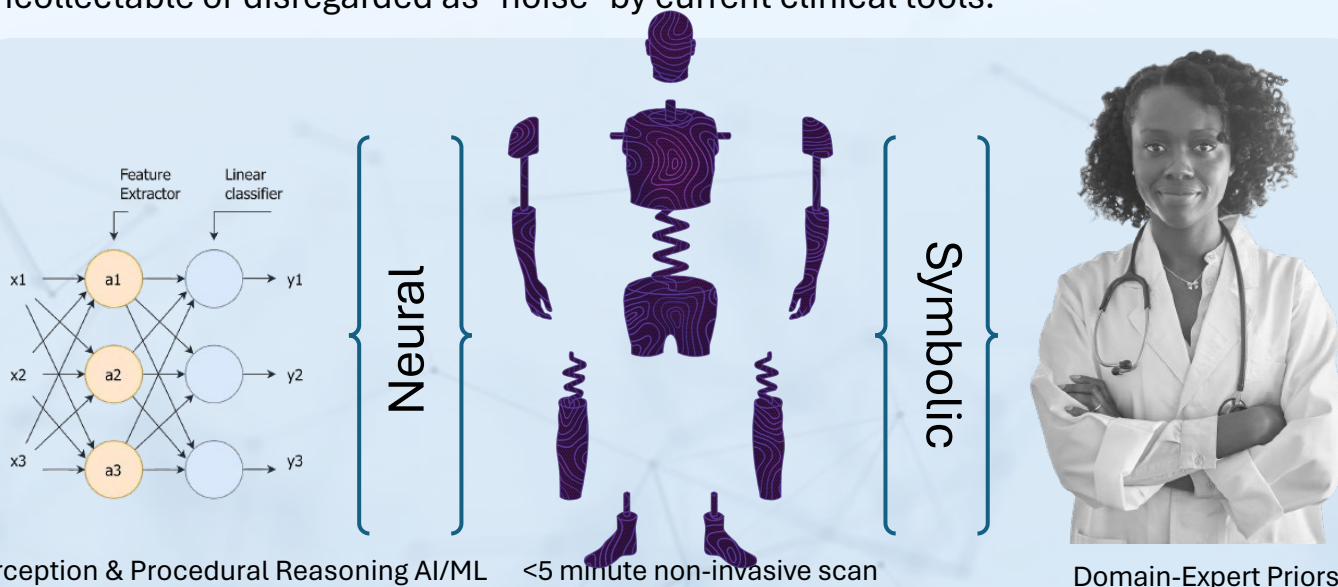




The human body is a mostly soundless musical orchestra of lung, heart, brain, and gut instruments that play harmoniously during health but fall out of sync during disease. We are introducing a safe, fast, non-invasive, *genAI* platform that harvests and interprets inaudible and audible vibroacoustic bodily symphonies that are uncollectable or disregarded as "noise" by current clinical tools.



Perception & Procedural Reasoning AI/ML

<5 minute non-invasive scan

Domain-Expert Priors

Neurosymbolic program synthesis algorithms automate vibroacoustic biomarker discovery from novel biopotential and biomechanical "noise" generated by the human body for earlier disease detection, more accurate diagnosis, and convenient monitoring.

INTEROPERABLE DEVICES:



imPulse™ TOR
electro-phono-cardiogram (EPHNOGRAM™)



imPulse™ UNA
Infrasonic-ultrasonic e-stethoscope



Trillian™ smartPatch
Point-of-person EPHNOGRAM

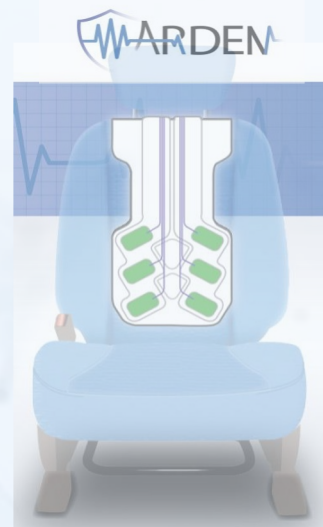
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genAI F.A.C.E.S. Monitoring Platform

