

Community Collaboratory for Co-Creation
Designing Technology for Social Justice & Health



PENN4C AWARDEE CELEBRATION

Monday, February 26, 2024

5:30-7:30pm EST

University of Pennsylvania, Houston Hall

Ben Franklin Room

3417 Spruce Street, Philadelphia, PA 19104



The Penn4C Collaboratory is an initiative led by the University of Pennsylvania School of Nursing and the School of Engineering and Applied Sciences, based on the recognition that technological solutions should be designed with active engagement of marginalized communities with the explicit goal to challenge rather than reproduce or exacerbate structural inequalities as technology often does. Penn4C focuses on the health care needs of low-resource high-need populations and marginalized groups. We work with a Community Board with members of groups or organizations that can provide the perspectives of high-risk, low resource communities as well as advice on critical issues of social justice and serve as advocates as we broaden and deepen our community outreach. The priorities of the Collaboratory focus on three areas: Research, Education and Community Engagement and Outreach.

Research

In order to facilitate research activities that address social justice through designing and implementing solutions to improve health, well-being, and safety, we fund research projects that will require engagement of faculty and students as well as active community engagement.

Education

Our long-term goal is to foster interdisciplinary educational activities and synergies for students in SEAS and SON (as well as other disciplines) at all levels (undergraduate, graduate and post-doctoral).

Community Engagement and Outreach

We invite Community Members to actively serve on our Board. Additionally, we aim to increase awareness of the Collaboratory both within and beyond the Penn Campus so as to allow researchers in the two Schools and on campus to identify and build community partnerships and create a platform that fosters co-creation.

<https://www.penn4c.org>

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Director of Innovation
School of Nursing



Ann Muramatsu
Penn4C Outreach Facilitator
Associate Director, Personal
Health Informatics Lab



Stacey D. Brown, MSW
Project Manager



STUDENT MEMBERS



Shiny Shen
Bachelor's of Science in
Bioengineering, Class of 2026
Student Member



Julie Szymaszek
Accelerated Bachelors of
Science in Nursing/ Masters
of Nursing in Adult –
Gerontology Primary Care
Student Member

COMMUNITY BOARD



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Pennsylvania



Alison Corter
Director
Strategic Initiatives
NewCourtland



**2023-2024
AWARDEES**

Heat Islands



Community Lead

Nikki Bagby
Chief External Affairs Officer
North10 Philadelphia



Nursing Lead

Sara Jacoby, MPH, MSN, PhD,
FAAN
Associate Professor of
Nursing



Engineering Lead

Paulo Arratia, PhD
Professor of Mechanical
Engineering & Applied
Mechanics



Design Lead

Dorit Aviv, PhD, AIA,
Assistant Professor of
Architecture at the Weitzman
School of Design

Project Scope

This project aims to address the problem of urban heat stress in the Hunting Park / East Tioga area of Philadelphia. This pilot work will include the development and construction of a prototype for a cooling shelter that can be integrated into local bus stops in areas that people use regularly.



Community Site

North10, Philadelphia works to improve life outcomes for community members of the North Philadelphia Hunting Park-East Tioga community so current residents and future generations live happy, healthy, and civically engaged lives. They work with their neighbors to address issues of systemic violence, poverty, and disinvestment that have induced trauma, built barriers, and challenged the health and prosperity of this community. Taking a holistic approach, North10 is striving to make impactful change not only by delivering high-quality programs and services in response to stated community preferences, but also by serving as the community backbone.

<https://north10phl.org>

Smoothie Bike



Community Lead

Daniel Merin, MS
Rebel Ventures Board Chairperson



Nursing Lead

Monique Dowd, EdD, RD, LDN
Advanced Senior Lecturer of
Nutrition Science, Associate
Director of Undergraduate
Nutrition Programs



Engineering Lead

Dustyn Roberts, PE, PhD,
Practice Associate Professor,
Mechanical Engineering and
Applied Mechanics

Project Scope

The Smoothie Bike Project is a collaboration that engages Penn students, local high school students, and Netter Center staff in re-purposing used bikes and used blenders into educational and joyful kid-powered smoothie making machines.



