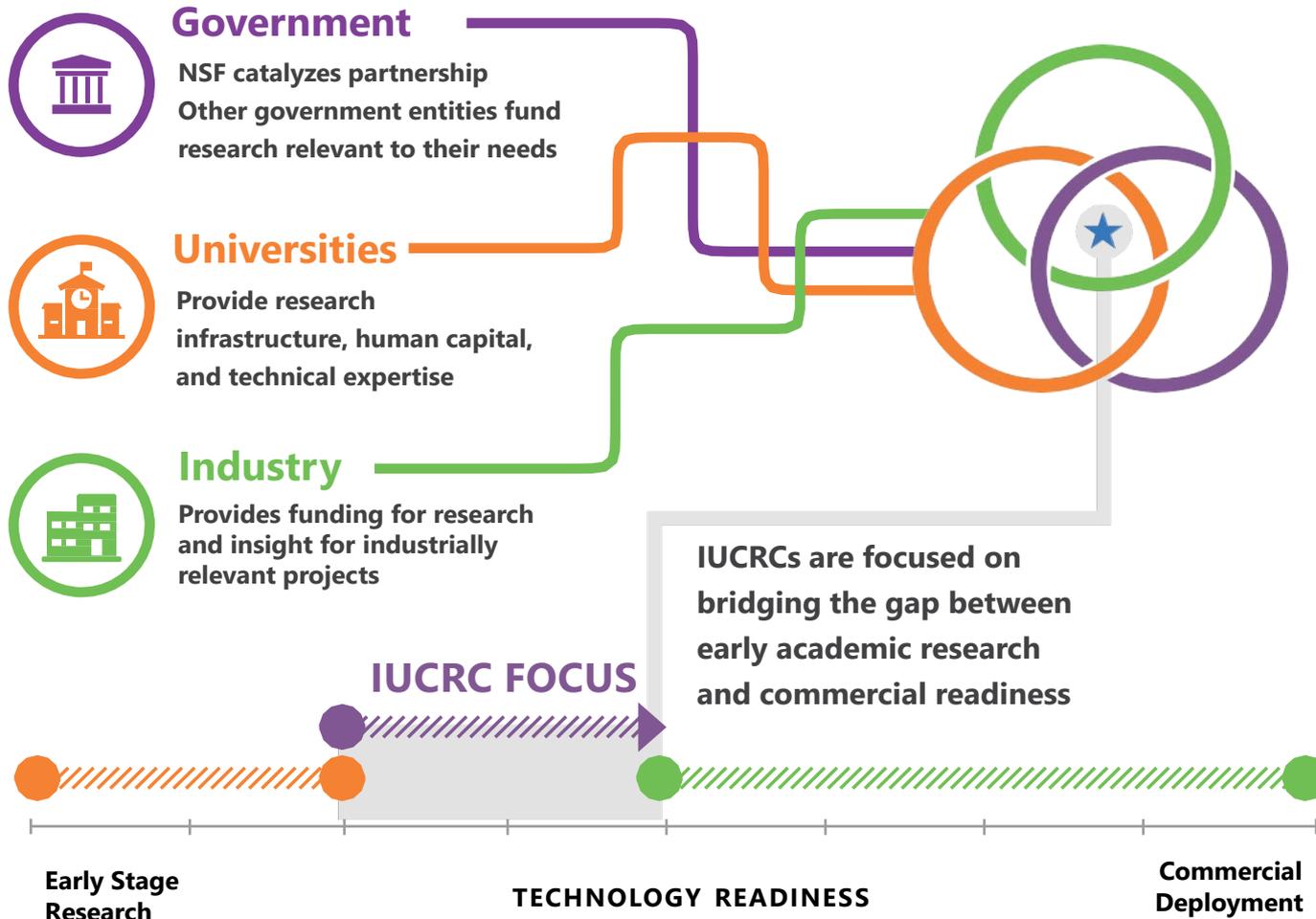
Resources for Applicants:

- Read the solicitation NSF 20-570:
<https://www.nsf.gov/pubs/2020/nsf20570/nsf20570.htm>
- Visit our IUCRC website: <https://iucrc.nsf.gov/>
- Read the IUCRC FAQs (NSF 20-080) at:
<https://www.nsf.gov/pubs/2020/nsf20080/nsf20080.jsp>
- Contact Program Directors at: iucrc@nsf.gov

