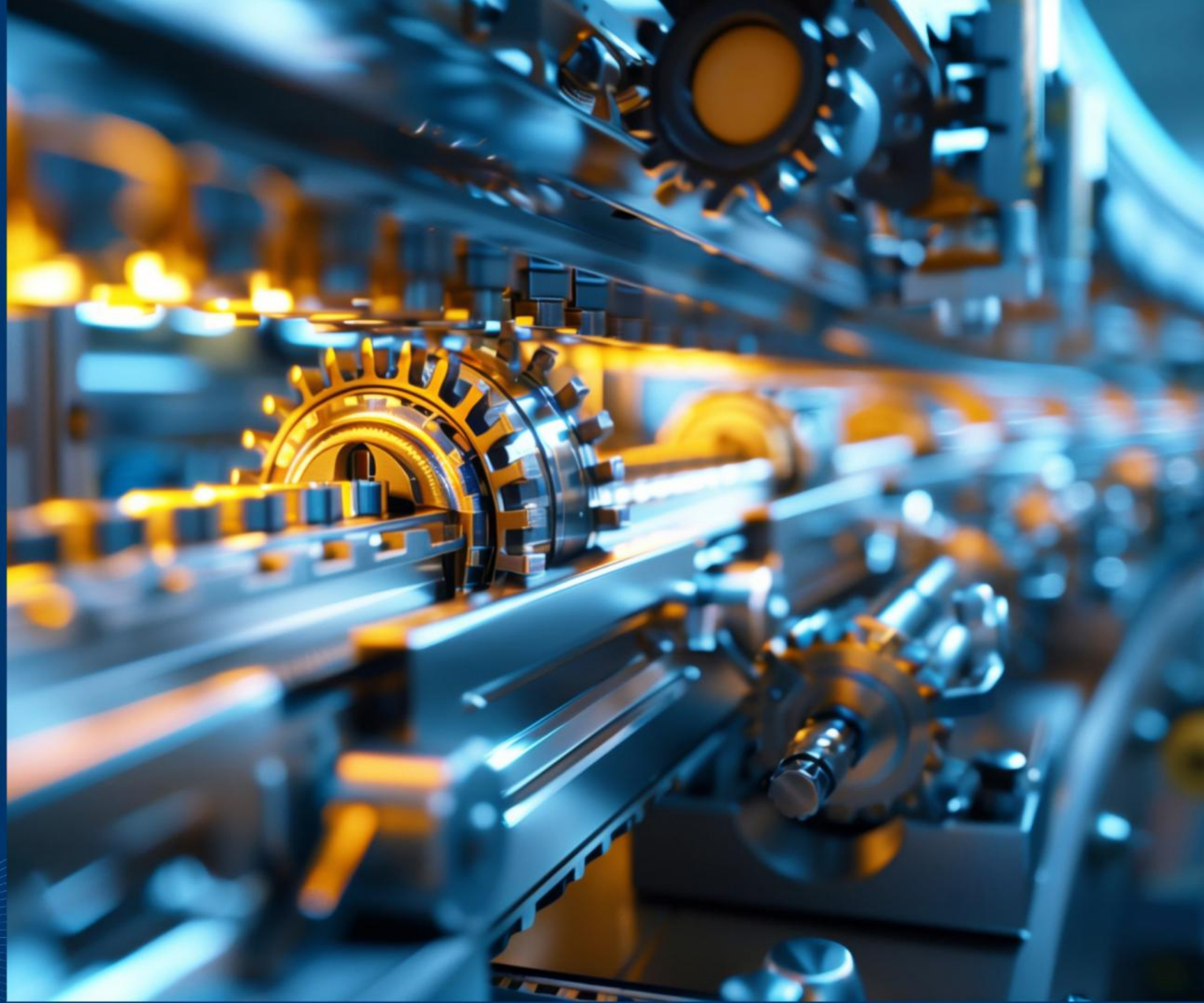


NSF ERC Strategy Session

Positioning Yale teams
for a future Gen-4
Engineering Research
Center Competition

Sep 1, 2026

Yale Office of Research Development



Yale Office of Research Development

 **Established:** November 2023 under the Vice Provost for Research

 **Mission:** We help faculty and teams navigate the federal funding landscape, develop competitive proposals, and strengthen Yale's position in an increasingly competitive research environment.

