Project Spotlight: Rapid, point-of-care test to detect the presence of a copper IUD

Drs. Leo Han, Alison Edelman, and Martina Ralle received a Biomedical Innovation Program (BIP) device and diagnostics award to test their idea that detection of copper in cervical mucus can be the basis of a less invasive and cost-effective alternative for confirming the presence of a copper intrauterine device (CuIUD). CuIUDs placed immediately post-partum are at risk of being expelled in up to 20% of cases. In lower resource settings, this requires a painful procedure during a clinic visit to determine whether or not the device is still in place. Dr. Han and his co-investigators leveraged BIP funding to conduct a proof-of-concept study demonstrating that copper levels in CuIUD users were measurably and reliably higher in cervical mucus compared to nonusers. The team is now seeking follow on funding to develop and optimize an assay for measuring copper levels in a rapid, low-cost format that can be used by both clinicians and consumers.