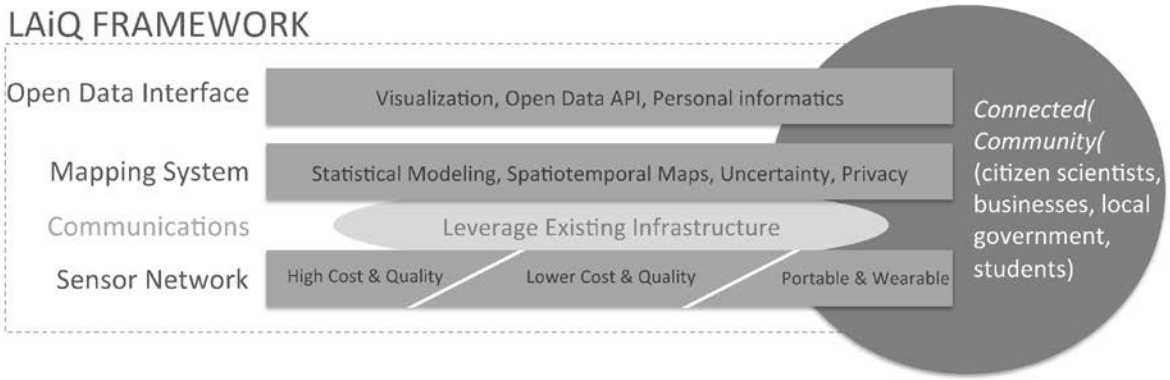
2017 NSF CYBER-PHYSICAL SYSTEMS PRINCIPAL INVESTIGATORS' MEETING

A Layered Framework of Sensors, Models, Land-Use Information and Citizens for Understanding Air Quality in Urban Environments

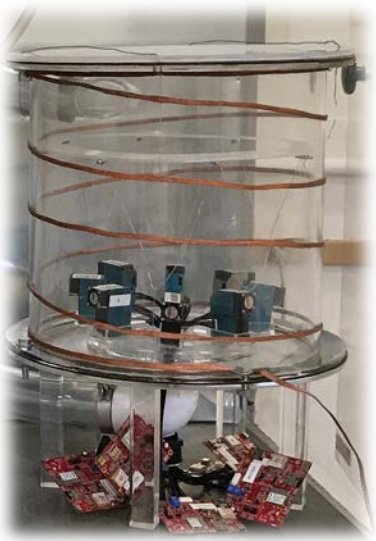
Miriah Meyer[*], Pierre-Emmanuel Gaillardon[±], Kerry Kelly[+], Ross Whitaker[*]
[*]School of Computing, [±]Dept. of Electrical and Computer Eng., [+]Dept. of Chemical Eng.
University of Utah

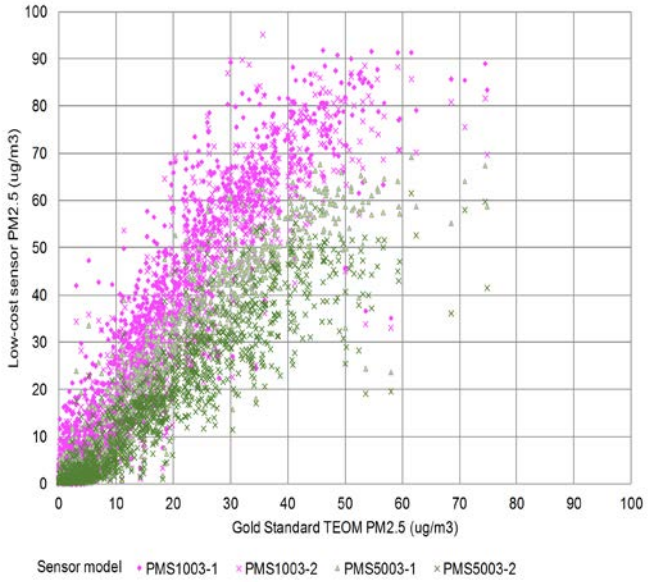
Overview

- Motivation
  - Utah air quality
  - Sensor technology
  - Broad health/econ. effects
  - Health/epi. studies
  - Citizen science



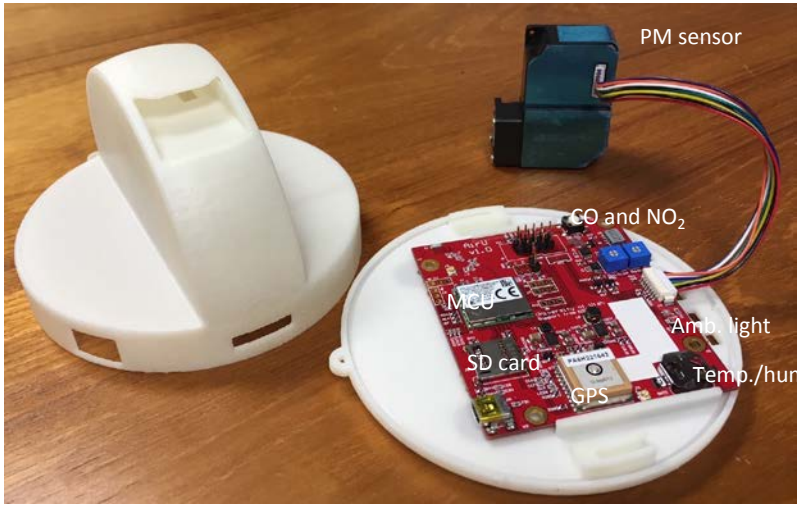
- Challenges
  - Sensor quality/quantity
  - Deployment and comm. Infrastructure
  - Models, estimates, and uncertainty
  - Publication communication and outreach





Update

Sensor design/manufacture



Outreach/education

Mapping technology/ system