Community Site

Rebel Ventures is a youth-driven healthy food business run by high school students and supported by Penn students that includes a non-profit business entity. At its core it is an educational activity. Students learn about the food system by competing in the real-world competitive food marketplace - the pedagogy is deep engagement through projects, problem-solving, and partnership. To examine these issues the Rebel Crew researches, shares knowledge, seeks out expertise, and makes decisions democratically.

<https://www.philasd.org/foodservices/programs-services/rebel-ventures/>

Digital Healing: Co-Creating Youth Digital Creative Arts Space for Community Wellbeing



Community Lead

Andrea Ngan
Co-Director
Creative Resilient Youth (CRY)



Social Policy and Practice Lead

Siva Mathiyazhagan, PhD MSW
Research Assistant Professor



Engineering Lead

Sharath Chandra Guntuku, PhD
Research Assistant Professor of
Computer & Information Science



Nursing Lead

Seul Ki Choi, PhD, MPH
Research Assistant Professor

Project Scope

Digital Healing is a web-based platform, which will be co-designed and co-developed as an AI-driven culturally responsive youth digital co-creative arts space for community healing in partnership with youth-led organization called Creative Resilient Youth (CRY) in Philadelphia.



Community Site

CRY is an intergenerational collective promoting equitable mental health care by realizing youth-led models of care through co-learning, socially engaged art, and leadership training. CRY envisions a future where every young person has the healing resources and skills needed to: Access their authentic selves to define and communicate care for themselves on their own terms; Influence how mental health is talked about and cared for in their peer group, families, and communities, and other youth-serving spaces; and, create tools to address injustices in youth mental health care systems.

<https://creativeresco.org/Creative-Resilient-Youth>

Re-Imagining Childhood Asthma and Electronic Health Records: A Community-Based Approach



Community Lead

Sonya Sanders
Community Organizer
Philly Thrive



Nursing Lead

Kenrick Cato, PhD, RN, CPHIMS,
FAAN
Professor of Nursing CE



Engineering Lead

Andrew Head, PhD
Assistant Professor,
Computer and Information
Science



SP2 Lead

Aviv Landau, PhD, MSW
Research Assistant Professor
School of Social Policy and Practice

Project Scope

Asthma is a major non-communicable disease affecting children, especially those from marginalized communities, because of limited access to information. This project will explore how medical information systems can be improved to provide better care for young, marginalized asthma patients.



Community Site

Philly Thrive won the permanent closure of the South Philly oil refinery, ending 150 years of deadly pollution. Now Philly Thrive organizes to protect affordable housing and fight displacement of Grays Ferry residents, and to win a robust cleanup of the refinery site, family sustaining jobs, and community-reinvestment as the historic refinery redevelopment progresses.

<https://www.phillythrive.org>

The impact of land care in North Tioga-East Huntington Neighborhood of Philadelphia: Building occupational and public safety into North10's neighborhood beautification initiatives



Community Lead

Jamese Newsome-Williams, MA
Director of Adult Programs &
Community Services
North10 Philadelphia



Nursing Lead

Sara Jacoby, MPH, MSN, PhD,
FAAN
Associate Professor of Nursing



Engineering Lead

Devin Carroll, PhD
Lecturer at University of
Pennsylvania

Project Scope

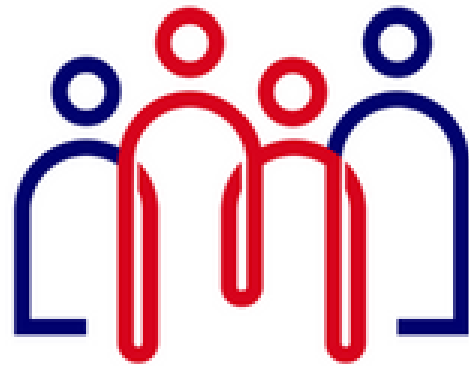
The focus of this project is to create a tool to assist in removing debris to improve the wellbeing of the community and individuals in the North Tioga neighborhoods.



Community Site

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