 **Focus:** Interdisciplinary, center-style proposals exceeding \$1 M/ year

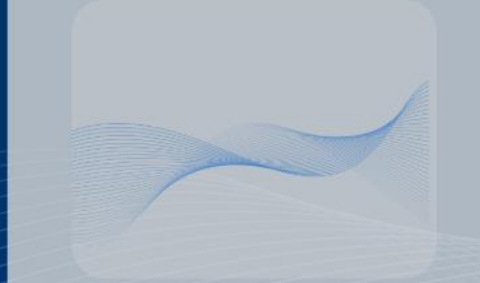
MEET THE TEAM



Christina McDonald
Director
christina.mcdonald@yale.edu



Trisha Bailey, Ph.D.
Research Development
Specialist



Karen Francis, Ph.D.
Program Manager, Funding
Opportunities



Kirsten Hewitt, Ph.D.
Research Development and
Analytics Specialist

Yale Office of Research Development

Research Strategy, Communication, & Funding Intelligence

 **Limited Submissions & Internal Competitions**
We support Yale's strongest candidates for competitive, limited-opportunity grants.

 **Strategic Research Positioning**
Get guidance on aligning your research with funder priorities and long-term trends.

 **Funder Engagement Support**
Learn how to connect with program officers and navigate the funding landscape.

 **Funding Opportunity Newsletter**
Receive curated funding intel directly to your inbox.

 **Funding Opportunity Webinars**
Strategic insights that offer strategic context, solicitation guidance, and key deadlines.

Large-Scale Proposal Development & Facilitation

 **Pre-Proposal Planning**
Clarify your scope, team roles, and strategy before you start writing.

 **Structuring & Narrative Development**
We help strengthen clarity, cohesion, and alignment with funder goals.

 **Proposal & Deliverable Roadmapping**
We manage timelines and deliverables so your team stays on track.

 **Team Facilitation & Oversight**
We help your team stay aligned from concept to submission.

 **Graphics Support**
Get visual support to make your proposal easier to understand and more compelling.

 **Red Team Reviews* & Feedback**
Receive structured feedback to improve competitiveness before submission.
**2 month lead time needed*

Research Engagement & Strategic Collaborations

 **Strategic Team Formation**
We help you build competitive, cross-disciplinary teams for large grant opportunities.

 **Interdisciplinary Research Networks**
Connect across departments and schools to spark new collaborations.

 **Collaboration and Networking Events**
Discover partners and opportunities through facilitated research events.

 **Research Partner Engagement**
Bring funders, national labs, and institutions into conversations with Yale researchers.

 **Reverse Site Visits**
Engage directly with funders through tailored events and workshops.

Why convene before the solicitation?



Center Vision

A clear societal challenge, engineered system, and research thesis.



Strategic Ecosystem

Partners, stakeholders, workforce development, and innovation pathways.



Yale Positioning

A credible case for why Yale, why this team, and why now.

ERCs are built before they are written - and shaped before they are submitted.

