

NSF ERC Concept Brief Template

A YRD strategy tool for Yale teams exploring ERC-caliber center concepts

Section 1 — Proposed Center Identity

Field	Response
Working center title	
Potential acronym	
Potential Yale lead / center director	
Core Yale contributors	
Potential non-Yale core partners	

Section 2 — 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]**.

Prompt	Response
field / stakeholders / society	
new capability or outcome	
integrated research + partner ecosystem	
engineered system or transformation	

Section 3 — Societal Challenge + Engineered System

Societal Challenge	Engineered System / Capability
What societal, national, technological, industrial, environmental, health, security, or workforce challenge anchors the center?	What system, platform, infrastructure, technology, capability, or transformation is the center building toward?
Stakeholder Pull	5-10 Year Outcome
Who outside academia needs this?	What exists in 5–10 years because the center existed?

Section 4 — Research Architecture

Proposed thrust / area	Role in the center	Connection to shared center outcome

Integration mechanism:

How do the thrusts depend on one another?

Section 5 — Partner Ecosystem

Partner type	Potential partner(s)	What they make possible (function)
Core academic partner(s)		
Industry partner(s)		
Government / public-sector stakeholder(s)		
Clinical, community, user, or implementation partner(s)		
Workforce / education partner(s)		
Translation, testbed, or deployment partner(s)		

Section 6 — Workforce + Innovation

Workforce Development Vision	Innovation / Value Creation Pathway
What kind of engineer, scientist, technical leader, or workforce will this center produce? What will trainees experience that is distinct?	How will knowledge, tools, technologies, systems, practices, or trained people move toward use?

Section 7 — Why Yale? Why This Team? Why Now?

Why Yale?	Why this team?	Why now?
Specific assets, strengths, infrastructure, partnerships, or institutional positioning.	Leadership rationale and complementary expertise.	Field timing, stakeholder urgency, technology readiness, or national priority.

Section 8 — Current Readiness and YRD Support Needs

What is already strong?	What is thin or unresolved?	What must be built in the next 60–90 days?

Most useful YRD support:

- ☐ Strategy consultation
- ☐ Center thesis development
- ☐ Partner ecosystem mapping
- ☐ Landscape / funded-center intelligence
- ☐ Reviewer-facing positioning
- ☐ Concept brief refinement
- ☐ Readiness roadmap
- ☐ Other: