



Greater Philadelphia Region Precision Medicine Tech Hub

Update
January 16, 2024

Agenda

1:00 Introductions

- Ben Franklin
- America Achieves

1:10 Project Presentations - Direct to whiteboard for questions/comments

- Governance (8-10 minutes plus Q&A)
- 1:25 Entrepreneurship
- 1:40 Biomanufacturing
- 1:55 Deployment
- 2:10 Workforce

2:25 Direct to whiteboard for input/assistance - who and what

- Final thoughts/questions

Key Elements

□ From the NOFO:

“All projects funded should increase the speed and effectiveness with which industry and other organizations transition technologies upward from Field Testing through Full deployment.”

→ Think transformative, not incremental

→ EDA funding as “force multiplier”

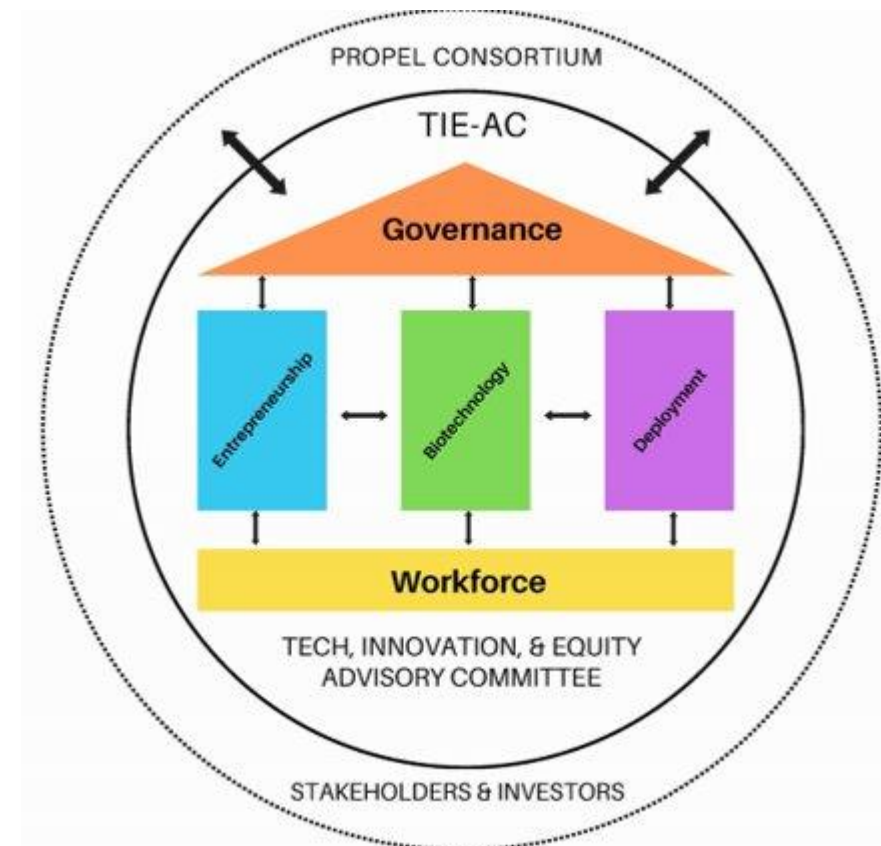
PROPEL Project 1: Governance—Progress to Date

- Completed Governance document, Hub organization, management and committees
 - Identified initial members of Steering & Advisory Committees
 - Started Risk Management plan—cyber, national security, technology
 - Identification of Assessment Consultants in-progress
 - Started solicitation for match

Identified Projects and Leads/co-Leads

- Governance
- Biomanufacturing
- Workforce
- Deployment
- Entrepreneurship

- Budget discussions in-progress
- Continuous engagement with EDA to assure compliance with their priorities.



PROPEL Project 2: Entrepreneurship

Executive Summary: Nurture and accelerate biotech companies developing cutting-edge Precision Medicine innovations that require complex development and commercialization processes by providing a supportive network of service providers, consultants, and expert mentoring programs with the ultimate goal of serving patients with affordable and effective treatments while creating high paying jobs

Problem Definition & Proposed Solution: There is a rapid progress in research that could help in the treatment of diseases and with better outcomes for more prevalent diseases with Precision Medicine approaches. However, translation and commercialization are extremely complex and need nurturing and mentorship for successful deployment. We will leverage the well-established infrastructure and resources across the region to put together a robust network of partners that can help companies at each stage of their development and commercialization across the following pillars:

