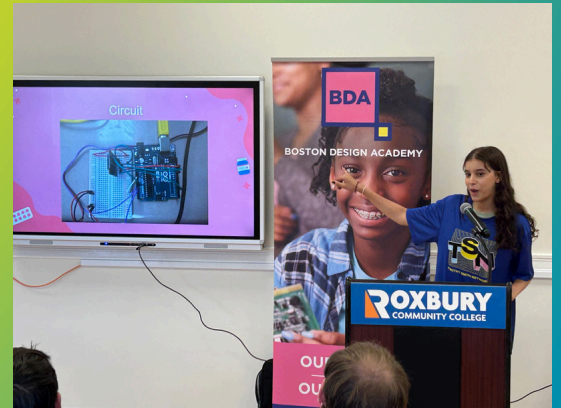




# BDA PROGRAM SUMMER '25



## Key Dates & Information

**Program Dates:** Monday, July 7th thru Friday, August 15th

**Scholar Arrival Dates:**

Week of June 30, 2025

**Scholar Departure Date:**

Sunday, August 17, 2025

**Program Location:** Boston, MA, USA

**Open Laidlaw Positions:** 7 Positions

- Assistant Instructors (6 positions)
- Administrative Support (1 position)

**Areas of Instruction:**

- Digital Sketching (3D Paint or Procreate)
- 3D Modeling (TinkerCAD & Fusion360)
- Coding & Programming (Arduino)
- Website Design
- Unreal Editor for Fortnite

**Programs being Offered:**

- Digital Design Intensive (DDI)
- Tech Your Health (TYH)



Learn more!

[www.timothysmithnetwork.com](http://www.timothysmithnetwork.com)

# Timothy Smith Network

When a wealthy merchant, Timothy Smith and his wife Mary Ellen both died in 1918 their final will and testament specified that the proceeds of their bequest be utilized to benefit the residents in Old Roxbury.

The Timothy Smith Fund was established on March 8, 1996 by Mayor Thomas M. Menino and the City of Boston to bring the benefits of computer technology to underserved communities. The Timothy Smith Network (TSN) continues to be committed to supporting the creation of an inclusive technology workforce by providing demographics that are underrepresented in technology with the tools necessary to compete for careers in 21st century tech-focused industries.

In 2018, TSN launched the Boston Design Academy (BDA) in partnership with the City of Boston, Microsoft, Boston Public Library, and Boston Public Schools (BPS) to provide BPS high school students with the opportunity to explore potential career pathways through project-based learning and collaborations with the institutions, companies and individuals that drive Boston's innovation ecosystem. Students are provided with supplies, tools, and training to enhance their understanding of applied science, technology, engineering, arts, and mathematics.

At TSN, we see technology as a tool that creates opportunities, inspires action, and changes lives, through BDA we are committed to developing socially aware and tech savvy students.



BDA  
SUMMER

2024 ORIENTATION

# Tech Your Health -

## 3 Laidlaw positions

The Timothy Smith Network is seeking interns to innovate smart technologies specifically designed for health and wellness. This dual approach of learning distinguishes Tech Your Health from other health technology programs. Interns will focus on product design and development to create personal health and wellness technologies that incorporate aspects such as monitoring, diagnostics, and therapeutic interventions.

Interns will gain an awareness of local, state, and national initiatives focused on health disparities, current wellness practices, healthcare issues, the health economy, and participate in a robust guest speaker series that includes community members, technology professionals, professors, healthcare providers, and government representatives.

They will also participate in design thinking workshops, explore patents from leading health organizations, learn product design utilizing CAD software and rapid prototyping techniques, program electronic components, and use 3D printing technologies.

Three Laidlaw scholars will be selected as Assistant Instructors for the Summer 2025 program. Each scholar will lead an instruction module for a week and a half while being supported by the other scholars and the Tech Your Health Lead Instructor as support.

