

How Do Agencies Determine L&C Priorities?



Taking Cues from the Direct and Indirect



National Science Foundation 10 Big Ideas

- 1 Future of Work
- 2 Growing Convergence Research
- 3 Harnessing the Data Revolution
- 4 Mid-Scale Research Infrastructure
- 5 Navigating the New Arctic
- 6 NSF 2026
- 7 NSF INCLUDES
- 8 Quantum Leap
- 9 Understanding the Rules of Life
- 10 Windows on the Universe



Office of Science and Technology Policy R&D Priorities



American Security (e.g., Advanced Military Capabilities, Critical Infrastructure Resilience, Semiconductors, Critical Minerals)



American Leadership in Industries of the Future (e.g., AI, Quantum Information Science, Computing, Advanced Communications Networks and Autonomy, Advanced Manufacturing)



American Energy and Environmental Leadership (e.g., Energy, Oceans, Earth System Predictability)



American Health & Bioeconomic Innovation (e.g., Biomedicine, Veteran Health and Wellness, Bioeconomy)



American Space Exploration and Commercialization

Not Your Mentor's Award

All Opportunities Growing in Complexity

Large and Complex Opportunities...



...require cross-disciplinary, cross-unit, cross-institutional, and/or cross-sector teams and coordination



...entail a more complicated budget exercise, as grants typically exceed \$1 million



...typically demand institutional cost-sharing and/or infrastructural investments



...include significant education and outreach components that necessitate dedicated staff and community engagement expertise



...occur inconsistently and often unpredictably because of longer award timeframes and changing funder priorities



...frequently limit the number of submissions allowed per institution

Example Large and Complex Awards

National Science Foundation

- Engineering Research Centers
- Materials Research Science and Engineering Centers

National Institute of Health

- P¹ and U² Grants

Department of Energy

- Engineering Frontier Research Centers

Department of Defense

- University Affiliated Research Centers

Tri-Council

- New Frontiers in Research Fund

1) Program Project/Center Grants.
2) Research Project Cooperative Agreement.

A Higher Bar to Clear

L&C Grants Have Stricter Expectations and Mandates

“

A cooperative agreement is not a gift, it's almost a contract. When you win one of these awards, you are considered to be on contract and treated as such. The agency must respond to advisories and committees so it must ensure that universities are working to successfully execute the grants.

*Former Program Director,
National Institutes of Health*

”

Challenges Faced When Executing L&C Awards



Agency Reporting

Universities must respond to agency inquiries and status updates throughout grant process



Administrative Support

Research offices must hire or backfill staff positions to fulfill additional requirements of L&C awards



Program Management

Awards must adhere to strict timelines and milestone mandates



Good for Them, Good for Us

Benefits Associated with Large and Complex Federal Awards



Problem Complexity

Enables institutions to undertake more complex research by providing greater funding over longer timeframe



Reputational Impact

Increases opportunities for media attention and prestige—and for more researchers



Administrative Capacity

Helps institutions gain experience and credibility as responsible administrators



Relationship Building

Facilitates formation and strengthening of relationships with partners, agencies



Innovation Impact

Paves the way to create innovative new disciplines, methods, and curriculum



Future Positioning

Increases institutional competitiveness for future awards

An Immodest Proposal Timeline

L&C Pursuits Require Far More Proposal Planning and Preparation Time

NIH R01 Award



Especially for first-time applicants, an R01 can require up to six months to:

- Plan and write (2-3 months)
- Receive feedback (1-2 months)
- Edit and rewrites (1 month)

NSF ERC Award



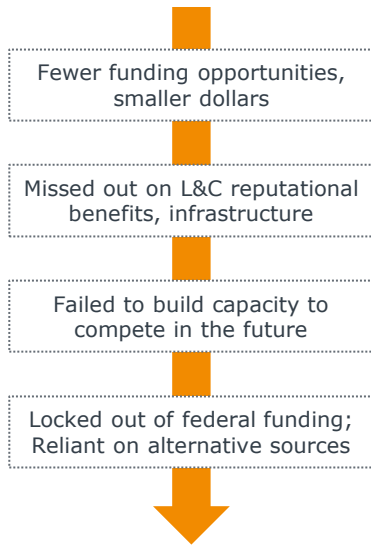
Even the most experienced ERC awardees require up to 18 months to compile a competitive proposals:

- Identifying leadership (1-2 months)
- Convening team (2-3 months)
- Plan and write (7-9 months)
- Receive feedback (2-3 months)
- Edit and rewrites (2 months)

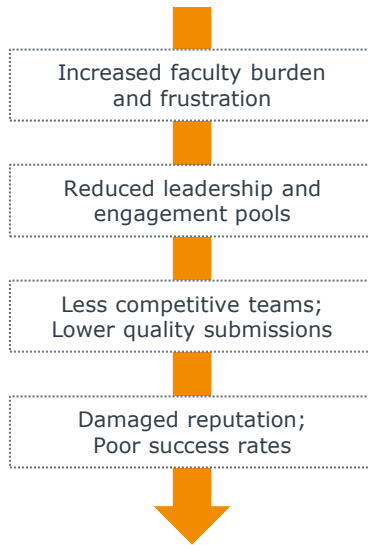
A Rocky Road

Three Potential Pitfalls in Journey to Grow the Research Enterprise

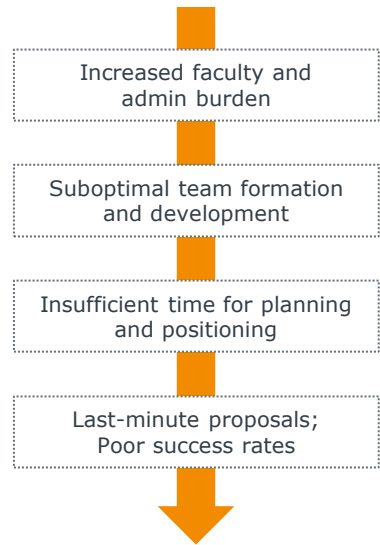
1 Overly reliant on individual investigator awards



2 Laissez-faire approach to team formation, support



3 Reactive approach to L&C awards



Stagnated Research Expenditures

Research Development (RD) to the Rescue



Traditional Approach to RD



Support services decentralized across campus units



Predominantly focuses on individual investigator awards



Uses same playbook of activities and services as other institutions



Broad mandate to help faculty compete for extramural awards

Case in Brief: National Organization of Research Development Professionals (NORDP)



- NORDP was established in 2010 to build community for the growing field of research development professionals in higher education
- Members share best practices for securing and managing research funding and facilitating building collaborative services through research offices
- NORDP supports members with RD activities such as strategic research advancement, research communications, enhancement of team science and proposal development services

Universities Must Evolve RD Priorities to Reflect L&C Grants

Evolving RD Strategy



How can we position ourselves to be more competitive for L&C awards?



How can we adjust our existing resources to support the pursuit of L&C awards?

Refining Institutional Research Strategy

How can we make research strategy more comprehensive and institutionally aligned?

Developing Research Partnerships

How can we tap a range of external and internal stakeholders (not just RD staff) to increase competitiveness

Adapting Research Office Services and Resources

How can we prioritize activities and services based on institution-specific goals and objectives?

Supporting Building Research Teams

How can we support faculty collaborate by breaking disciplinary siloes?

Our Focus Today



Expediting the Shift Toward Strategic Research Development

I



Use Data and Analytics to Drive Research Strategy

1. Competitive Intelligence Analyses

II



Better Position Institution with Pre-RFP Interventions

2. Federal Agency Relationship Building
3. Complementary Partnership Development

III



Tailor Resources to Support Team Development

4. Guided Team Formation
5. Targeted Leadership Identification and Training
6. Scaled Research Project Management Resources

IV



Upgrade Proposal Development Services to Improve Submission Quality

7. Proactive Proposal Interventions
8. Proposal Reapproach Support