Today's Focus

This session is about

Center formation

Competitiveness

Teams and partner strategy

Reviewer-facing positioning

Early readiness

Strategic next steps

This session is not about

Submission metrics

Forms and systems

Page limits

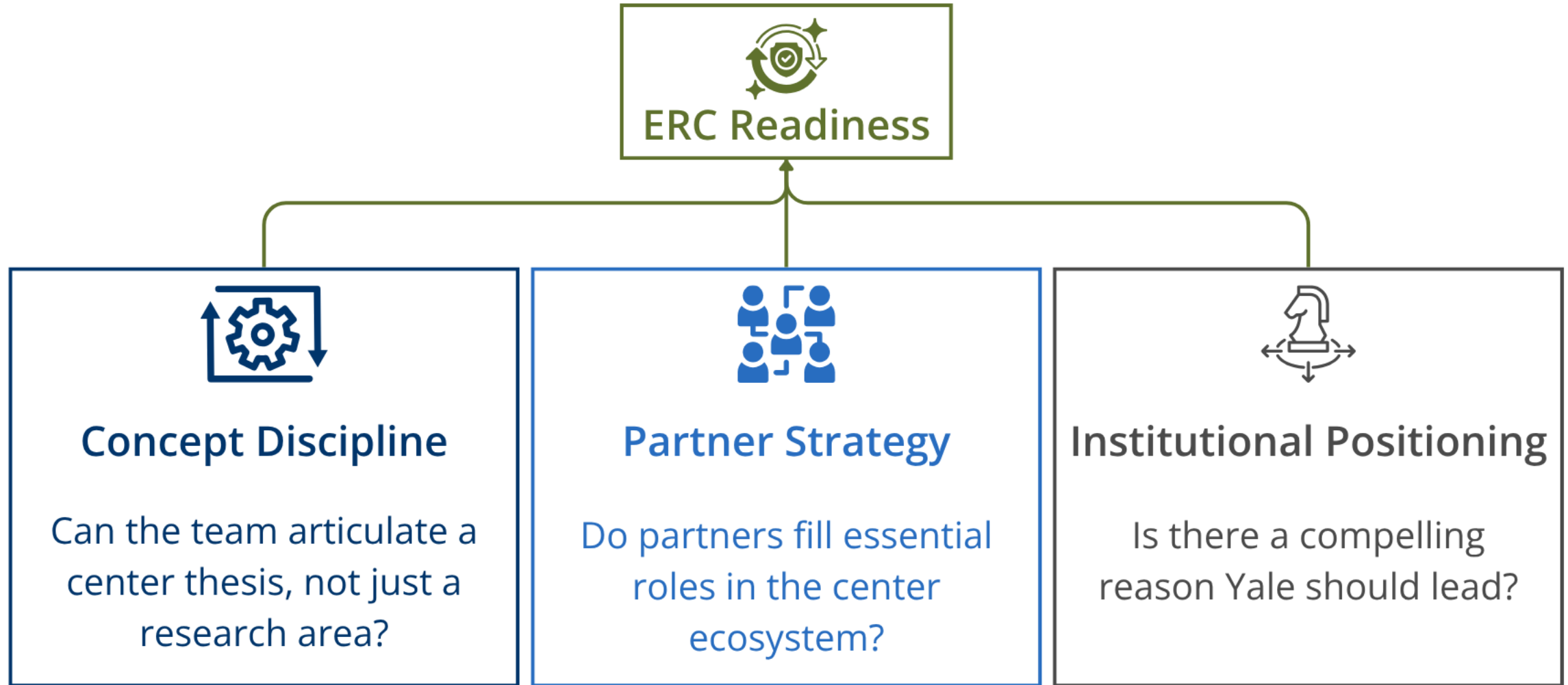
Administrative routing

Deadline management

Document assembly

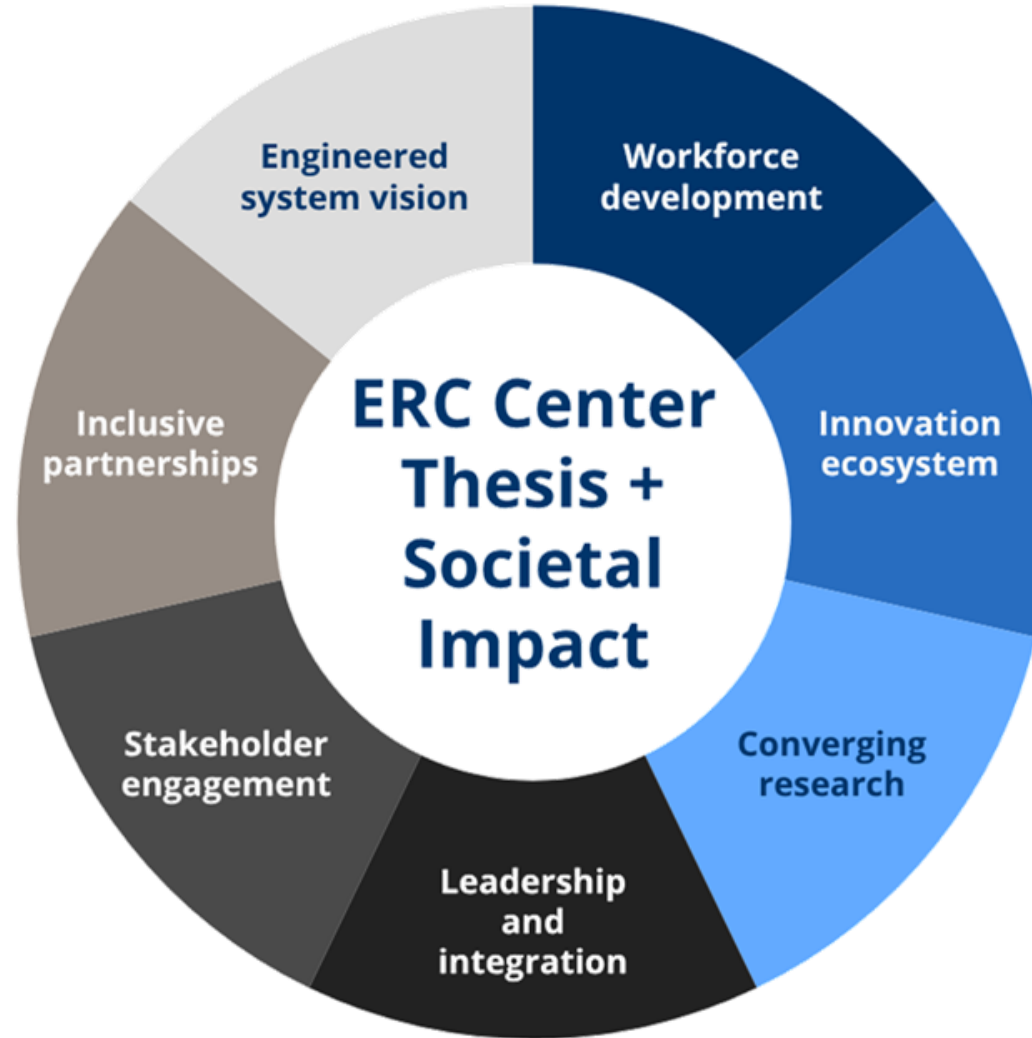
This is a strategy session, not a submission briefing.

Why this matters for Yale



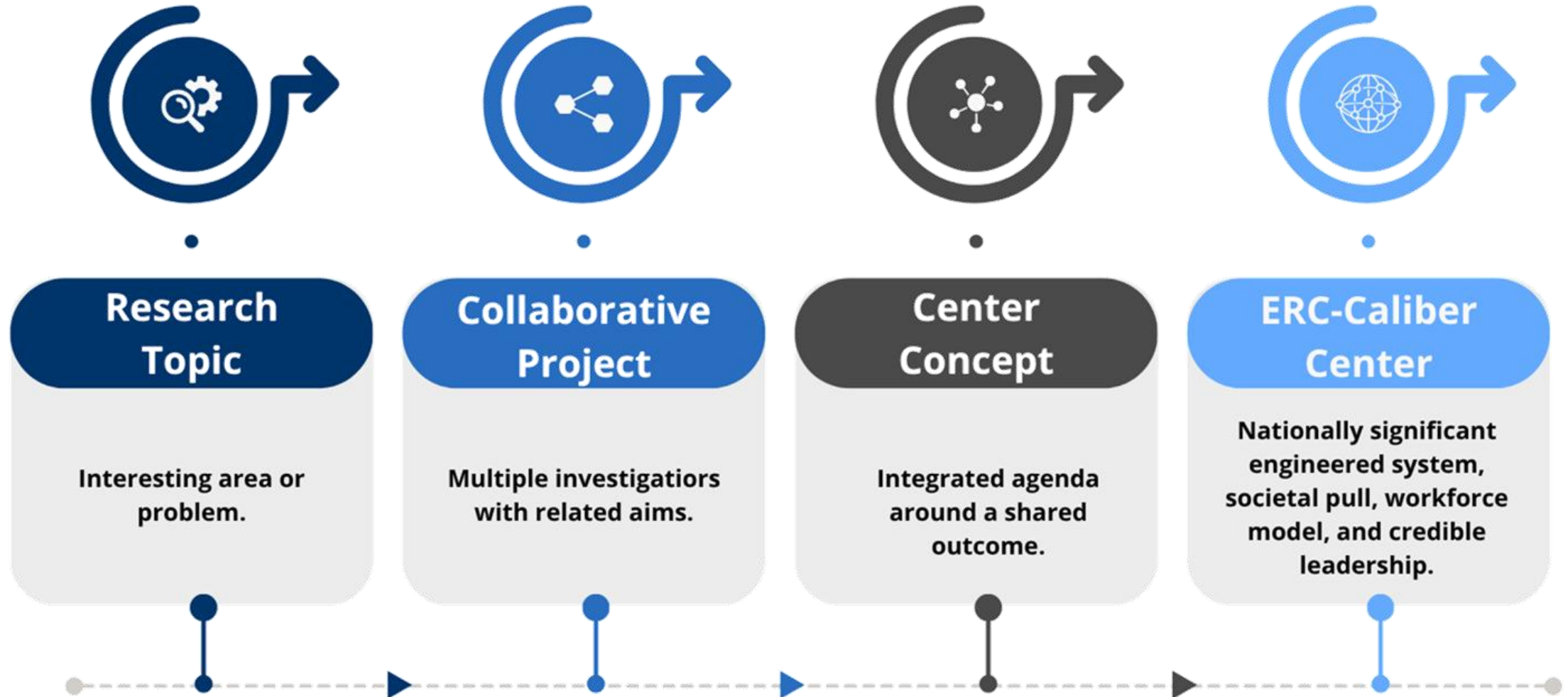
ERC competitiveness depends on early strategic choices.

