



RRPV Member Spotlight: Sapphiros



Q: What does your company do? What specific capabilities or strengths does your company offer?

A: Sapphiros is an in vitro diagnostics company with several low-cost diagnostic platforms designed for use in the home or point of care settings and has installed manufacturing capabilities for lateral flow and molecular platforms. Additionally, we also manufacture all proteins, probes, and primers for RPA isothermal amplification and can manufacture printed electronics based on proprietary conductive ink formulations which include PTC heaters, electrochromic displays, flexible PCBs, and others. Our key capabilities include:

- RPA-based isothermal molecular platform
- Digital lateral flow platform
- Visual lateral flow based on high volume manufacturing
- Printed electronics based on proprietary conductive inks (displays, batteries, heaters, others)
- Low-cost blood collection patches
- Remotely controllable drug delivery via micro needles or subcutaneous injections to support chronic diseases, and others

Q: Are there any specific partnership opportunities you're seeking with other members in the industry? What kinds of expertise or resources would be beneficial for your company to explore through partnerships?

A:

- SMEs on biothreat pathogens to provide advice on ideal sample type, gene targets, clinical relevance, etc
- Partners to perform analytical and clinical studies for biothreat pathogens



- Regulatory support on 510(k) path for biothreat agents
- Banked samples or sample matrix from relevant animal models
- Partners with antibodies for LFAs interested in tech transfer into Sapphiros for IVD development
- Entities interested in low-cost decentralized blood-collection/drug delivery devices

Q: Provide some insight about your company's history, core business areas, focuses, or key ideas that you wish to describe.

A: Sapphiros, headquartered in Boston, was founded by Namal Nawana (former CEO of Alere, Smith&Nephew) and Mark Gladwell (formerly Alere, Smith&Nephew). Sapphiros operates with the mission to empower individuals and communities with timely, reliable health information.

Partner companies in the Sapphiros ecosystem include Satio (patches for blood collection, drug delivery, and integrated diagnostics), GrapheneDx (graphene-based biosensors), Sapphiros-UK (molecular diagnostics, lateral flow diagnostics, printed electronics, and high volume manufacturing), SapphirosLab (CLIA laboratory), and GotoKnow (commercial arm).

Sapphiros is led by a team of experienced healthcare executives and entrepreneurs committed to addressing global health challenges.

Q: What trends or innovations do you foresee shaping the future of the industry, and how is your company preparing for those changes?

A: We see a continued movement away from centralized lab testing toward rapid, at-home, near-patient diagnostics that are affordable, accurate, easy to use, and connected.

Our next-generation diagnostics focus on fit-for-purpose, engineered for their intended use, user, and setting. Our platforms are built on modularity, where, depending on the setting, an ultra-low-cost lateral flow test might be sufficient, while a more connected



device with printed electronics and the ability to transfer data off-board may fit the needs of a different setting.

By controlling the diagnostic supply chain through manufacturing all critical proteins, primers, and probes in our molecular assays, we can offer accurate diagnostics at a low cost of goods, ultimately ensuring that diagnostics are accessible to everyone. This vertical integration ensures quality and resilience and allows us agility to respond to new health threats and global diagnostic needs.