PATIO

The Advanced Research Projects Agency for Health

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ARPA-H

Project Accelerator Transition Innovation Office (PATIO)

Our Mission: PATIO increases the probability that ARPA-H funded health technologies **will reach Americans** by identifying barriers and providing transition and commercialization services to program managers and performers.

Since ARPA-H will not fund performers in perpetuity, PATIO's services increase the odds that solutions attract private investment and customers—to translate the breakthroughs

Where might the solution go after ARPA-H?

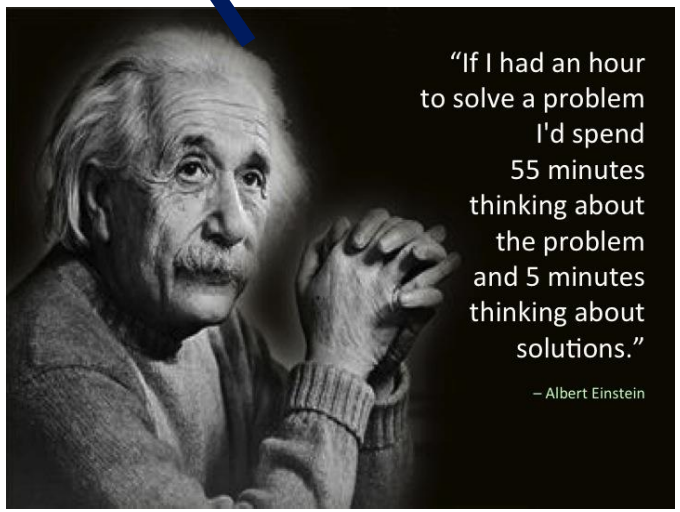
Work backwards: Design with the end in mind

Large Established Company	Emerging Company with VC Backing	De Novo Startup	Health Care System
Other Gov Agency	Scaled NGO or Non-Profit	Startup NGO or Non-Profit	Fast Fail & Early Offramps

Most Common Startup Failures

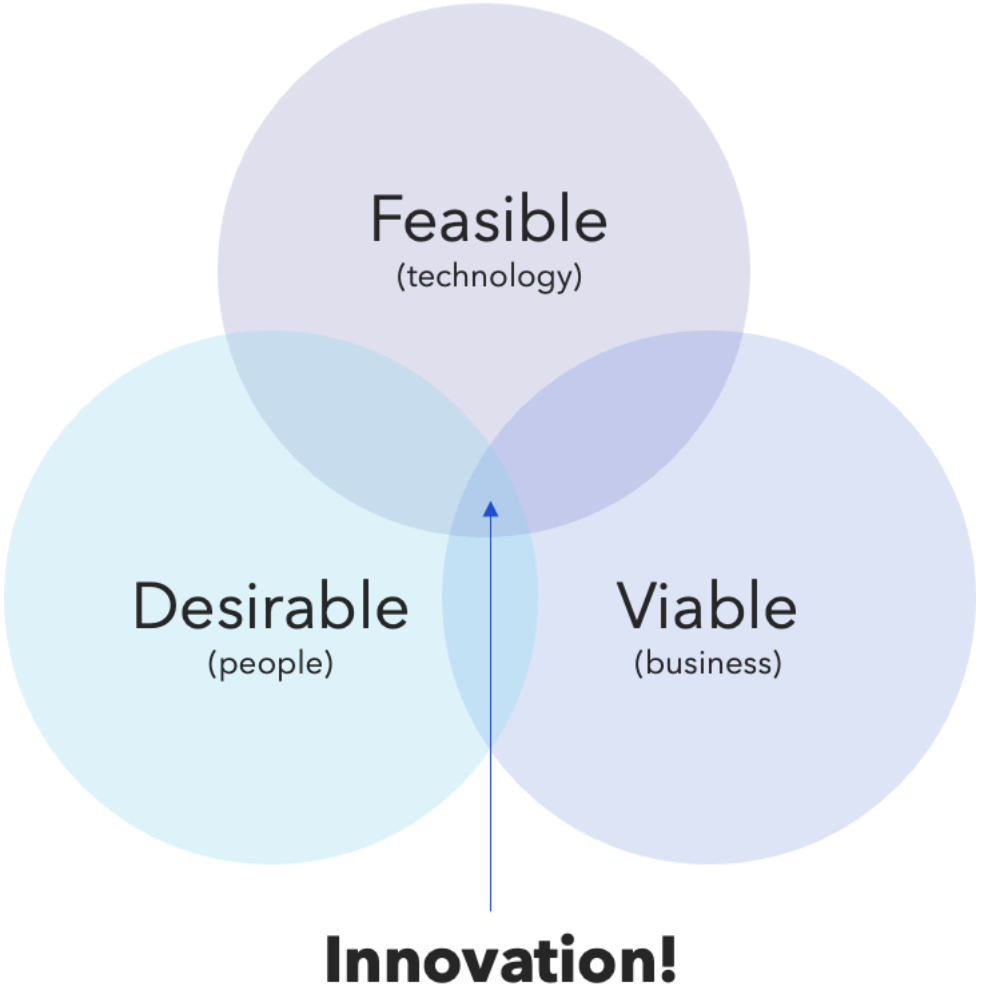
Based on the analysis of 101 startup postmortems

