



EPSCoR Update

FY 2021 RII Track-2

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Program Director
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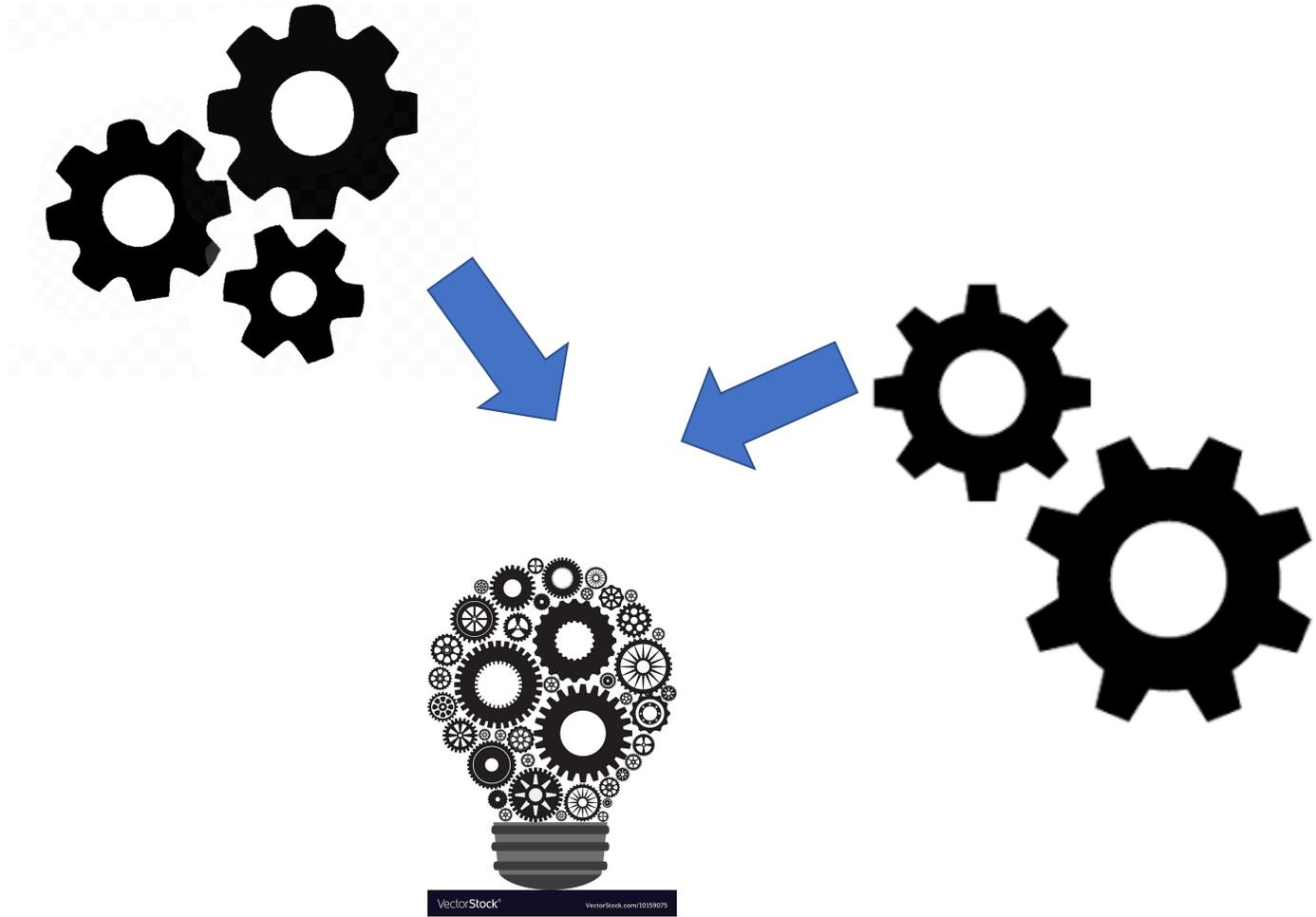
NSF EPSCoR RII Track-2

- Builds research capacity through interjurisdictional collaborative teams in focus area(s) aligned with NSF-wide priorities
- Combines expertise distributed in different EPSCoR jurisdictions into a “critical mass” capable of productive research and related activities in the focus area
- Exemplifies diversity through strategic, broad inclusion and meaningful integration of different types of individuals, institutions, and sectors
- Develops diverse early-career faculty
- Promotes productive, balanced collaborations that are capable of sustained activities beyond the award period