What is an ERC, strategically?



An ERC is a center-scale engine for research, workforce development, and innovation.

From project to center



A strong ERC is not a bundle of excellent projects.

The center thesis

If Yale leads this center, then **[field / stakeholders / society]** will be able to **[new capability or outcome]** because **[integrated research + partner ecosystem]** will make possible **[engineered system or transformation]**.

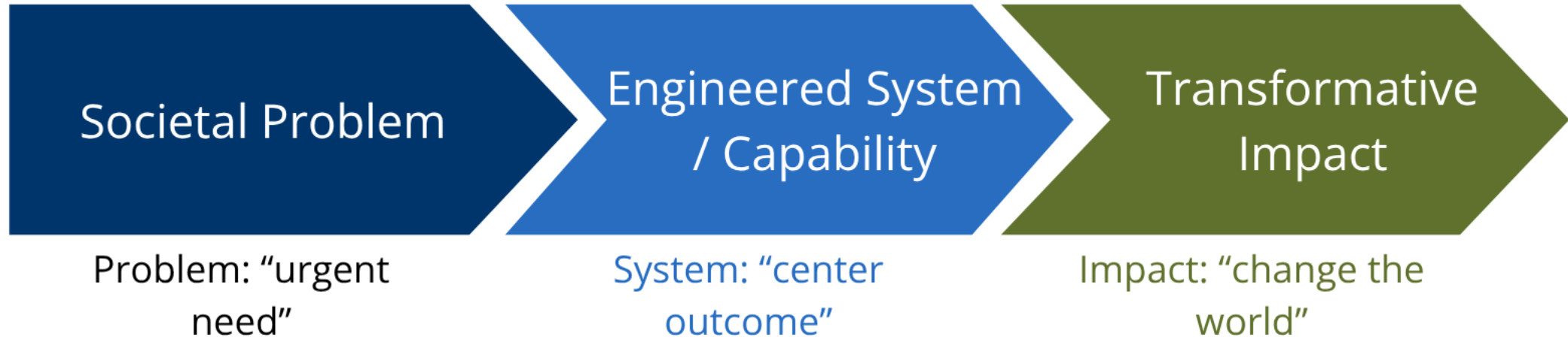
What will exist because this center exists?

Who urgently needs it?

Why can't separate grants do this?

Every competitive ERC needs a center thesis.

The engineered system / center outcome



- What system, platform, technology, infrastructure, or capability is the center building toward?
- What changes after five to ten years?
- What integrates the research thrusts?

The center needs a concrete outcome reviewers can believe in.

ERC-specific artifacts make the architecture visible



3-Plane Strategic Planning Chart

Connects research, engineered systems, and societal impact over time.



Institutional Configuration

Shows why this lead, these partners, and this structure are necessary.