Fatigue, Actigraphy, Congestion, Edema, Stress Digital Twin System



imPulse™ UNA

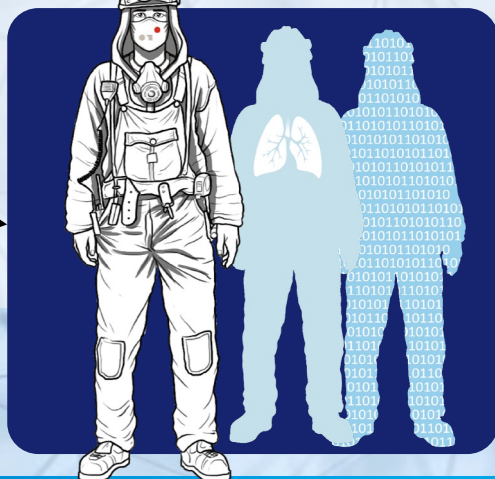
Infrasonic-ultrasonic e-stethoscope

Constant 'Q'

genAI Health Access Control System

Warden+™

Seatback Fatigue Monitoring System



Vibrome™ Digital Twins

for precision fatigue monitoring

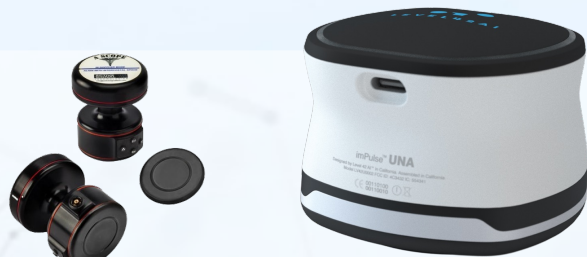
Vibrome™ Digital Twins

for work performance enhancement

Powered by:



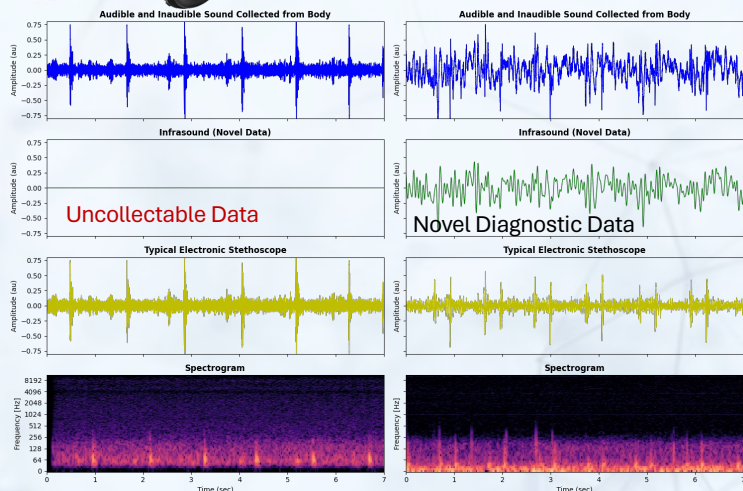
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imPulse™ UNA

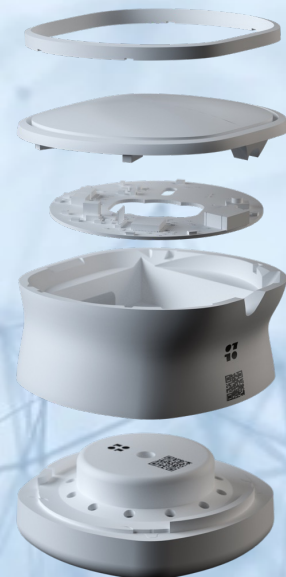
Infrasonic-ultrasonic e-stethoscope

More than 90% of biosignal data produced by healthy hearts, lungs, and digestive tracts lie below current instrument detection thresholds, rendering these data inaccessible for bedside and remote clinical diagnosis and decision-making. **The real-time "noise" generated by the human body is an underexplored data source for health biomarker discovery.** *What if we could unveil innate early human health warning signals to increase warfighter health spans and enhance performance?*