60% of startups fail between the pre-seed and Series A funding stages



https://medium.com/age-of-awareness/why-school-shouldnt-be-designed-for-learning-db0192a41f20

Design Rubric



Our Capabilities

Technology Transfer and Transition Services (T3X)

Build transition-ready programs by de-risking solutions from program design through performance; runs agency SBIR/STTR program

Led by Jenica Patterson

Health Ecosystem and Engagements Team (HEET)

Create meaningful bi-directional communication between ARPA-H and America.

Led by Dan Bram

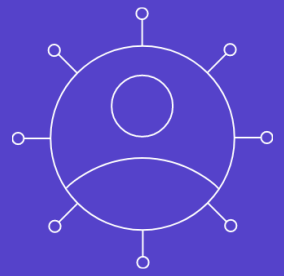
ARPANET-H (ANH)

Connect a fragmented health ecosystem through projects, events, and democratized learning

Led by Amy Lin

PATIO is led by Craig Gravitz (Director) and Melissa Antman (Deputy Director)

Health Ecosystem Engagement Team (HEET)



Create meaningful bi-directional communication between ARPA-H and stakeholders

Capabilities

- **Ecosystem Activities & Speaking Opportunities** Broad, in-person engagements where ARPA-H leaders explain the ARPA-H model and mission and build connections.
- **Network on Demand** A self-service platform for ARPA-H PMs and others to access key external stakeholders + ensure de-duplication of efforts.
- **Design Services** Capture the needs and perspectives of expected agency beneficiaries using design research tools and practices.
- **In-Person Discovery Trips** Targeted, deep dive trips with small groups of ARPA-H technical staff to deepen perspectives.

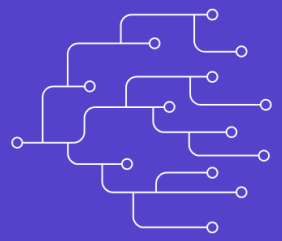
ARPANET-H

Connect a fragmented health ecosystem through projects, events, and democratized learning

Capabilities

- **Funding Opportunities/R&D projects** Funded projects to accelerate transition.
- **Network Activation** Gather feedback at scale by drawing on the skills and reach of network members.
- **Consortium Events/Network Building Activities** Convene the ARPANET-H network to foster connections and enable information sharing.
- **Program Augmentation (future)** Support maturing ARPA-H efforts. Examples might include independent validation and verification, CROs for pre-clinical, clinical trial support, and manufacturing (facilitating the business relationships).

Technology, Transfer and Transition Services (T3X)



Build transition-ready programs by de-risking solutions from program design through performance.

Capabilities

- **Experts in Residence (XIR) Program** External, recognized transition/commercialization experts identify and solve for blind spots of ARPA-H PMs and programs.
- **Regulatory & Reimbursement Support** Demystify and assist in navigation of these processes. Get involved early to avoid traps.
- **Due Diligence / Landscape Analyses** IP analyses, commercialization landscape to understand a particular technology, competitive landscape to understand key players in the arena, etc.
- **Small Business Program** provides funding for small businesses that possess the expertise to use innovative approaches to enable revolutionary advances in science, technology, or systems leading to developments that contribute toward the agency's mission.

ARPA-H's Small Business Program

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ARPA-H Small Business Program (SBP):

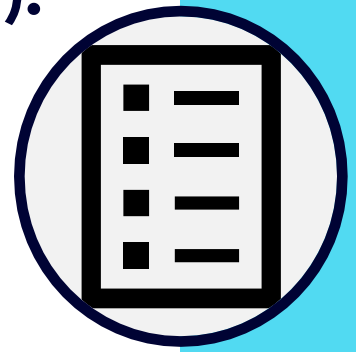
Non-Dilutive Opportunities for U.S. Small Businesses

- ARPA-H's SBP focuses on leveraging research advances for real world impact.
- Our SBP topics are generated by ARPA-H Program Managers and align with their programs.
- ARPA-H releases at least one contract solicitation each year addressing topics that are mission-oriented.
- Our SBP positions small businesses to commercialize technological solutions and products that are spun out from ARPA-H programs.

Learn more at our website ➡

ARPA-H contact us! sbir@arpa-h.gov

ARPA-H SBP Advantages



- Simplified contract application process
- Expedited review process only takes a few months!

- Non-dilutive funding. Stable and predictable funding.
- Not a loan, as SBIR/STTR funds do not have to repaid. IP rights are retained by the small business.

- ARPA-H SBP performers can utilize our suite of entrepreneurial services to help advance and commercialize technologies.

ARPA-H Small Business Program: 2023 Solicitation Awards

Solicitation Awards

Topic	Project	Performer	Location
Topic 1: Novel telehealth instruments for assessing pediatric well-being	A Smart AI-based Digital Health Framework for Enhancing Pediatric Wellness	Medentum Innovations Inc.	Clintwood, VA
	Digital Assessment of Children's Conditions Using Artificial Intelligence ("DACCS AI")	BelleTorus Corporation ("Belle.ai")	Cambridge, MA
Topic 2: Microneedle-based patches and digital patch interfaces for remote and real-time transdermal drug delivery and chronic disease management	Design Integration and Testing of a Low-Cost Disposable Remotely Controlled Microneedle Transdermal Drug Delivery Device	Satio, Inc.	Boston, MA
	Microneedle-based Patch for Remote and Real-time Transdermal Drug Delivery for Cardiovascular Disease	Triton Systems Inc.	Chelmsford, MA
Topic 3: Robotics for autonomous soft tissue surgery	'Autonomous' minimally invasive surgery approach with robotic tools and a 'smart' vision framework	OptoSurgical	Columbia, MD
Topic 4: Intraoperative contrast agents	Translation of Novel Biliary Tract-specific Contrast Agent to Mediate Successful Image-guided Hepatobiliary Interventions	OptoSurgical	Columbia, MD
	Real-time functional fluorescence nerve imaging for surgery	Trace Biosciences	Portland, OR
Topic 5: Scale-up: Transition disruptive technologies	Highly Miniaturized and Portable MALDI-2 Based Imaging Mass Spectrometry for Point-of-Care Clinical Diagnostics	BaySpec	San Jose, CA

Update on 2024 ARPA-H Small Business Contract Solicitation:

Pre-Solicitation Released on Jan 8, 2024

- Full solicitation will be released on January 22, 2024
- Proposers will have 30 days to submit
- Carefully review the solicitation prior to submitting your proposals
- Follow the solicitation instructions on how to contact us if you have any questions.

Learn more at our website

2024 Small Business Contract Solicitation Topics
Inexpensive plant-based manufacturing of viruses
LymphoLab ProDiscover Kit – Developing a lymphatic vasculature assay kit
Continuous monitoring of vascular health using smart biomimetic implantables
Fully autonomous neonatal echocardiography for diagnosis of critical congenital heart disease
Improving identity and access management with clinical context
Personalized medicine platform for predicting response to immunotherapy

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ARPA-H Small Business Program: Transition Awards

Project	Performer	Location
Machine Learning (ML) and Data Fusion Methods for Phenotype-based Threat Assessment of Unknown Bacteria	Netrias, LLC	Cambridge, MA
Wearable Ultrasound for Imaging and Modulation	The Ultran Group	State College, PA
Gene Therapy that Systemically Produces Brain-penetrating Replacement Enzyme for MPS IIIA (Sanfilippo A Syndrome)	BIOSTRATEGIES, LC	Jonesboro,AR
Real-time Multimodal Diffuse Reflectance and Polarization Imaging Based Nerve Identification in Surgical Field of View	YAYA SCIENTIFIC, LLC	Nashville, TN
Commercial Readiness for Direct-to-Digital Pathology	APPLIKATE TECHNOLOGIES, INC.	Fairfield, CT
Image-guided Surgical Detection of Metastatic Disease to the Peritoneum	ONCONANO MEDICINE, INC.	Southlake, TX
Phase II: biomimetic optical phantoms for advancing FGS	QUEL IMAGING	Hartford, VT
A New Paradigm for Autologous and Allogeneic Cell Therapy Manufacturing	PROTEIOS	Seattle, WA

*transitioned from NIH and DARPA

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