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Digital POC Dx

Application

- Driver: Improve availability of Point of Care diagnostic to lab performance
- Market size: > number of cell phones
- Need: Low cost complete detection + fluidic + radio + power + integration under \$0.50

Research Needs

Scientific/technological problems and barriers:

- Detection system
- Integration with low cost fluidics
- Bioelectronics to relax the sample preparation steps/modules
- Demonstration at the field
- Biomarker discovery

Advantages

Impact:

- This technology can enable early diagnostics and prevention at point of care
- Reduced development/approval cost for neglected markets

Metric(s) of Progress

3 Year Goal:

- System demonstrations using existing fluidics and assays

5 year Goal:

- Commercial prototype
- Novel assay + fluidic + detection combination

Resource requirements: [\$1M, 10 PhD students, Near term goal 3 yrs; Long term goal 5 yrs]