The Technology

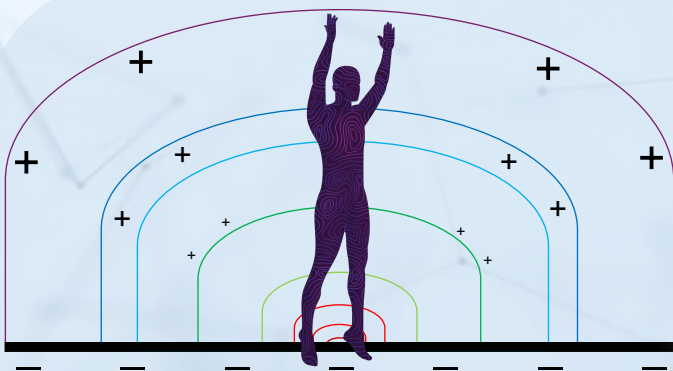
Our bodies are living organisms and vibrations and noises are part of our bodies' functions. imPulse™ UNA technology monitors physiological conditions from 0.01 Hz to 160 kHz, spanning the entire frequency, resonance, and harmonic progression bandwidth range. By capturing, deciphering, and annotating novel broad-spectrum data for advanced *genAI* algorithms, we aim to revolutionize screening, detection, and monitoring of lung, heart, and gut diseases affecting warfighters and veterans. The imPulse™ UNA can be coupled directly to a person's body or used through layers of clothing.



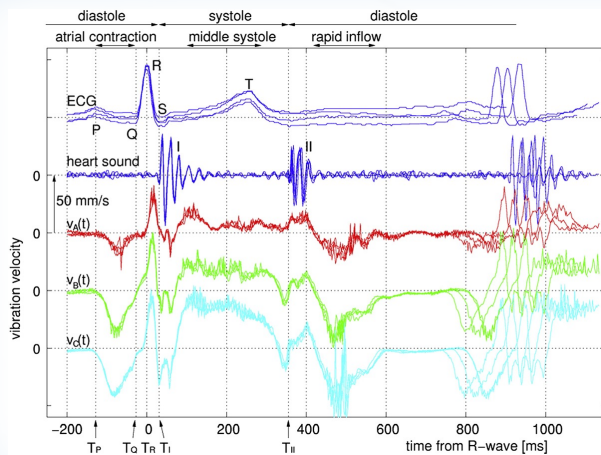
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Most places on Earth have a vertical electric field of about 100 V/m. The human body is mostly water and this interacts with the electric field.



The Technology

The Level 42 capacitive electric field sensor is a new ECG/EEG technology that works by measuring tiny changes in the electric field down to millivolts, even at a distance and through clothing. Capturing deep-phenotyping vibroacoustics, ECG, and SpO2 at the same time enables separation and interpretation of lung, heart, gut infrasonic (mechanical vibrations at very low frequencies and low amplitudes) waves produced by physiological processes—heartbeats, respiratory movements, blood flow in vessels, gut motility, and other life-preserving processes, and non-invasive fetal health monitoring.



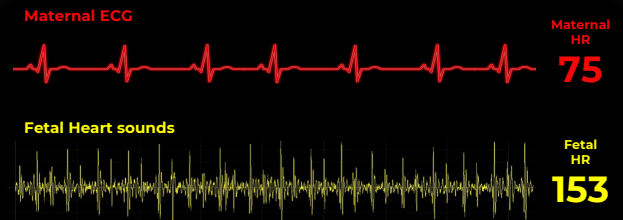
imPulse™ TOR

electro-phono-cardiogram (EPHNOGRAM™)

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Simultaneously capturing clear fetal s1 and s2 heart sounds and maternal ECG for preeclampsia, gestational diabetes and hypertension early detection and monitoring.

imPulse™ TOR

electro-phono-cardiogram (EPHNOGRAM™)



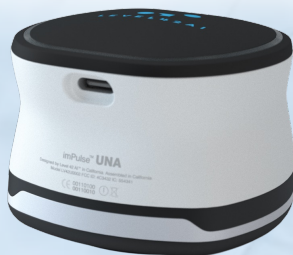
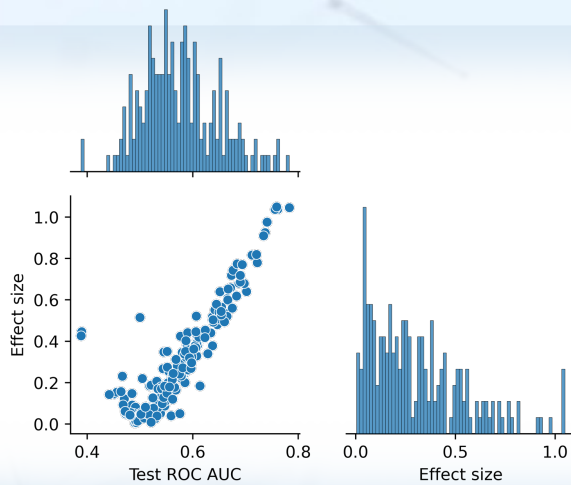
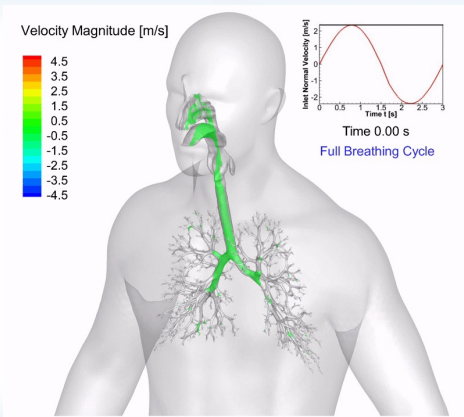
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imPulse™ UNA

Infrasonic-ultrasonic e-stethoscope

The Technology

Our bodies are living organisms, and vibrations and noises are part of our bodies' functions. We are introducing a proprietary, safe, and non-invasive biosensor AI platform that harvests and interprets lung symphonies that often goes unnoticed or are disregarded as mere "noise" by current clinical tools. The world is on the brink of a new health era, where COVID-19, RSV, Flu, TB early disease detection, precise health assessment, timely diagnosis, and treatment monitoring are enhanced by analyzing the sounds and vibrations, both audible and inaudible, emitted by the human body.

Powered by:





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Trillian™ smartPatch

Point-of-person EPHNOGRAM



Powered by:



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Fatigue, Actigraphy, Congestion, Edema, Stress Digital Twin System



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Vibrome™ Digital Twins
for work performance enhancement

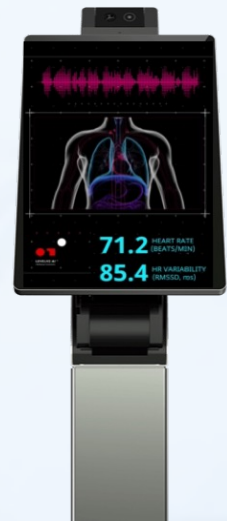
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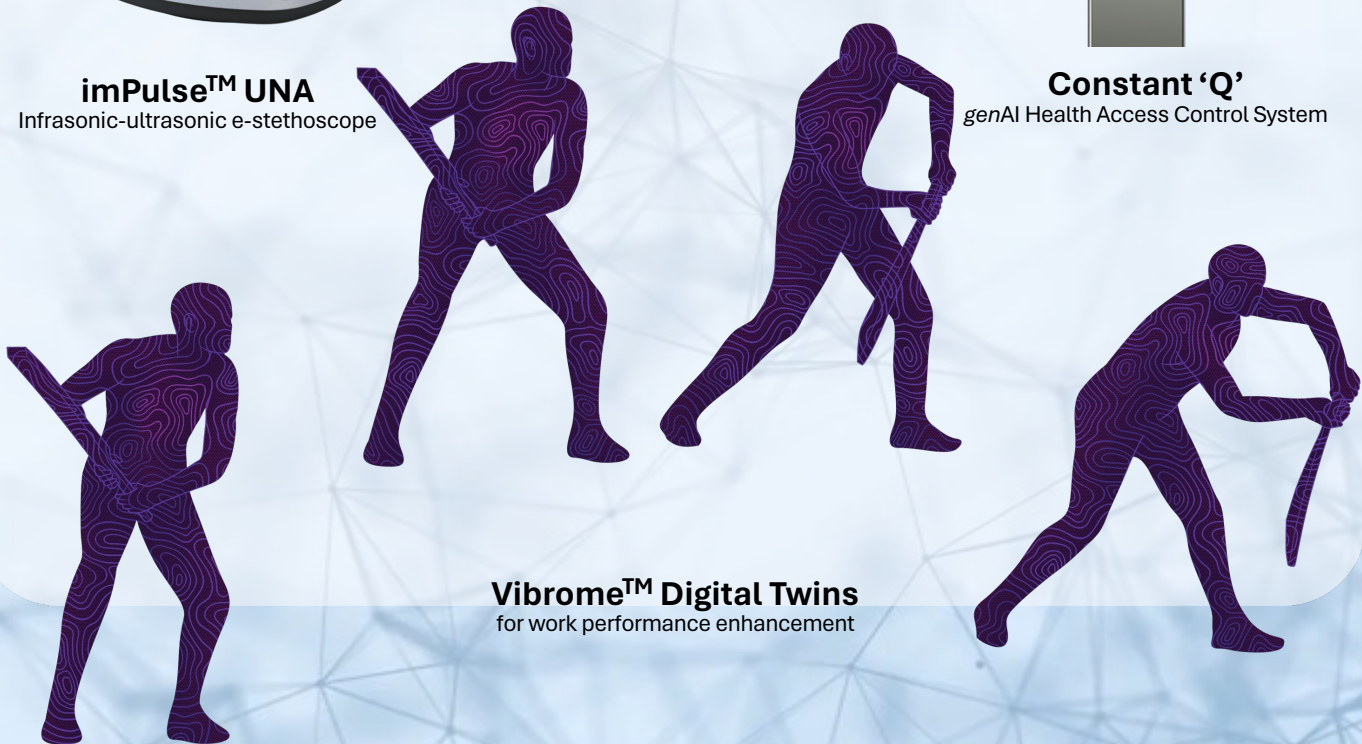
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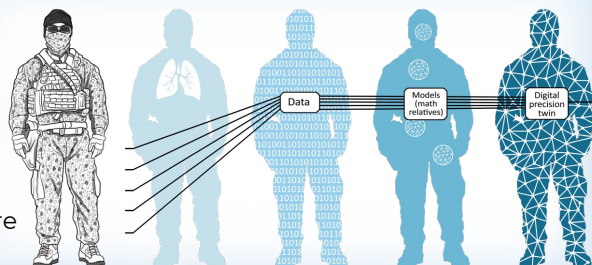
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genAI Disaster Response Platform

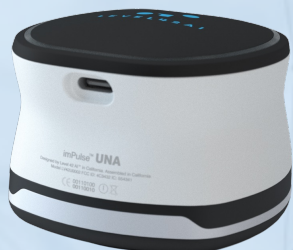
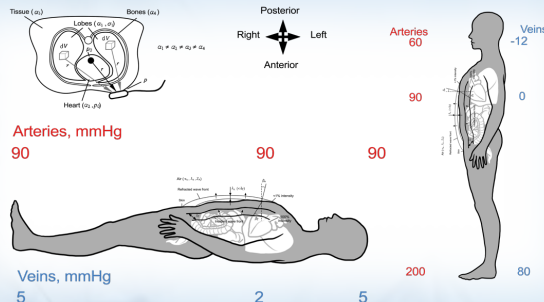
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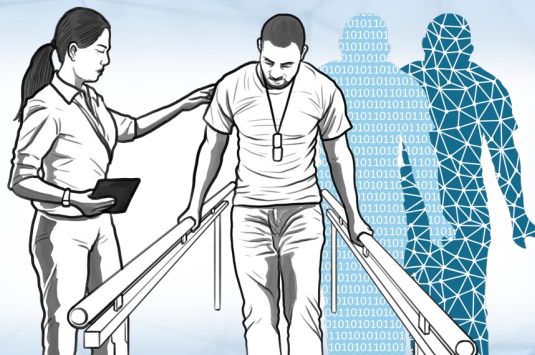
First-Responders
Before and After Exposure
Monitoring



Casualty
Easy, Fast, Accurate
Triage



Rehab
Digital Twin-Guided
Rapid Return to Duty



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