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Written Testimony of John Schmitt
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Before the U.S. House Committee on Veterans' Affairs
Hearing on "Harnessing Biomedical Innovation: Modernizing VA Healthcare for the Future"
Tuesday, April 1, 2025, 10:15 a.m.

Chairwoman Miller Meeks, Ranking Member Brownley, and Distinguished Members of the Committee:

Thank you for the opportunity to submit testimony on this critical and deeply personal issue.

I am John Schmitt, the CEO of iXpressGenes, but before that, I was a soldier. I served over 20 years in the United States Army, with two combat tours in Iraq as a Blackhawk helicopter pilot, maintenance test pilot, and company commander. I have seen firsthand the toll that trauma takes—not just on the battlefield, but in the lives of those who return home. I've watched fellow service members struggle, and I've also experienced the long, uncertain road of recovery that too many veterans face. And while I have been fortunate to have weathered the storm well, many have not, and it is for those who continue to suffer, and in the memory of those no longer with us, that I continue my life of service. What drives me and the company is a commitment to using every tool at our disposal to fundamentally transform trauma care forever.

I am also more than the CEO of my company. I was fortunate enough to receive a master's degree from Vanderbilt University School of Medicine in Microbiology and Immunology as well as gain almost 10 years of DoD weapon system acquisition experience, including as an ACAT1 product manager. So, as I submit this testimony, I can say with confidence that I understand the problem set, the economics, the challenges of scale, and I can speak with authority to the science and the power of using RNA dysregulation profiling technology, specifically in context of our Trauma Autoimmune Indicator (TAI) test, to revolutionize the way we care for veterans. This technology has the power to detect trauma-induced changes in the body long before symptoms arise, allowing us to intervene early, prevent chronic conditions, and dramatically improve outcomes. Additionally, it is a powerful tool for clinicians to inform ongoing care, access emerging therapy modalities, and **conduct** continuous monitoring to prevent mental health relapses.

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A System That is Failing Veterans

We owe it to our veterans to do better and I am grateful to the Committee for your dedication and focus on doing so. Despite previous efforts including increased investment in mental health services, outcomes have not improved proportionately. According to the Government



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Accountability Office (GAO), mental health spending at the VA increased by over 60% between 2015 and 2022, yet suicide rates among veterans have remained tragically high and continue to increase.

Even more troubling, many veterans face wait times of two to three months or longer to access mental health services—completely unacceptable care when a servicemember is in crisis. The system remains reactive, relying on subjective self-reporting and crisis intervention after conditions have already worsened. This approach leads to missed opportunities for early intervention and contributes to rising healthcare costs over the long term.

We cannot continue down this path. We need a new approach—one that recognizes the profound connection between the brain and body and that leverages objective, science-based tools to identify risks before they escalate.

Why RNA Transcription Profiling is the Solution

RNA transcription profiling is that solution. This technology analyzes gene expression patterns to create an objective, quantifiable snapshot of a person's immune response and physiological health. It detects subtle changes at the molecular level, providing real-time insights into the body's response to trauma, stress, and inflammation.

Until recently, RNA transcription profiling was largely confined to research labs and high-cost clinical environments. The potential was always there, but the technology was difficult to scale, expensive to implement, and required specialized expertise. It wasn't practical for widespread use in routine healthcare settings.

That's no longer the case. Advances in biotechnology, computational biology, bioinformatics, and artificial intelligence have made it possible to deliver this technology in a low-cost, high-volume format that is ready for real-world application. The barriers that once made RNA transcription profiling inaccessible have been eliminated.

Introducing the Trauma Autoimmune Indicator (TAI) Test

At iXpressGenes, we've taken this powerful technology and developed the Trauma Autoimmune Indicator (TAI) test—a simple, science-driven tool that detects trauma-induced inflammation and immune dysregulation before clinical symptoms appear. And if clinical symptoms have already appeared, it serves as a powerful clinical tool to inform treatment effectiveness.



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The Trauma Autoimmune Indicator (TAI) test works by leveraging RNA transcription profiling to detect clear, trauma and stress induced changes in the body before symptoms become clinically significant. It begins by identifying changes in gene expression patterns triggered by trauma and chronic stress, providing an objective snapshot of the body's physiological response. Initial TAI screenings establish a baseline for trauma-related health, allowing providers to monitor inflammation and track the veteran's progress over time. As treatment progresses, TAI data enables personalized care by guiding individualized treatment plans and ensuring that interventions are tailored to the veteran's specific needs. Furthermore, regular TAI screenings play a critical role in preventing relapse and chronic conditions by detecting early signs of recurring trauma-related issues, allowing providers to adjust care strategies and maintain long-term progress. This proactive, data-driven approach ensures that veterans receive continuous, evidence-based care that evolves with their changing health needs.

Why This Matters for Veterans

Veterans face unique and complex healthcare challenges, particularly when it comes to mental health. PTSD, depression, and anxiety often go undiagnosed or untreated until they become debilitating. The current system relies too heavily on subjective assessments, which miss the physiological changes that accompany trauma.

TAI changes this paradigm. It provides objective, measurable data that empowers clinicians to identify risks and intervene early, before a veteran spirals into crisis. This approach can dramatically improve outcomes by preventing the progression of trauma-related conditions and reducing the need for costly long-term care.

The potential for impact is enormous. Research shows that incorporating biomarker-based approaches into mental health protocols can reduce PTSD symptom severity by 30-40% through earlier intervention and more personalized care (Smith et al., 2023).

The Technology is Here. The Time is Now.

We're no longer talking about theoretical solutions or future promises. The technology is ready, and the science is sound.

iXpressGenes has validated the effectiveness of the TAI test in clinical blind studies and is prepared to commercialize it within the next 30 days. At a retail price of \$225 per test, TAI screening is affordable, scalable, and ready to be deployed across the VA healthcare system.



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We've barely scratched the surface, and everything is pointing in one direction—toward a future where objective, physiology-based approaches are the standard in mental healthcare. The opportunity to transform the lives of veterans is in front of us, and this is the moment for action.

Bold Moves to Validate and Adopt High-Impact Technologies

We cannot afford to hesitate. If we are serious about modernizing VA healthcare and improving outcomes for veterans, we must:

1. **Validate High-Impact Technologies Quickly:** Establish pathways for rapid evaluation and validation of innovative technologies like TAI.
2. **Adopt Proven Innovations Without Delay:** Once validated, technologies with demonstrated impact should be integrated swiftly into VA protocols.
3. **Dismiss What Doesn't Work:** Be willing to pivot away from approaches that fail to deliver measurable benefits, ensuring that resources are directed where they can have the greatest impact.

This is not the time for incremental changes. Immediate action is required to move from reactive care to a proactive, prevention-based model that protects the health and well-being of our veterans.

Seizing the Future with Confidence

For me, this isn't just about science or technology. It's about ensuring that the men and women who have served this nation receive the care they deserve. We have the tools, the data, and the opportunity to transform the future of veteran healthcare.

In my last ten years of military service serving as an acquisition corps officer, I watched great technology die in the Valley of Death. The risk and investment of bridging this technology is very minimal because I intentionally structured the program we have built in a way to maximize the chance that it would cross the Valley of Death intact. This is why I strongly urge the Committee to support bold limited pilots of novel technologies like ours and ensure there is advocacy for adoption should the technology prove effective.

The science is here. The technology is ready. The time to act is now.

Thank you for the opportunity to share this vision. I look forward to working with the Committee to ensure that veterans receive the quality care they have earned.

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- Government Accountability Office (GAO). (2023). *VA Health Care: Opportunities Exist to Improve Mental Health Services and Reduce Wait Times*. U.S. Government Accountability Office.
 - Smith, J., et al. (2023). *Biomarker-Based Approaches for PTSD Detection and Intervention: A Systematic Review*. *Journal of Traumatic Stress*, 36(2), 345-359.
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