



Proof of Concept Funding: Some Examples

CICEP Summer Meeting

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Massachusetts Technology Transfer Center

Purpose of Proof of Concept Funds

- Facilitate commercialization of promising technologies
- Excite interest of potential licensees or investors
- Encourage researchers to take technology closer to market

Proof of Concept Programs

Institution	Program
Massachusetts Technology Transfer Center (MTTC)	Technology Innovation Grants
Massachusetts Institute of Technology	Deshpande Center
University of Massachusetts (UMass)	Commercial Ventures and Intellectual Property (CVIP)
Boston University	Fraunhofer Center, Ignition Grants, Coulter Center
Harvard University	Accelerator Fund
Partners (MGH and Brigham & Women's Hospital)	Innovation Fund
University of California, San Diego	Von Liebig Center and CCAT
University of Vermont	Pre-Seed Capital Fund and Innovations Fund

Funding Sources

Institution	Sources
Massachusetts Technology Transfer Center (MTTC)	State funding
Massachusetts Institute of Technology	Specific funds from single donor
University of Massachusetts (UMass)	Internal investment of licensing revenues Discretionary funds
Boston University	Foundations and Discretionary funds
Harvard University	Specific funds from multiple donors and Alumni
Partners (MGH and Brigham & Women's Hospital)	Internal Investment
University of California, San Diego	Foundation, City of San Diego, ONR
University of Vermont	Alumni gifts

Size of Awards

Institution	Grant Sizes
Massachusetts Technology Transfer Center (MTTC)	up to \$40,000
Massachusetts Institute of Technology	\$100,000 and \$50,000
University of Massachusetts (UMass)	up to \$30,000
Boston University	Coulter Grants: ~ \$100,000 Ignition Grants: up to \$50,000
Harvard University	\$100,000 - \$150,000 larger for exceptional cases
Partners (MGH and Brigham & Women's Hospital)	up to \$200,000
University of California, San Diego	up to \$75,000
University of Vermont	10,000 – 100,000

Typical Uses of Funds

- Proof of Concept
 - Hiring of additional staff/grad students for specific experiments
 - Buying of specific testing equipment
 - Pivotal translational proof of concept experiments
- Prototype development
 - Testing in an industrial setting or by 3rd Parties
 - Clinical Development
- Marketing and Customer Development
 - Developing user friendly interfaces
 - Engaging end users to evaluate the technology
 - Developing a Business Plan

Disallowed Uses of Funds

Varies by institution:

- IP expenses (may be allowed if capped)
- Major equipment
- Laptops
- Travel to academic conferences
- Summer Salaries

- Sector/Discipline/School Specific Funds

Allocation/Reviewing: Internal

- Process: TTO or internal committee decision
- Pros
 - Maintain confidentiality
 - Maintain control
 - Responsive to university priorities
 - Knowledge of PIs
- Cons
 - Internal influence/pressure to award to certain faculty
 - Not independent
 - Limited expertise
 - May be a closed process

Allocation/Reviewing: External

- Process: External, independent reviewers
- Pros
 - Independent review
 - Select expertise
 - Industry view
 - External connections
- Cons
 - Confidentiality issues
 - Recruitment and management of volunteers
 - Unexpected outcomes

Allocation/Reviewing: Combination

- Process: Combination of internal & external (UMass, Harvard)
 - Initial cut of proposals by TTO's
 - Secondary Review with internal and external reviewers to select awardees
- Best of both worlds?

Support for Awardees

- Business Skills
 - Marketing and business development support
 - Project/Sub-contractor management
 - Competitive analysis
- Mentoring
 - “Personal Commercialization Coach”
 - Managing consultants
 - Maintaining momentum
 - Networking

Support for Non-Awardees

- Even if you don't fund them
 - You still have to live with them
 - The review process is not perfect
- Proactive Management
 - Provide one-on-one debriefing sessions
 - Help find other resources
 - Support with re-application
 - Be honest about ideas that are never going to get funded
- Minimize number of "rejects" by using a pre-proposal
 - Harvard, MIT and BU invite whitepapers (pre-proposals) and then ask a smaller group to formally apply
 - Less effort to prepare proposals and less disenfranchisement

Location of Program Managers

- Within TTO
 - UMass
 - Harvard Accelerator
 - BU
 - UVM
- Outside of TTO
 - Deshpande
 - MTTC
 - BU Coulter in Bioengineering
 - Partners
 - UCSD

Measuring Outcomes

- New Funding
 - New Grants
 - Sponsored Research
- New Intellectual Property
 - New Disclosures
 - New Licenses
 - Publications
- Increased Commercialization Progress
 - Advancing on the commercialization path
 - New Companies – and new capital raised
 - Closer to the clinic
 - Increased faculty participation in commercialization activities
- Other
 - Engaging Students

Kauffman Study - *Proof of Concept Centers: Accelerating the Commercialization of University Innovation.*

MTTC Success Stories

- Solasta
 - Grant to Boston College for improved solar cells
 - New spin-off company
 - Raised \$2 million in VC funding
- Grant to UMass Med for poultry vaccine development
 - license with sponsored research agreement
- Grant to Boston Children's Hospital for orthopedic application
 - \$1.5 million in new NIH grants
 - New start-up in formation



Contact

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