- Module 1 will cover an overview of the health economy, healthcare disparities, wellness practices, and indoor health technologies. This module will have interns develop various health technology prototypes with the help of the instruction team. Interns will research and select a problem within the health and wellness sector to solve.
- Module 2 is Arduino. This will be an introduction to Arduino for most of the interns participating. Module 2's goal is for interns to build confidence in programming an Arduino device as Arduino will be a crucial part of their final program prototypes. Interns will begin to ideate the solution to their selected problem.
- Module 3 will focus on 3D modeling, design, and printing. The Laidlaw instructor will be responsible for introducing and teaching interns how to utilize Tinkercad and Fusion360 as design platforms for their prototypes. Additionally, this instructor will lead the other scholars in printing interns' prototypes.

The ideal candidates are scholars majoring in mechanical, electrical, or computer engineering, industrial design, computer science, architecture, or with a passion and skill in coding and design.

# Responsibilities

BDA Assistant Instructor is responsible for providing challenging project-based learning STEAM curriculum as follows:

## 1. **Background - Health Challenges**

- Review current health conditions within the local and surrounding communities.
- Assess most popular health and wellness technologies on the market.
- Work with interns to identify gaps in personal health upkeep.

## 2. **Plan - Technology Design Concepts**

- Assist lead instructor in teaching technology creative concepts relevant to TYH.
- Support interns with developing ideas for health and wellness technology design concepts.
- Help interns apply an iterative process to ensure requirements are met for finalizing their design.

## 3. **Teach - Technology Tools and Application**

- Guide interns on reviewing technologies they can use to support their design build.
- Introduce interns to TSN prescribed technologies for applications and uses in coding, electronics, and mechanical purposes. Technologies used are but not limited to Microsoft Suite, Arduino, Fusion 360, TinkerCAD, GitHub, and Visual Studio Code.
- Work with the lead instructor and interns in identifying questions for the guest speaker series.
- Help students develop and finalize a comprehensive STEAM product and presentation for the BDA Showcase.

## 4. **Team Building and Networking**

- Network with TSN staff, other scholars, and the interns to optimize the opportunities of supporting TSN.
- Participate in scholars' cultural experiences planned by the Program Support Scholar.
- Complete surveys relative to the TSN, TYH, and all speaking and field trip activities.
- Create 3 posts for the Laidlaw website regarding the experience during the 6 weeks of working with TSN on BDA

# Digital Design Intensive -

## 3 Laidlaw positions

TSN will be conducting another iteration of its Digital Design Intensive project-based program to prepare students participating in digital and visual communications career to technology educational pathways. Participating students will be exposed to digital and product design creation platforms during this three-module program including creating a personal brand and program portfolio website while learning social media graphic design, 3D modeling, and digital sketching. Students will be taught to utilize small business approved open-source platforms such as Wix, Google Sites, Canva, TinkerCAD, Paint 3D, Visual Studio Code, and Unreal Editor for Fortnite.

Three Laidlaw scholars will be selected for this program. Each scholar will lead weeks of instruction, with the other scholars and TSN Lead Instructor support. The DDI program is broken down into 3 modules.

-Module 1 consists of Digital Sketching, creating a Fortnite Avatar with Paint 3D. The lead scholar will introduce the students to Paint 3D for digital sketching to create a self-portrait, a Fortnite Avatar and props that shows perspective, and 1-2 instructor chosen projects should time allow.

-Module 2 consists of 3D modeling utilizing TinkerCAD and Fusion 3D. The lead scholar will introduce students to 3D modeling and video game design by introducing them to TinkerCAD to create 4 simple designs and then Fusion 3D as a platform to create more complex and detailed designs. Students will learn the basics of making 3D models and printing on a FormLabs printer. The module is completed after students create a Fortnite maps with Unreal Editor. Additionally, this instructor will lead the other scholars in printing students' prototypes.

