

Engineering Research Centers

Gen-4 ERC: Infrastructure Management

NSF 19-503

Kickoff Meeting October 14-15

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Management Structure

- An effective management structure begins with a clear understanding of the ERC goals
- Has the ability to adapt to the changing needs of the ERC
- Clearly designate a lead person or team with responsibility for each foundational component



- Internal ERC Management Structures
- External ERC Management Structures
- Dissemination and Data Management



Required ERC Configuration

Lead Institution

Responsible to lead and manage the ERC

Lead and Core Institutions

- Contribute diverse teams of faculty and students to fulfill vision
- Cost sharing required

Affiliated Institutions

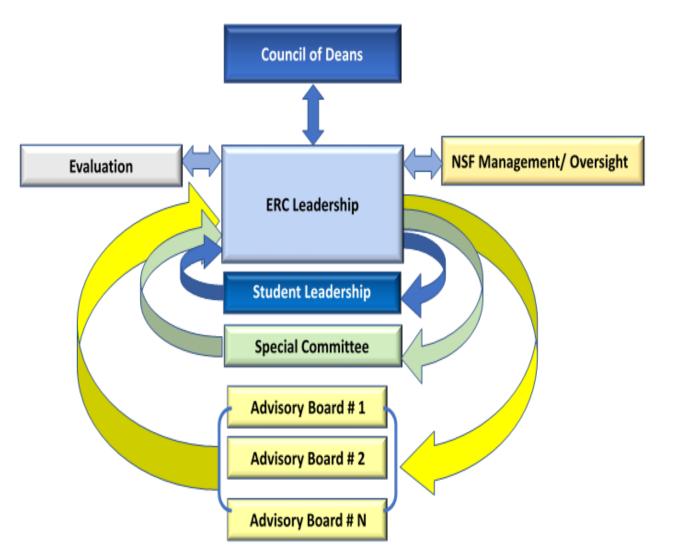
- Contribute faculty and students who carry out research/education
- No cost sharing

Foreign Partner Universities (If relevant)

- Faculty and students carry out research/education
- Support for foreign partners comes from foreign sources



Flexibility in Management Processes



PIs will:

- Define the roles and charter of various advisory boards/entities;
- Explain the ERC's processes for;
 - Team communication;
 - Taking in and responding to advisory feedback



Mandated Advisory Boards Roles

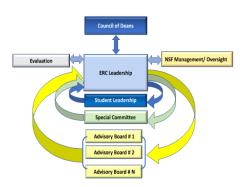
Dean's Council

- Oversees ERC execution; assures departmental cooperation for faculty participation
- Oversees diversity partnership between the ERC and the contributing departments
- Assures cross-university partnership and agreements

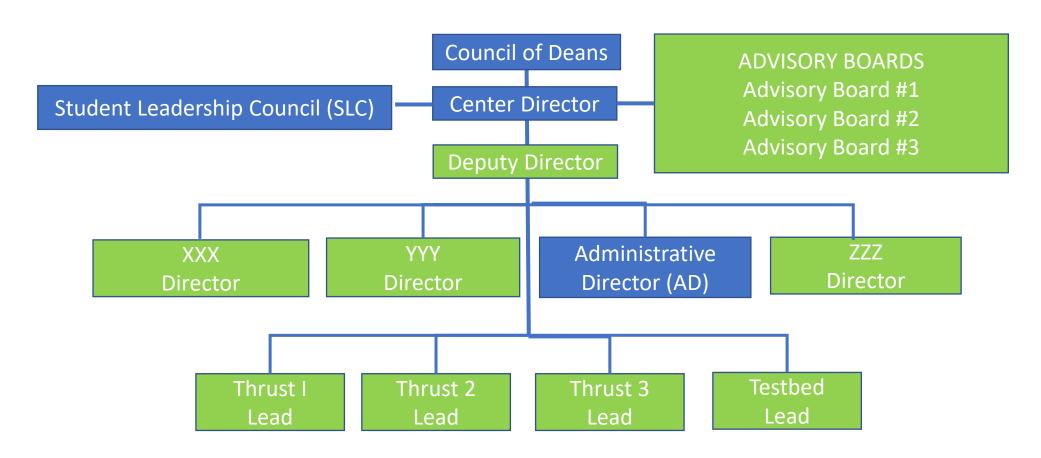
Student Leadership Council (SLC) Chair and co-Chair –

- Set and fulfill the SLC vision,
- develop SLC activities,
- develop and maintain the SLC membership,
- lead SLC SWOT analysis,
- attend ERC Leadership Team meetings,
- organize SLC SWOT meeting with NSF site visit team





Sample Org Chart





Roles of Mandated Leadership Team Positions

• **Director** - Set and fulfill the vision, responsible for strategic planning, building a diverse and committed team, allocation of funds, management, and reporting*

• Administrative Director - Day to day management, financial management, management of information system for reporting and database, management of site visits and other events (Orientation sessions provided)

*Team Science: Bringing it all together for Successful Convergence Research (65 min) Michelle Bennett



OUTLINE

- Internal ERC Management Structures
- External ERC Management Structures
- Dissemination and Data Management

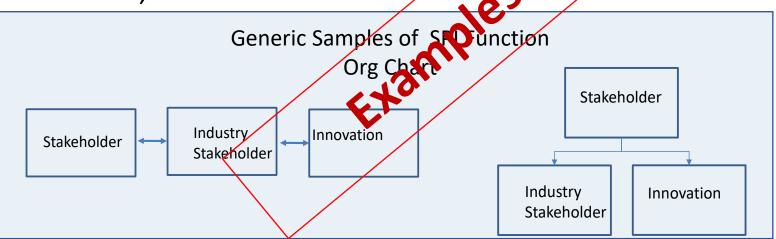


Strategic Partner & Innovation (SPI) Lead

Creates strategic plan for nurturing ERC's innovation ecosystem. Under that umbrella, the SPI Director defines the organization, reporting structure, and processes needed to complete the following 3 functions:

see details in Innovation Ecosystem presentation

- a) nurture innovation ecosystem,
- b) manage industry partner relations,
- c) engage stakeholders.





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Dissemination and Data Management

- Dissemination Plan: NSF PAPPG Chapter XI Section
 D.4 "Dissemination and Sharing of Research Results"
- Public Access Policy: NSF PAPPG Chapter XI Section D.2 "Copyright" https://www.nsf.gov/news/special reports/public access/
- Data Management Plan guidelines: https://www.nsf.gov/bfa/dias/policy/dmp.jsp







Best Practices Manual (to be updated), http://erc-assoc.org/best_practices/best-practices-manual

- ERCWEB Library, https://www.erc-reports.org/public/library
 - Reporting requirements/guidelines
 - Performance metrics

QUESTIONS