Creating with Community: An Introduction to Human-Centered Design for Public Health Intervention Development

CLASS SESSIONS
Monday, June 22 – Friday, June 26 2020
1:30 – 5:30pm
Location: Via Zoom Webinar

INSTRUCTORS
Rebecca Hope, MD MPH (YLabs)
Caroline Wong, MS (YLabs)
Trena Mukherjee, MPH (DrPH Candidate in Epidemiology)

COURSE DESCRIPTION
This hands-on training workshop will introduce public health practitioners to the concept of Human-Centered Design (HCD). Traditionally, HCD has been used in engineering, business and marketing to co-develop optimal products and services. More recently, HCD has been used in the public health sector by institutions such as UNICEF, PSI and USAID to develop sustainable prevention and intervention programs for a range of health topics including health systems, obesity, infant mortality, and HIV/TB.

In the HCD process, public health practitioners first start by understanding the target community’s needs using a variety of ethnographic and qualitative research methods. These findings are then used to build, iterate, and improve potential solutions in partnership with the community. By cultivating creativity and engaging key stakeholders, public health practitioners can develop and refine interventions, products, and services that are not only feasible and acceptable, but also desirable by the communities they are intended for to ensure sustainability of public health solutions.

This hands-on workshop will introduce HCD and will present participants with a public health challenge. Participants will work in teams to use HCD methodology (i.e. conducting design research, synthesizing insights, developing and testing early prototypes) to implement their solutions. Participants will also be introduced to developing and prototyping digital (mHealth) health products and services. HCD is intentionally multidisciplinary in nature and people with diverse backgrounds and experiences are encouraged to attend.
We will use real-world case studies with a focus on public health practice. We will provide examples of different ways that HCD has been employed in public health products, communications, services, organizational strategies, and business models, with an emphasis on solutions that YLabs is currently designing and implementing in Sub-Saharan Africa, Central America and South Asia.

**COURSE OBJECTIVES**

Participants will work in teams to apply human-centered design methods to tackle a significant public health challenge. During this introductory workshop they will:

- Understand what HCD is and how to apply it to public health
- Practice design research methods and apply appropriate frameworks to understand community needs
- Synthesize insights to uncover opportunities for intervention
- Cultivate a creative approach to develop contextually appropriate interventions
- Understand how to prototype and refine these concepts with target communities

**AGENDA**

**Day 1 AM: Learning the Ropes — Intro to HCD**
- Introduction to Human-Centered Design:
  - What is HCD?
  - HCD methodology
  - The role of HCD in public health and implementation science
- Introduction of the Team Challenge

**Day 1 PM: Diving In — Design Research & Synthesis**
- Design research in the ‘field’ in small teams
- Synthesis of insights from design research

**Day 2 AM: Connecting the Dots — Ideation**
- Cultivating creativity in teams: effective ideation
- Developing prototype plans

**Day 2 PM: Make Make Make — Prototyping**
- Building prototypes
- Prototyping and iterating ideas with communities
- Team presentations

**Day 3 AM: In the real world — Implementation and Evaluation**
- We have a plan. Now what?
- Business model canvas
- Reflections on Day 1 & 2
Rebecca Hope, MBChB, MPH
Rebecca Hope is a physician and global health researcher with expertise in gender, rights and social and behavioral change to improve the health of girls and women. She has 15 years of research, clinical and programmatic experience in adolescent sexual and reproductive health, HIV, and maternal and child health in Sub Saharan Africa, South Asia, US, and Europe. She is the Co-Founder and Director of Programs at YLabs.

She specializes in applying human-centered design, robust data and her public health expertise to develop seamless strategies that improve health and economic opportunity for young people globally. At YLabs and with IDEO.org, she has worked alongside partners like Marie Stopes International, Pathfinder and Population Services International to design, evaluate and scale innovations to improve youth-access to SRH and HIV services in Sub Saharan Africa and South Asia.

Rebecca has strong qualitative and quantitative research skills and has previously worked at Harvard’s Women and Health Initiative and University College London as principal investigator on studies relating to sexual and reproductive health and rights, maternal and child health, adolescent health and education, women’s microfinance, and health systems research in sub-Saharan Africa, Asia and Latin America.

Rebecca holds a BSc in International Health, a MSc in Pediatrics and Child Health from University College London, a MPH in Global Health from Harvard T.H. Chan School of Public Health and an MBChB Medicine from the University of Leeds. Previous research awards and fellowships include the Frank Knox Fellowship (Harvard), the National Institute for Health Research Academic Clinical Fellowship, the UK’s national Cochrane Prize for Public Health and The Lancet Student Essay Prize.
Caroline Wong, MS
Caroline is a product designer and researcher who is passionate about healthcare and youth-centered education. At YLabs, she conducts design research to understand user needs, and co-designs products and services with youth. She has been working at the intersection of digital product design, design research, and data for the past 8 years. Caroline specializes in leveraging human-centered design to develop digital healthcare products and services. She has designed for adolescent health and education, mental health, and clinical trials in sub-Saharan Africa, South Asia, and North America. She holds a M.S. in IT product design from University of Southern Denmark, and a B.S. in Statistics from University of British Columbia.

Trena Mukherjee, MPH
Trena Mukherjee is a DrPH candidate in Epidemiology at the Mailman School of Public Health, and a pre-doctoral fellow in the Global HIV Implementation Science training program. She has a background in quantitative and qualitative methods and specializes in infectious disease research at the intersection of criminal justice and substance use. Prior to starting a doctoral program, she was awarded a Fulbright to evaluate a hepatitis C education intervention for people who use drugs and develop a health needs assessment for urban refugee populations in Malaysia. She has also worked as a project coordinator for several projects related to infectious disease prevention and integrative models of healthcare in Southeast Asia and Eastern Europe. She has previously collaborated with YLabs to apply human-centered design methods to engage young men in HIV self-testing in Kenya. Trena holds an MPH from the Yale School of Public Health, and a BA from Johns Hopkins University.