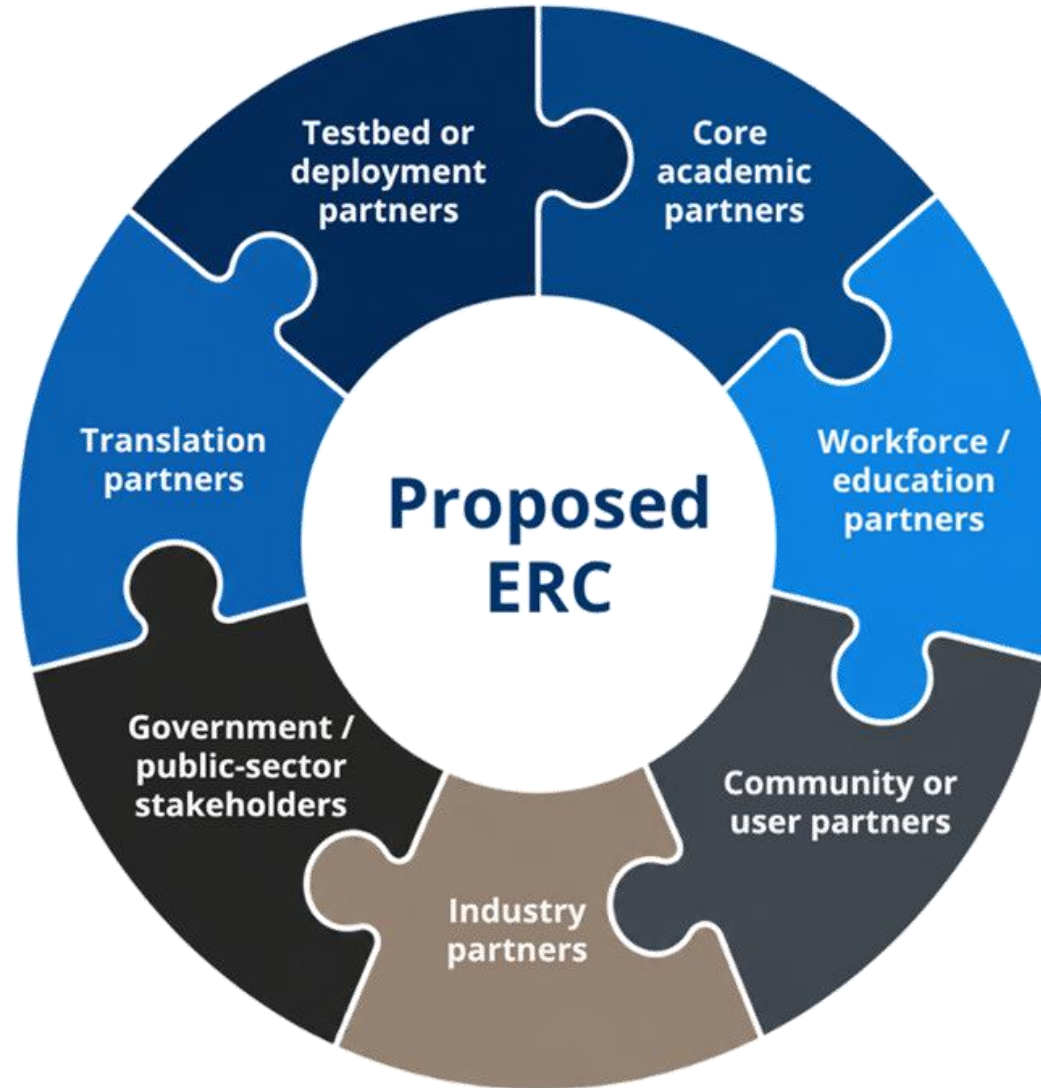


Team, Commitment, and Governance Evidence

Makes leadership, roles, institutional alignment, and execution credibility visible.

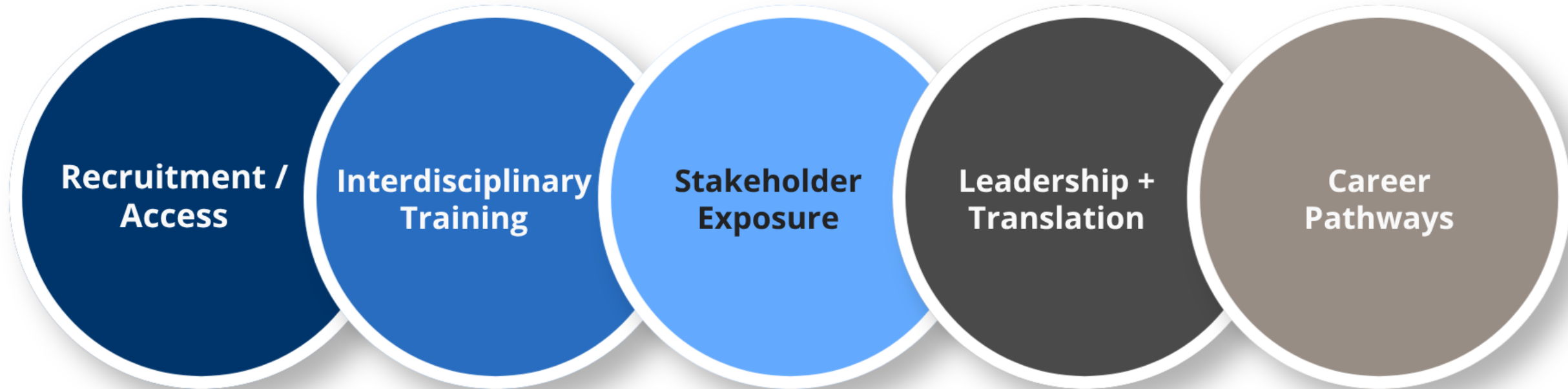
ERC artifacts are readiness signals, not just submission requirements

Partner ecosystem, not collaborator list



ERC partnerships should fulfill strategic functions.

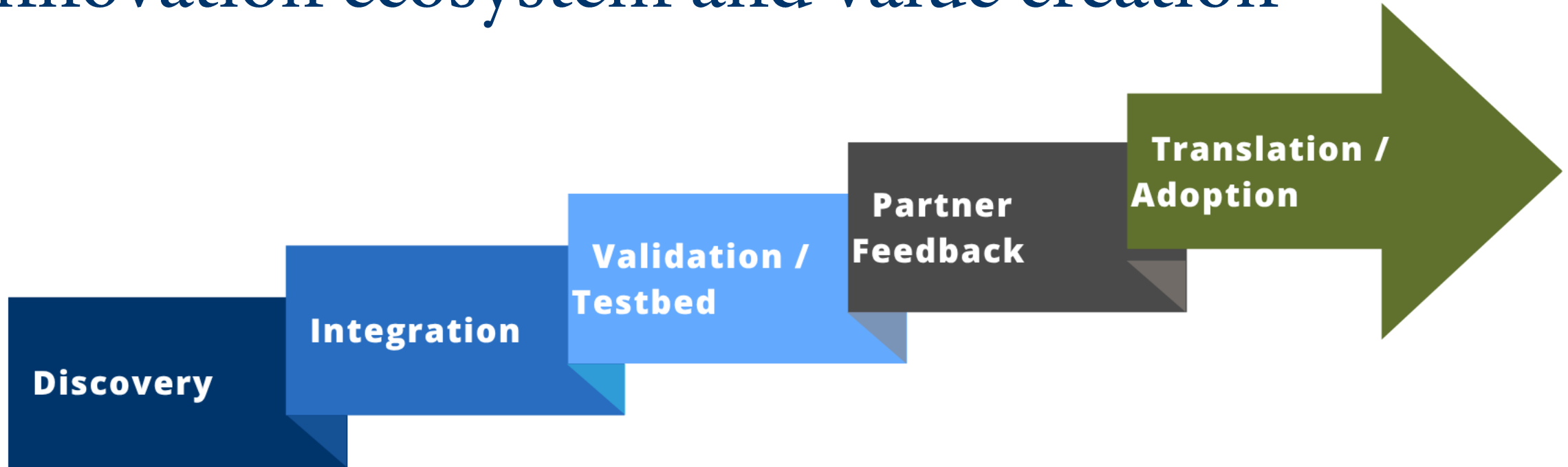
Workforce development as strategy



- What kind of technical leader will this center train?
- What will students experience that is different?
- How do partners and the engineered system shape training?

Workforce development cannot be an add-on.

Innovation ecosystem and value creation



Potential strategic contributions:

- Yale Ventures
- Industry partners
- Public-sector stakeholders
- Community or user groups
- School / department leadership
- External implementation partners

A credible ERC shows how knowledge moves towards use.

Why Yale? Why this team? Why now?

Why Yale?	Why this team?	Why now?
• Distinctive research strengths • Cross-school capabilities • Existing assets or infrastructure • Institutional credibility	• Leadership capacity • Complementary expertise • Integration across disciplines • Existing or emerging partnerships	• National need • Field inflection point • Technology readiness • Stakeholder urgency

If any answer is generic, the center case is not yet strong enough.

The center has to make Yale feel like the right lead.

ERC readiness map

Dimension	Early idea	Developing	ERC-ready
Center thesis	Topic area	Emerging center idea	Clear societal challenge + engineered system
Research integration	Related aims	Draft thrusts	Interdependent thrusts with shared outcome
Partners	Known collaborators	Interested partners	Strategic ecosystem with defined functions
Workforce	Activities	Training themes	Integrated model tied to center goals
Innovation	Potential applications	Some stakeholder interest	Value creation pathway and partner pull
Leadership	Strong PI	Leadership group	Credible center management and integration
Yale positioning	General excellence	Some institutional assets	Clear reason Yale should lead

YRD can help teams assess where the concept is mature and where it is thin.