-Module 3 consists of students creating an interactive portfolio website using Wix or Google Sites. The lead scholar will be responsible for introducing students to website design using HTML/CSS and creating a portfolio website. Their website will be displayed during final presentations.

The ideal candidates are familiar with the below or similar software platforms and should be prepared to provide examples of any work created utilizing the above or similar platforms.

# Responsibilities

BDA Assistant Instructor is responsible for providing challenging project-based learning STEAM curriculum as follows:

## **1. Background – Creative Career Pathways**

- Review current career pathways that intersect with art and creative within the local and surrounding communities.
- Work with interns to explore ways in which their interests could lead to careers in the future.

## **2. Plan – Personal Brand Concepts**

- Assist lead instructor in teaching technology creative concepts relevant to DDI.
- Support interns with developing a brand for their design concepts.
- Help interns apply an iterative process to ensure requirements are met for finalizing their digital portfolios.

## **3. Teach - Technology Tools and Application**

- Guide interns on learning and reviewing technologies they can use to build their portfolios.
- Develop and teach BDA curriculum to include lesson plan/modules, student guides, assessments, reflection narratives, and framework for mid-term and final projects.
- Introduce interns to TSN prescribed technologies for applications and uses in digital sketching, video game design, and website design. Technologies used are but not limited to Microsoft Suite, TinkerCAD, Fusion360, Unreal Editor for Fortnite, Paint 3D, and Visual Studio Code.
- Work with the lead instructor and interns in identifying questions for the guest speaker series.
- Help students develop and finalize a comprehensive digital portfolio and presentation for the BDA Showcase.

## **4. Team Building and Networking**

- Network with TSN staff, other scholars, and the interns to optimize the opportunities of supporting TSN.
- Participate in scholars' cultural experiences planned by the Program Support Scholar.
- Complete surveys relative to the TSN, DDI, and all speaking and field trip activities.
- Create 3 posts for the Laidlaw website regarding the experience during the 6 weeks of working with TSN on BDA.

# Management and Program Support -

## 1 Laidlaw position

The Timothy Smith Network (TSN) seeks the help of a Management Analyst Scholar (MAS) to work with TSN's Program Executive and Managing Director to conduct research studies, coordinate program planning, and assist with various administrative functions relative to TSN's Science, Technology, Engineering, Arts, and Math (STEAM) initiatives.

## Responsibilities

### 1. Conducting Research

- Gap Analysis – Evaluate 2024 Gap Analysis regarding STEAM initiatives within the local ecosystem by focusing on educational institutions and non-profit organizations. Create an implementation plan. Present findings to assist TSN in retooling existing programs.
- Data Collection – Assist in gathering information and maintaining accurate records regarding TSN's Boston Design Academy (BDA) program and project outcomes.
- Survey – Prepare and conduct pre and post surveys for BDA interns and scholars and present findings after each survey. Additionally, prepare surveys for each field trip and guest speaker activities.

### 2. Coordinating Program Planning

- Assist in developing and overseeing the BDA Summer Program Planning Calendar.
- Help with creating the BDA Summer Program agendas for interns' orientation day and final showcase days.
- Work with the BDA instructors and interns in identifying questions for guest speaker series.
- Support the Managing Director in organizing meetings with key stakeholders.
- Facilitate organizing scholars' cultural experiences.

### 3. Supporting Administrative Management

- Provide administrative support to TSN staff including BDA Summer onboarding and serve as a staff floater, as needed.
- Identify new program materials including SWAG to help increase branding, loyalty, and morale.
- Create BDA field trip announcements and coordinate travel plan, provide daily bulletins that announce updates on schedule, late breaking news (e.g. weather alerts), and lunch menu.

# HOW TO APPLY

Fill out the application at:  
<https://forms.microsoft.com/r/dKhWq69avvd>



**IF YOU HAVE ANY QUESTIONS EMAIL  
ALESSANDRA BROWN AT  
ABROWN@TIMOTHYSMITHNETWORK.ORG**

