# **Incremental Tweaks Are Insufficient**

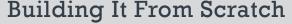


# Traditional Seed Funding Model Not Directly Applicable to Interdisciplinary

_	Traditional Seed Funding Programs	Typical Adaptations for Interdisciplinary Opportunities
Goal	Provide initial funding to support <i>individual</i> research	Adjust language to interdisciplinary 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





# Process to Develop a Strategic Interdisciplinary Seed Funding Program



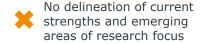
# 1.Establish Goals That Will Enhance Interdisciplinary Research

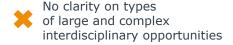


# Broad Goals Fail to Address Core Problems with Interdisciplinary Research

#### "We want to fund big ideas."

This falls short because...





No funding parameters for early-stage research requiring additional support

#### Example:



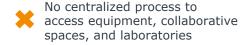
### The Maryland Catalyst Fund

- 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 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	New lines of research	L1:≤\$25K
	Fund	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

#### Northwestern's 1-2-3

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



## **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

# Michigan's Mcubed

Half of awarded funds must support graduate and postdoctoral students



#### **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

## 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

# Assemble interdisciplinary "cube"

# Immediately receive funds

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

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

- 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