Fireside Panel: Building a Center, Not Just a Proposal



Hong Tang

Llewellyn West Jones, Jr.
Professor of Electrical &
Computer Engineering

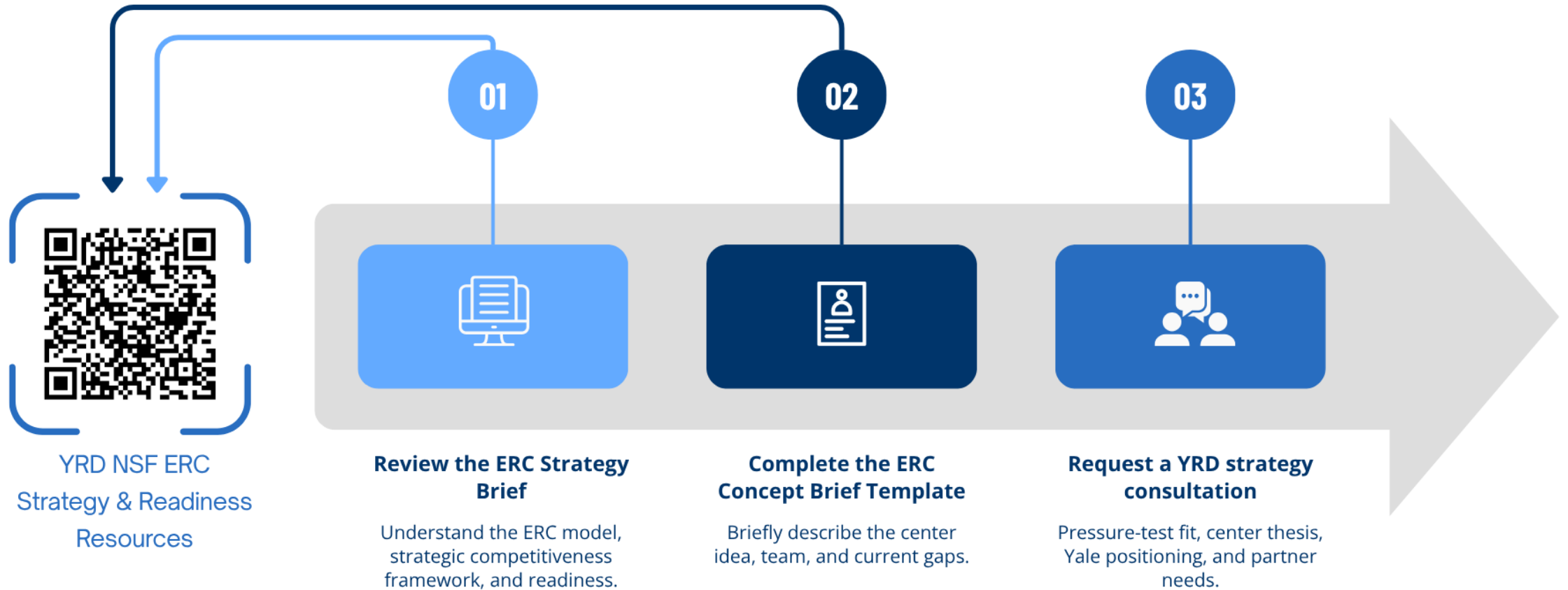


Leandros Tassiulas

John C. Malone Professor
of Electrical & Computer
Engineering

The discussion will focus on center formation, strategic partnerships, execution credibility, and what teams should build before solicitation release.

Strategic next steps



YRD follow-up begins with the concept brief and a strategy consultation.

NSF Expeditions in Computing (NSF 26-525) CURRENTLY ACTIVE

YRD can support interested teams with opportunity assessment, concept positioning, team development and proposal strategy.
Contact YRD to discuss fit and next steps.

Yale Office of Research Development

Thank you!



researchdev.yale.edu



Christina McDonald

Director

christina.mcdonald@yale.edu

Karen Francis

Program Manager, Funding Opportunities

Kirsten Hewitt

Research Development and Analytics Specialist

Trisha Bailey

Research Development Specialist



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