

Engineering Research Centers

Gen-4 ERC: Pre-recorded Program Overview

NSF 19-503

Kickoff Meeting
October 14-15, 2020

Deborah Jackson, ENG/ERC Program Director



Year-1 Milestone Schedule



Pre-Kickoff activities:

Sep 16- Oct 13

Set 2021 Fall site visit date to establish funding year

6-month deliverables: March 1, 2021













Kickoff activities: Oct. 14-15, 2020

90-Day
PTC/Cooperative
Agreement
Strategic plan:
Dec. 1, 2020

Ramp-up site visit with assigned PD (Inperson, COVID19 permitting)



Gen-4 ERC



NSF Working Group Recommendations (Considering NASEM Report)

Convergent Research and Innovation through Inclusive Partnerships and Workforce Development

Emphasizes societal impact, convergence, stakeholder community, and team formation

Demonstrable integration of F.C.

Increase award size to max \$6M/year

Planning grant opportunity to enhance convergent team formation



Kickoff Orientation: Three objectives

- 1. Firm up new concepts
 - Convergence => to win a Gen 4 ERC award, you had to master this concept
 - Societal impact => metrics are easier if one uses logic models
 - Team formation => effective teaming and creating a culture of inclusion have strong overlapping Venn diagrams
 - Stakeholder community => identifying and engaging learning curve
- 2. Explain Post Award Oversight Process
- 3. Help you prepare your 90-day deliverables and 6 month deliverables





Pre-Recorded Presentation Index

ERC Foundational components:

- Research
- Engineering Workforce Development
- Innovation Ecosystem
- Diversity and Culture of Inclusion

Logic Model and Evaluation Plan

Infrastructure Management

Center Level Risk Management

Post Award Oversight





90-day Deliverables

- 1. Strategic Plan and Logic Model
- 2. Evaluation and Assessment plan
- 3. Center Governance Model and Organizational Chart
- 4. Innovation Ecosystem Membership Agreement
- 5. Intellectual Property Policy
- 6. Establishment of charters for boards, councils, and committees
- 7. Data Management Plan
- 8. Center-Level Risk Management Plan





Presentations Assisting Prep of 90Day Deliverables

ERC Foundational components:

- Research
- Engineering Workforce Development
- Innovation Ecosystem
 - SPI; IP; Member & Institution Agreements
- Diversity and Culture of Inclusion

Logic Model and Evaluation Plan

- Strategic Plan & Logic Model
- Evaluation and assessment plan

Infrastructure and Management

- Center Governance Model and Org Chart
- Data management plan

Center Level Risk management

Post Award Oversight





6-months Requirements

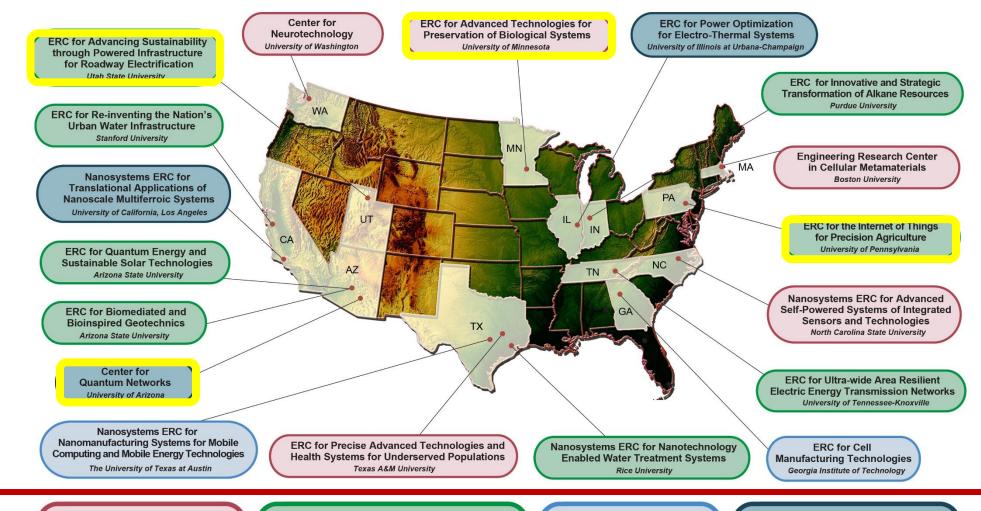
Status report that:

- All ERC Leadership team positions are <u>filled</u>. <u>Time &</u>
 <u>Effort</u> consistent with their ERC team roles.
- Projects have started with planned synergistic coordination.
- All technology elements (labs, equipment, testbeds) across ERC institutions are in place.



NSF's FY 2020 Engineering Research Centers (Lead institutions)





Advanced Manufacturing

Microelectronics, Sensing, and IT

Energy, Sustainability, and Infrastructure

Note: All centers are multi-university partnerships; university shown is lead institution.

Biotechnology and Health Care