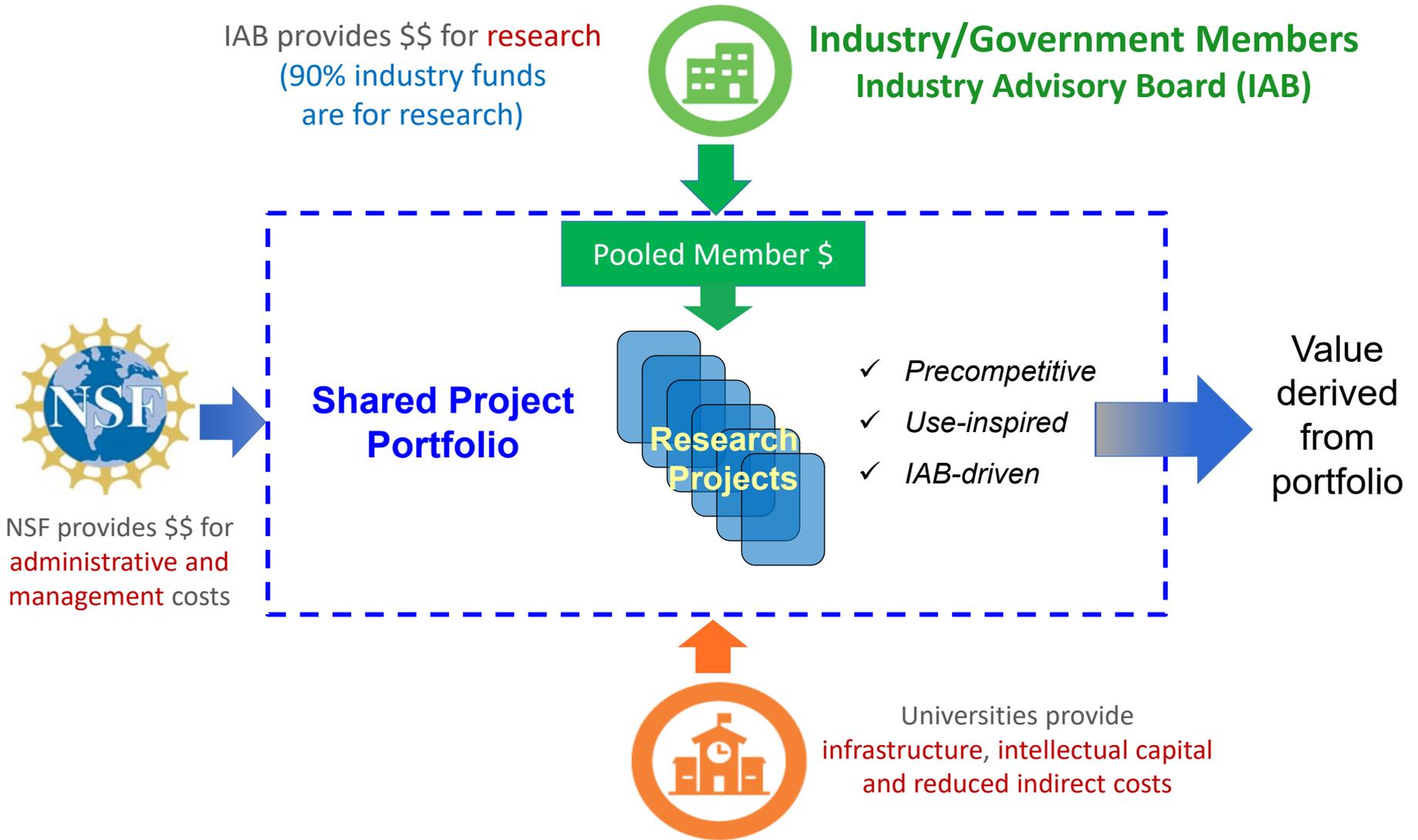


IUCRC – A Collaborative Partnership

*Perform cutting-edge **pre-competitive** basic research in science & engineering to drive innovation and societal impact*



IUCRC – Program Framework



IUCRC – Value Proposition for Members

IUCRC Program Funding Benefit

Every \$1 in
member
contributions
leverages multiple
of additional dollars
in research funding



Access to Talent

Opportunity to mentor and train students to attain desired skills for work in your industry



De-Risk R&D

Share risks of early stage research leading to disruptive business opportunities



Research Cost Avoidance

Save internal research dollars through access to facilities, infrastructure, and lower human capital costs



Leverage Research Dollars

Earn higher return on investment when research is jointly funded



Access to Network

Learn from interacting with center participants within your technology sector



Access to Intellectual Property

Gain royalty-free, non-exclusive licenses on intellectual property produced in the center

