



PROPEL and the Greater Philadelphia Region Precision Medicine Tech Hub (EDA Tech Hub) FAQ:

What is the US EDA Tech Hubs initiative?

From the US EDA:

"Tech Hubs was authorized by the bipartisan CHIPS and Science Act. It is an economic development initiative designed to drive regional innovation and job creation by strengthening a region's capacity to manufacture, commercialize, and deploy technology that will advance American competitiveness. The program invests directly in burgeoning, high-potential U.S. regions and aims to transform them into globally competitive innovation centers.

These Tech Hubs are located across 32 states and Puerto Rico, and represent a cross-section of urban and rural regions. Designation is an endorsement of the region's plans to supercharge their respective technological industries to create jobs, strengthen U.S. competitiveness, and protect national security."

Where does Philadelphia fit into this?

In October 2023, the US EDA designated the Greater Philadelphia region as one of its Tech Hubs. The designation was established through the support of the Greater Philadelphia Region Precision Medicine Tech Hub, a coalition of more than 50 regional partner organizations throughout Pennsylvania, New Jersey, and Delaware.

This coordinated effort is designed to build an integrated, inclusive, and iterative approach for Precision Medicine technology innovation and deployment, while also building technically competent, community-conscious workforce solutions. This collaboration is designed to accelerate both the Greater Philadelphia region's global competitiveness, and its equitable delivery of these new products, tools, and interventions.

What is PROPEL?

The regional coalition that helped Greater Philadelphia receive the EDA distinction has developed PROPEL, a specific, unified multi-year vision and effort to accelerate Greater Philadelphia's progress in precision medicine through development of advanced technologies, the industry and workforce that supports

them and the regional infrastructure to deliver these new interventions to the people that need them.

PROPEL: The National Center for Precision Medicine works to improve national health equity and economic opportunity by focusing on the growth of Greater Philadelphia's industry of Precision Medicine. PROPEL means precision medicine that builds equitable access to care and careers. PROPEL drives national economic security by improving health and equitable economic outcomes for our most underserved communities.

PROPEL's work is driven by a coalition of more than 50 research institutions, universities, healthcare systems, corporations, nonprofits and economic development organizations throughout Pennsylvania, New Jersey, and Delaware. PROPEL's initial steering committee is led by Ben Franklin Technology Partners of Southeastern Pennsylvania, and includes:

- <u>University of Delaware</u> / <u>NIIMBL (National Institute for Innovation in Manufacturing Biopharmaceuticals)</u>
- Tech Council of Delaware
- Philadelphia WORKS
- HealthShare Exchange
- Drexel University
- Drexel University College of Medicine
- Virtua Health
- Delaware Innovation Space
- University of Pennsylvania

How is this all going to work?

PROPEL's effort to develop the "living laboratory" for precision medicine throughout Greater Philadelphia is structured in five key projects, each coordinating the participation of its 50+ partners throughout the region:

- 1. Governance (Ben Franklin lead):
 - Leads, engages, and integrates members; executes hub's mission and vision; fosters community culture; influences policy; executes governance, oversight, operations, communication, evaluates policies; creates organizational MOU; establishes go/no-go policies; supervises risk management [PROPEL].
- Workforce (Philadelphia Works & Tech Council of Delaware leads):
 Expands or creates programs for a diverse, technically trained
 workforce; connects with K-12 schools, community colleges,
 regional HBCUs, and underemployed citizens for careers in the life
 sciences and precision medicine; partners with other workforce
 programs and labor unions.
- 3. Entrepreneurship (Ben Franklin & Delaware Innovation Space leads):

Increases efficiency for commercialization of new technologies through access to specialized resources—e.g., help with technical/manufacturing challenges, clinical trial/regulatory assistance, mentoring of company management teams for growth; diversifying and growing founders and company management teams, and corporate and venture network.

- 4. Biomanufacturing (University of Delaware/NIIMBL lead):
 Improves capacity to train diverse biomanufacturing workforce
 (aligning with Workforce project); advances technologies and
 processes to improve speed to market in the sector.
- 5. Access (HealthShare Exchange, Drexel University, & Virtua Health leads): Accelerates the development, testing and commercialization of precision medicines by creating a research and data-sharing network that amplifies the strengths of our region's institutions; addresses inefficiencies and inequities in research design and execution; prepares our region for future public health emergencies; creates a competitive environment that grows and retains jobs in data science, health research and artificial intelligence.

What are we asking for? What do we need for success?

