



Incremental Tweaks Are Insufficient

Traditional Seed Funding Model Not Directly Applicable to Interdisciplinary

	Traditional Seed Funding Programs		Typical Adaptations for Interdisciplinary Opportunities
Goal	Provide initial funding to support <i>individual</i> research	→	Adjust language to <i>interdisciplinary</i> research
Amount	Varies between \$1K and \$15K depending on matching requirements	→	Increase funding amounts
Criteria	Eligible faculty must submit a study proposal and budget	→	Scale application expectations
Evaluations	Centrally staffed review panel selects awardees	→	Use same evaluation process

Inherent Challenges of Interdisciplinary Research

- Diversity of disciplines lead to miscommunication and methodological misalignments
- Large size and geographic dispersion of faculty can impede workflow and productivity
- Group coordination requires additional financial and administrative support
- Incentives for participation vary by discipline, college, and institution

Building It From Scratch

Process to Develop a Strategic Interdisciplinary Seed Funding Program



1. Establish goals that will enhance interdisciplinary research



2. Design program structure to align with objectives



3. Select eligibility criteria that catalyze collaboration



4. Create a transparent selection process with interdisciplinary representation



5. Build a coalition with university leaders to promote program



1. Establish Goals That Will Enhance Interdisciplinary Research



Broad Goals Fail to Address Core Problems with Interdisciplinary Research

“We want to fund big ideas.”

This falls short because...

- ✘ No delineation of current strengths and emerging areas of research focus
- ✘ No clarity on types of large and complex interdisciplinary opportunities
- ✘ No funding parameters for early-stage research requiring additional support

Example:



▶ **The Maryland Catalyst Fund**

- Explore emerging areas of research
- Actively target large and prestigious awards
- Catalyze ideation of new research

“We want to support team research.”

This is inhibited by...

- ✘ Lack of project management and administrative support
- ✘ No centralized process to access equipment, collaborative spaces, and laboratories
- ✘ Lack of interdisciplinary experience and poor communication

Example:



▶ **Northwestern 1-2-3 Seed Funding**

- Encourage proactive planning
- Fast-track approvals for resources
- Support team and leadership development workshops

2. Design Program Structure to Align with Objectives



University of Maryland's Catalyst Fund Offers Tiered Programming

	Program Name	Objective	Available Funding
Capacity-Building	New Directions Fund	New lines of research	L1: ≤\$25K
		Limited External Grant Opportunity fields	L2: ≤\$50K
	Fearless Ideation Workshops	Identify unique UMD strengths within high-potential multidisciplinary topic areas	≤\$15K
Opportunity-Specific	Big Opportunity Fund	Proposal support for large-scale, high-impact opportunities (≥\$2M/yr.)	≤\$50K
	Strategic Growth Fund	Proposal support for priority topics, headliner awards, and future research leaders	≤\$15K
	Reinforcement Fund	Unfunded requirements for large center proposals (≥\$2M/yr.)	≤10% F&A



Key Elements

Designated Categories

Programs are categorized by intended goal of capacity-building or pursuit of specific opportunity

Clear Definitions

Each program has distinct, clearly defined objective

Menu of Programs

Programs address different stages of research process

3. Select Eligibility Criteria That Catalyze Collaboration



Eligibility

- Eligibility criteria should reflect the specific objectives of program
- Criteria to consider:
 - Disciplines represented
 - Previous faculty collaborations
 - Faculty ranks
 - Cross-institutional proposals



Funding Guidelines

- Awarded funds should be used to promote interdisciplinary research
- Guidelines to consider:
 - Matching funds from units and/or faculty
 - Graduate student funding
 - Pilot data collection
 - Team-building activities



Outcomes

- Award recipients should be required to demonstrate the use and impact of funds
- Deliverables to consider:
 - External award submission
 - Proposal presentation
 - Annual budget reports
 - Publications, book contracts, conference proposals

▶ Northwestern's 1-2-3

Teams must be cross-college, cross-department, and new (not existing) collaborations

▶ Michigan's Mcubed

Half of awarded funds must support graduate and postdoctoral students

▶ Northeastern's TIER

Proposals must include strategy for pursuing extramural opportunities

4. Create a Transparent Selection Process with Interdisciplinary Representation



Key Problems

Opaque selection process

Faculty are unsure about who actually reviews proposals (e.g., VPR, review panel) and whether/how criteria are used to make decisions

Inconsistent application of criteria

Programs apply "universal" guidelines and metrics that don't apply to all disciplines and reinforce the status quo (e.g., favors siloed, disciplinary proposals)

Under-representative selection committee

Review panels lack interdisciplinary perspectives being primarily comprised of staff or faculty from similar backgrounds—this disadvantages some disciplines and innovative approaches

Lack of feedback

Faculty do not receive an explanation for why their proposals are rejected or awarded funding, making it difficult to improve their future submissions

Intervention



Create and publicize evaluation rubrics and proposal review guidelines



Develop strategy for evaluating interdisciplinary proposals holistically



Recruit panels representative of faculty and staff with relevant disciplinary expertise



Provide feedback for all proposals submitted to the program

4. Create a Transparent Selection Process with Interdisciplinary Representation (Cont.)



Team Assembly Process for University of Michigan's Mcubed Program



Post project proposal online

- Eligible faculty members post their research ideas on secure internal website
- **Replaces traditional focus on proposal development**



Assemble interdisciplinary "cube"

- Two additional interested faculty must join project to create cube
- **Removes biases and barriers of review panels**



Immediately receive funds

- Funds are immediately distributed to cube to support project
- **Expedites the funding allocation process**

Advantages of the Mcubed Peer Review Model



Streamlines identification of **new collaborators** in a **decentralized environment**



Democratizes research by replacing review panels with **peer-to-peer feedback and selection**



Enables exploration of **high-risk research** that might not attract traditional funding

5. Build a Coalition with University Leaders to Promote Program



Advantages to Building Program First

- ✓ Frontloads program design to ensure alignment with university research needs
- ✓ Standardizes branding campaign for the program across all units
- ✓ Reduces administrative burden for potential funding partners
- ✓ Communicates a clear and valuable investment opportunity
- ✓ Simplifies administrative processes and forecasts work volume ahead of launch

Common Pushback and Responses



"How is this different than existing seed funding programs?"

"Interdisciplinary research is more complex and requires additional support."



"How does allocating more money solve the problem?"

"Cost-sharing mechanisms incentivize participation and accountability."



"How does this impact me?"

"Funded programs are more competitive for extramural opportunities, expanding our university's research enterprise."

Reevaluate Program Objectives and Strategy