Facilities & Administrative overhead rate not to exceed 10%

IUCRC – Broad Areas and Research Themes

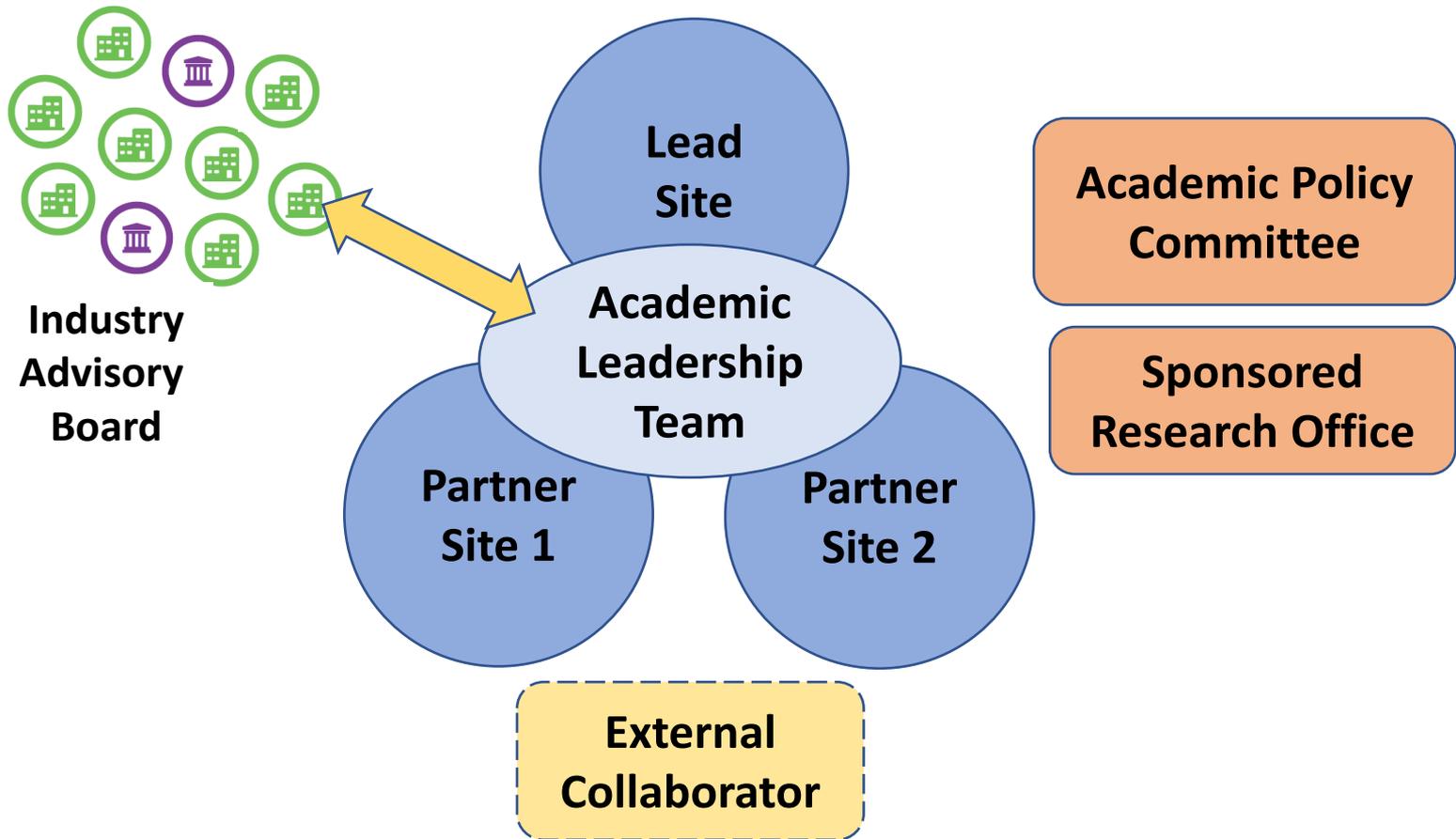
- **Advanced Electronics and Photonics**
- **Advanced Manufacturing**
- **Advanced Materials**
- **Biotechnology**
- **Civil Infrastructure Systems**
- **Energy and Environment**
- **Forensic science**
- **Geosciences**
- **Health and Safety**
- **IT, Communication, and Computing**
- **System Design and Simulation**



IUCRC 20-570 – Center Structure



IUCRC



IUCRC 20-570 – Academic Leadership Team

Center Director:

- The PI of the Center Lead Site proposal
- Oversees Center operations and management, Center research programs

Site Director:

- The PI for a Partner Site
- Manages the Site's research program

Industry Liaison Officer:

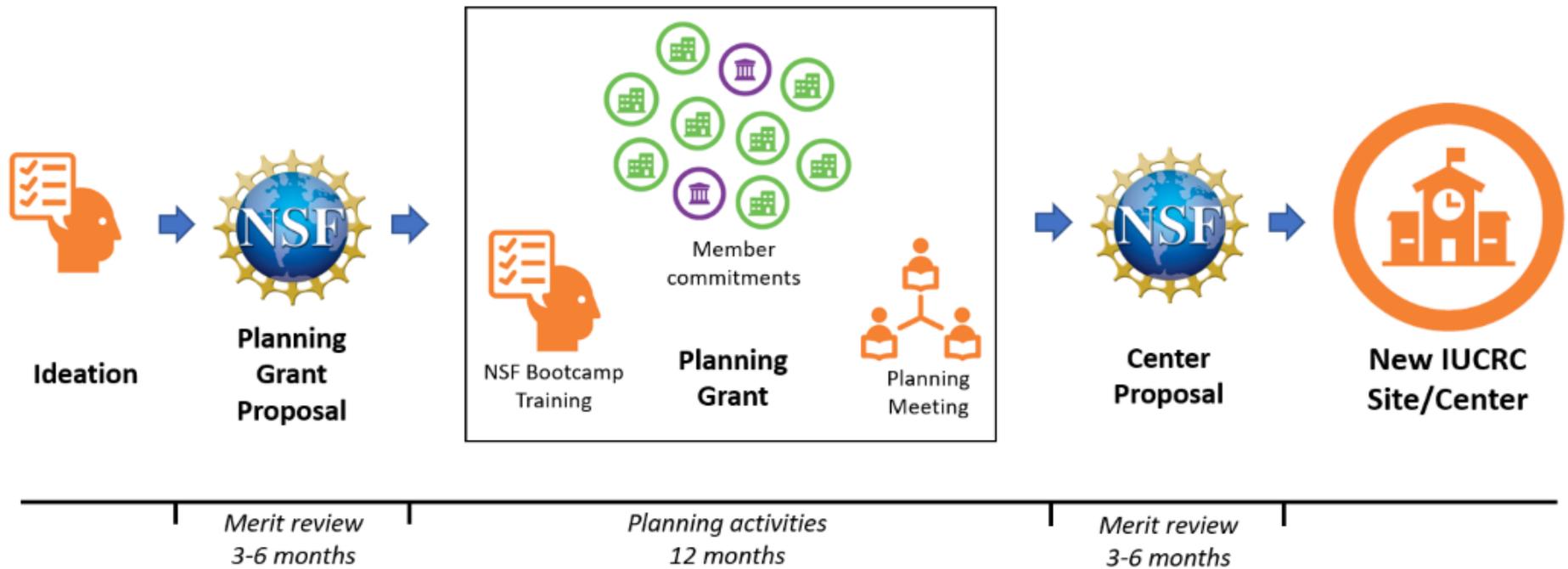
- Typically associated with the Lead Site
- Primary responsibilities for:
 - Identifying and recruiting new Members,
 - Building and maintaining existing industry relationships
- This position is highly recommended but is not required

Careful selection of IUCRC leadership team is critical to center success – cohesive, collaborative, entrepreneurial, aligned goals



IUCRC – Establishing a Center

Path and Timeline to IUCRC Creation



Planning Grant Funding and Expectations

Planning Grants (1 yr. duration)

- \$20,000 for Planning Grant (per site)

Grantees required to attend NSF Planning Bootcamp

Funding includes support for:

- Support principals in planning activities
- Marketing potential center
- Customer discovery
- Planning Workshop

What are expectations from Planning Workshop?

- Strong convergence between academia and industry on a broad, cutting edge, high-impact research agenda
- Strong industry interest to financially support a Phase I Center
- Competitive proposal to NSF for creation of a Phase I IUCRC Center



NSF 20-570 Preliminary Proposal Considerations

Preliminary Proposals are required:

- ✓ as a precursor to submitting a Planning Grant Proposal
- ✓ to request a Planning Grant Waiver

Submitting PIs of a Preliminary Proposal will receive an Encourage or Discourage decision from NSF:

- ✓ An **encourage** finding indicates that the proposal appears to be responsive to this solicitation and is a candidate for full proposal merit review
- ✓ A **discourage** finding indicates that the project did not respond to the solicitation and has a low likelihood of funding support

NSF's Encourage/Discourage decision made on the preliminary proposal or a planning grant waiver is advisory only. This means that PIs of both favorably and unfavorably reviewed Preliminary Proposals are eligible to submit full proposals.