As part of our Phase II submission to the US EDA, a grant allocation of \$80M has been requested from the US EDA to support the work of the 50+ partners' coordination and development of PROPEL—yet the initiative's success also relies on each of the existing (and potential) member organizations' commitment of time and capital to succeed.

\$9M in current matching capital commitments have been made by:

- The Commonwealth of PA
- The City of Philadelphia
- The State of Delaware
- Private cash match sources

But this is not simply an ask for capital. We need builders, doers, and advocates, too.

If you believe in the health and prosperity of Greater Philadelphia, and believe in the importance of precision medicine in the future of wellbeing for our neighbors and communities around the globe, we would appreciate you and your organization's advocacy for this proposal.

And if you and your organization see yourselves as a potential partner in this work, let's talk!

When is this happening? Are there key dates and milestones for this work?

- May 12, 2023: US EDA Tech Hubs Phase 1 NOFO is published. Within weeks, the coalition for Greater Philadelphia's Tech Hub distinction begins its development.
- August 15, 2023: Application period for Phase 1 concludes, detailing the concept for the Greater Philadelphia Region Precision Medicine Tech Hub and its vision.
- October 23, 2023: US EDA concludes Phase 1 of the Tech Hubs initiative, and announces designation of the 31 US EDA Tech Hubs, including the Greater Philadelphia Region Precision Medicine Tech Hub
- February 29, 2024: deadline for each of the 31 Tech Hubs to submit its Phase 2 proposal to receive US EDA funding to further develop their tech hubs.
- Summer 2024: Announcement of funding for each of the approved proposals is expected this summer.

What is "precision medicine?"

General definition from the FDA says:

"Precision medicine, sometimes known as "personalized medicine" is an innovative approach to tailoring disease prevention and treatment that takes into account differences in people's genes, environments, and lifestyles. The goal of precision medicine is to target the right treatments to the right patients at the right time.

Advances in precision medicine have already led to powerful new discoveries and FDA-approved treatments that are tailored to specific characteristics of individuals, such as a person's genetic makeup, or the genetic profile of an individual's tumor. Patients with a variety of cancers routinely undergo molecular testing as part of patient care, enabling physicians to select treatments that improve chances of survival and reduce exposure to adverse effects."

What makes Greater Philadelphia a Tech Hub focused on Precision Medicine?

These innovations, all created, developed and deployed in the Greater Philadelphia Region, are Precision Medicine at its core:

- Spark Therapeutics receives first ever FDA approval for gene therapy
- University of Pennsylvania uses CAR-T to cure childhood leukemia
- Temple University uses CRISPR technology in clinical trials to cure HIV
- Children's Hospital of Philadelphia cures childhood deafness through Gene therapy
- Wistar/UPenn scientists lay the foundation for universal blood cancer immunotherapy

- University of Pennsylvania technology forms basis for mRNA-based vaccine technologies
- ChristianaCare spin-out CorriXR advances gene editing technology for squamous-cell carcinoma of the lung
- The National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) at the University of Delaware officially launches program to develop economically viable, shared manufacturing process and analytical platforms for Adeno-Associated Virus (AAV) gene therapy vectors.
- Christiana Care, Drexel University and U Penn demonstrate the benefits of treating mild forms of chronic hypertension during pregnancy in a trial including 70% non-white participants.

The Philadelphia region's life sciences sector is the 5th largest and 3rd fastest growing life sciences sector in the U.S. and 35th worldwide (Global Innovation Index 2023).

We can locate and keep companies here with the abundance of life science real estate (<u>CBRE 2023</u>). These regional assets were incorporated into our Phase I Designation Proposal [<u>Greater Philadelphia Tech Hub Designation Proposal</u>]. The region includes three states (<u>including EPSCoR-designated Delaware</u>), and the fifth most colleges and universities in any MSA, including three HBCUs. By tapping into this region's resources, PROPEL becomes a valuable force multiplier, creating impact and bridging gaps.

What are the benefits of Hub Designation?

Per the US EDA, a Tech Hubs Designation is an endorsement of a region's plans to supercharge their respective technological industry to create jobs and strengthen U.S. economic and national security. Some of the <u>support and benefits</u> Tech Hubs Designees receive include follow-on funding, branding and technical support.

How can I learn about progress?

- Send your email to techhub@sep.benfranklin.org to get on our mailing list.
- Follow Ben Franklin and the Chamber on social media for updates.
- Reference this FAQ page.