- (1) Proof of Concept Fund** - enable matching grants to Precision Medicine companies for early proof of concept demonstrations and access to network of incubators and demonstration facilities/vendors in Greater PHL area. Create connections and enable use of a network of prototyping and demonstration facilities.
- (2) Accelerator and Mentorship Network** - work with existing accelerator and mentorship programs to hyper-cultivate Precision Medicine companies. Create a network of service providers to aid in mentorship and acceleration of company innovations.
- (3) Investor Network and Precision Medicine Showcase Events** - provide a platform for connection of Precision Medicine startup companies to investors and strategic partners across the United States. Conduct virtual and at least annual in-person showcase event in Greater PHL area.

For further information and sharing of ideas – please contact project co-leads:

Bill Provine - bill@innovationspace.org & **Sri Sriadibhatla** – sri.sriadibhatla@sep.benfranklin.org

PROPEL Project 3: Biomanufacturing

Advances technologies and processes that increase efficiency of biomanufacturing resulting in increased efficiencies and reduced time to market and costs. Collaborates to assure a fully trained workforce.

PROPEL Project 4: Deployment – 3 Pillars

Build an agile platform to accelerate precision medicine therapies to market and create a globally competitive R&D hub that produces high paying jobs in biotechnology, research and data science while preparing our institutions for future public health emergencies.

Network of Healthcare Stakeholders

Objective

Create a formal network of our region's leading healthcare stakeholders to work collaboratively to advance precision medicine technologies at varied TRLs and prepare for future public health emergencies.

- *Academic centers*
- *Public health entities*
- *Health systems*
- *Health plans*
- *Government*

Data sharing and Governance Framework

Objective

Leverage existing relationships and data sharing infrastructure to create a common framework for accessing health data, designing and executing equitable research studies and monitoring population-level health and equity gaps and outcomes in real time.

- *HealthShare Exchange (HSX)*
- *PIER Consortium*
- *Philadelphia Coalition for a Cure*

Industry Partnerships

Objective

Form strategic partnerships with US-based firms to facilitate operations and create a competitive environment for global investment in precision medicine research services.

Facilitators

- *IT, Data, AI/ML Firms*
- *Contract Research Orgs*

Investors

- *Life science and biotechnology*
- *Government*
- *Private equity*

PROPEL Project 5: Workforce



Problem Statement: There are **few training programs** in the Mid-Atlantic region that are preparing workers for middle-skill careers in life sciences and precision medicine. Without a trained middle-skill workforce, tech hub employers are likely to face significant challenges with advancing projects, producing and distributing medicines, conducting clinical trials, and delivering quality healthcare.

Solution: Create the **Workforce Center for Precision Medicine (WCPM)**, a centralized, hub-based talent center responsible for developing a multidisciplinary life sciences and precision medicine workforce to fill middle-skill positions in manufacturing, clinical trial support, public health, and laboratory operations. The WCPM will also attract and refer degreed and highly-skilled talent to fill vacancies and contract for the provision of education and career exposure to middle and high school students.

Precision Medicine Tech Hub—Examples



Plug-and-Play
vaccine
platforms



C>/CRISPR-
based gene
therapies that
eliminate need
for viral
vectors



“Modular
Manufacturing”



AI-based
screening for
biopharmaceutic
al drug
development



“Off-the-shelf”
Allogenic cell
lines for cell
therapy



Lab-on-a-Chip



Clinical trial
networks to
speed the
recruitment of
relevant and
diverse test
populations



Increased efficiency
of digital
health/telemedicine,
community
healthcare delivery

Next Steps

□ Contact us : techhub@sep.benfranklin.org

Develop appropriate sub-governance documents

- Operating
- MOUs
- Confidentiality



□ Confirm Project elements and assure integration among all four projects

□ Solidify non-Ben/non-Project lead Steering Committee members

□ Secure commitments from industry and private sector

□ Secure Technology, Innovation and Equity Advisory Committee members

□ Complete all relevant templates, docs and forms for completion as directed by EDA

How to Engage



FUNDED
THROUGH
A
SPECIFIC
PROJECT



RESPOND
TO A
PROJECT
RFP



BRING
YOUR
IDEAS TO
THE HUB



CONNECT
TO OTHER
REGIONAL
PROGRAMS



RESPOND TO OUR SURVEY



SUPPORT HUB SUCCESS TO ENSURE
SUSTAINABILITY

Thank You