NSF 20-570

Key Elements of Preliminary Proposal

A. Planning Grant Preliminary Proposal Title and Requested Award info

- Project Title
- Award size and duration requested:
 - Planning Grant: Up to \$20,000 for 12 months.
 - Planning Grant Waiver: Up to \$750,000 for 60 months for a site in a Phase I Center.

B. Biographical Information for Preliminary Proposals (2 pages)

- Provide one paragraph in prose for each member of the research team for the entire Center.

C. Project Description for Preliminary Proposals (2 pages)

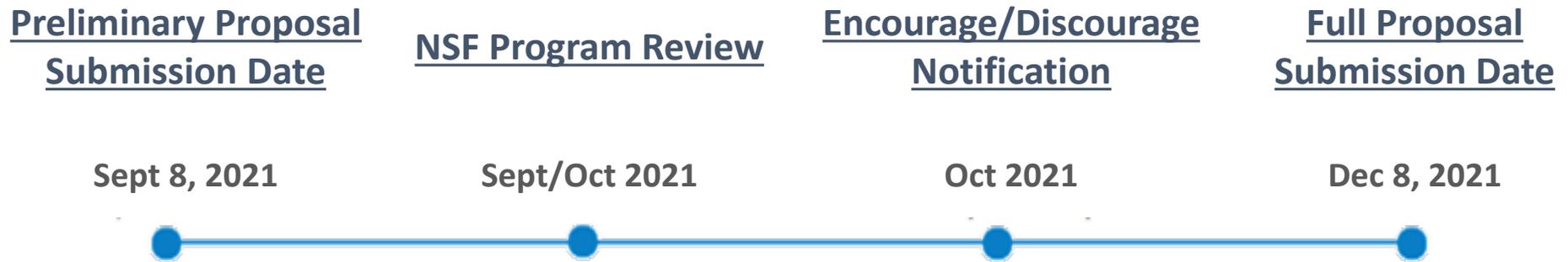
- The proposed Center's vision and mission
- Key unmet industry research needs driving Center creation;
- Economic importance of the research area;
- Demonstration of Center's uniqueness and differentiation from other IUCRCs and NSF-funded Centers;
- Pre-existing research partnerships between the Sites related to the Center's focus;
- List of potential research thrust areas, planned collaborative and Center-wide contributions by the Site;
- List of prospective Members, statement of who has already been contacted, and the estimated level of interest;
- For each Site include specific information regarding its faculty, capabilities, and resources

D. Supplementary Documentation for Planning Grant Waiver Requests Only (3 pages)

- Describe the relevant Center/Site planning events/workshops/activities involving active industry engagement to date. List each organization committing to join the Center and specify the amount and duration of its annual financial commitment.

NSF 20-570 – Preliminary Proposal Review and Timeline

NSF Preliminary Proposal Application Timeline



Applicants receive an Encourage/Dis courage Notification

Preliminary Proposal Submission Dates: Second Wednesday in September and March, annually thereafter

Full Proposal Submission Dates: Second Wednesday in December and June, annually thereafter

Building and Launching a Successful IUCRC....

- Takes an entrepreneurial and collaborative mindset. Challenges are similar to launching a startup.
- Build a strong leadership team. Pull together a dedicated group of core dedicated faculty researchers.
- Develop strong cross-institutional support. Get your administration engaged early.
- Engage in extensive customer discovery (talk to potential Center members as well as faculty and administration within your university).
- Bring on a key team member with strong and deep industrial experience to guide the academic team.
- **Network, Network and then some more.....**

NSF 20-570 Eligibility and Key Considerations

Who can serve as a PI?

- Do IUCRC PIs need to be tenured?
- May I serve as a PI or co-PI in more than one active IUCRC?

When is a Preliminary Proposal Required? When is a Full Proposal Required?

Is there a limit on the number of proposals an institution or individual PI can submit?

How significant a concern is overlap with existing centers in supporting proposed new IUCRCs?

Does each site need to submit its own Preliminary Proposal or Full Proposal?

- Are these Collaborative Proposals?
- How are the individual site proposals within a proposed center reviewed?

Do I need letters of Support “in hand” when I submit the Preliminary Proposal?

How much industry support is needed to get a Waiver Request? Do I need letters of commitment “in hand” when submitting a Waiver Request?



Thank you!

Questions?



iucrc@nsf.gov

<https://iucrc.nsf.gov>