Track-2 Solicitation-Specific Elements

- **As well as NSB required Intellectual Merit and Broader Impacts**
- **Research Capacity** – *potential to advance S&E fields, research competitiveness and capacity of the jurisdictions*
- **Interjurisdictional Collaboration** – *balanced, adds value?*
- **Workforce Development** – *recruit/develop diverse early career faculty, and create a diverse workforce relevant to the jurisdiction and industry*
- **Jurisdictional Impacts** – *sustainable research, innovation, and workforce preparation, education capacity, economic development*
- **Integration of Project Elements** – *cohesive project (all aspects well integrated?), effective coordination, evaluation, sustainability*





RESEARCH IDEAS

MATHEMATICAL, COMPUTATIONAL, FOUNDATIONS, ANALYTICS, DATA SCIENCE, EDUCATION, WORKFORCE, HARNESSEING THE DATA REVOLUTION, FUNDAMENTAL RESEARCH, MACHINE LEARNING, CHALLENGES, CYBERINFRASTRUCTURE, MODELING, DATA MINING

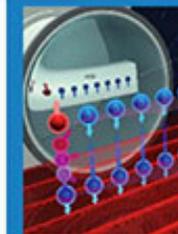
Harnessing Data for 21st Century Science and Engineering

Work at the Human-Technology Frontier: Shaping the Future



Navigating the New Arctic

Windows on the Universe: The Era of Multi-messenger Astrophysics



The Quantum Leap: Leading the Next Quantum Revolution

Understanding the Rules of Life: Predicting Phenotype



PROCESS IDEAS

Mid-scale Research Infrastructure



NSF 2050



Growing Convergent Research at NSF



NSF INCLUDES: Enhancing STEM through Diversity and Inclusion





Major Changes from FY20

The NEW Solicitation
NSF 21-518



“Advancing research towards
Industries of the Future to ensure
economic growth for EPSCoR
jurisdictions”

New Topic



Theme Change

- Industries of the Future
 - Advanced Manufacturing
 - Advanced Wireless
 - Artificial Intelligence
 - Biotechnology
 - Quantum Information Science
 - Spectrum Innovation Science
- In RARE cases, other industries can be considered that are relevant to State S&T Plans with strong justification



Theme Change

- To be successful, projects must:
 - leverage current and previous NSF and other federal agency investments in the research underlying or supporting these industries
 - show a clear pathway to impact jurisdictions' socio-economic growth
 - understand the industries' influence from a social perspective
 - disruptive impact of the technology on the industry
 - develop innovative educational plans to prepare a skilled and diverse technical workforce for that industry that is relevant to the associated jurisdictions



Key Proposal Preparation Changes or Clarifications

- You may have one PI, four co-PIs, and any number of Senior Personnel
 - You may only be a PI or co-PI on ONE active RII Track-2 award at a time
 - Each involved jurisdiction must be represented by a co-PI
 - An Institution may LEAD on a single proposal, but may be a SUBAWARDEE on any number
- Key Changes
 - Results from Prior Support
 - should summarize the coordination and synergy among EPSCoR and other NSF investments in the jurisdiction. This prior support should clearly link to the chosen industry of the future and provide a clear sense of how the outcomes from that prior support will be leveraged into this project leading to its eventual implementation into the chosen industry
 - Discuss Economic Impact and Sustainability of the Project
 - must describe the plan for long-term economic impact and sustainability of the proposed activities



Key Proposal Preparation Changes or Clarifications

- Key Changes
 - Workforce Development
 - develop a workforce that can integrate, as appropriate, within the chosen industry
 - provide trainees with skills to work easily across disciplinary and other perceived boundaries and to interface with stakeholders such as academe, industry, government, and the general public
 - generate an inclusive workforce appropriate to populate the Industries of the Future
 - provide early career faculty mentoring and training
 - Evaluation and Assessment Plan
 - aid in the identification of outcomes and impacts of the project's goals and objectives as well as a tool for providing effective feedback to the management team



Key Proposal Preparation Changes or Clarifications

- Management and Implementation
 - Management Plan includes the roles and responsibilities of key personnel, how the PI and co-PIs plan on communicating and coordinating with each other and the project team, how the centralized project output data-collection will be integrated into their evaluation mechanisms as described above, and how the project's administrative requirements will be managed across all areas.
 - If funded administrative staff are expected to support the project on a full- or part-time basis.
 - Implementation Plan outlines how this project will bring together previous documented research outcomes and build on them through the proposal
 - research is coordinated across jurisdictions to meet the needs of the target industry and relevant jurisdiction(s) for eventual implementation



Key Dates

- Letter of Intent December 18, 2020
- Final Proposal January 25, 2021



Thank you

- Questions?
- Or contact JD Swanson, jswanson@nsf.gov, 703-292-2898