

What if we could actually “ask” the immune system what’s going on, and get a clear, actionable answer?

We started asking this question over a decade ago, in the context of a seemingly simple clinical problem: a patient with fever, and a surprisingly hard decision - viral or bacterial? That question led to a broader insight: the immune system is constantly sensing and encoding disease in real time - if you know how to decode it.

In this talk, I’ll share our journey from that insight to a new class of FDA-cleared diagnostics called Advanced Host-Response, designed to translate complex immune signals into simple clinical decisions in minutes.

But the technology is only part of the story. I’ll briefly touch on what it takes to go from idea to impact: discovery, large-scale clinical validation, productization, FDA clearance, reimbursement, and real-world adoption, along with a few hard-earned lessons...

Finally, we’ll look ahead. This approach is now opening exciting new frontiers well beyond infectious disease, including inflammation, autoimmunity, and neurology, where the immune system can reveal disease earlier, and often more clearly, than traditional tools.