



EMPOWERING HUMAN ADAPTATION TO ENVIRONMENTAL STRESS



THE PROBLEM

Environment shapes our living conditions. Every alteration in our environment triggers molecular changes within our bodies, significantly impacting our health, safety and performance.

5.1M

deaths a year worldwide linked to extreme heat and cold

Lancet Planetary Health, 2021

62,775

heat deaths in Europe in summer 2024, over 19,000 in Italy

Nature Medicine, 2025

18,970

workers killed by heat every year, plus 22.85M injuries

ILO, Heat at work, 2024

Yet today's wearables only read heart rate, HRV and temperature: **late signals.**

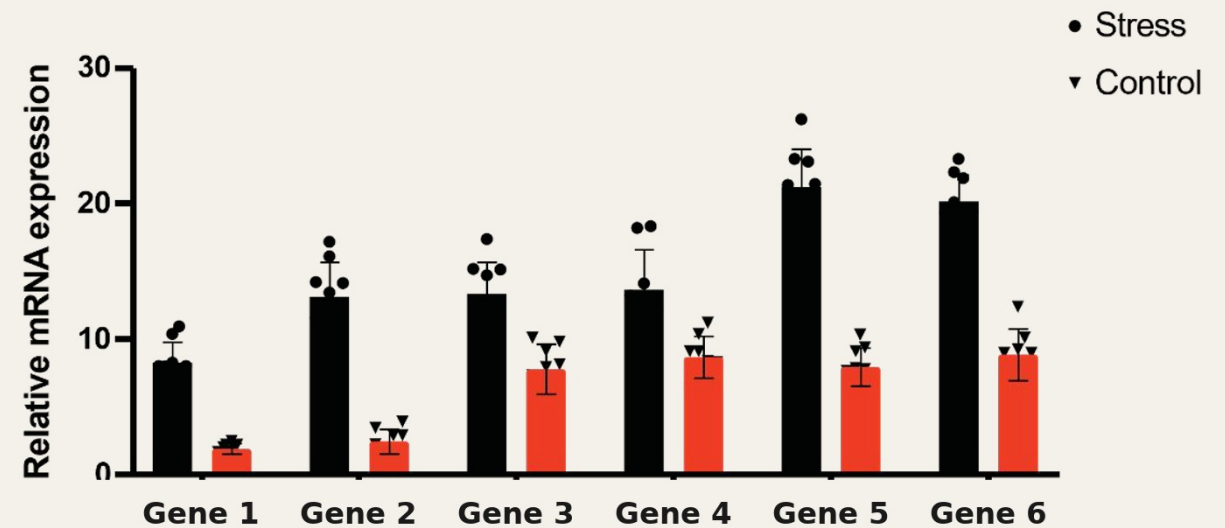
OUR SOLUTION

BREAKTHROUGH TECHNOLOGY FOR A CHANGING PLANET

- 01** **A molecular signature of environmental stress:** genes, proteins and metabolites that switch on early.
- 02** **Found in the field:** caves, cave diving and the Arctic, conditions close to ESA's CAVES astronaut training.
- 03** **Measurable with standard tools:** qPCR on blood today, a wearable patch tomorrow.

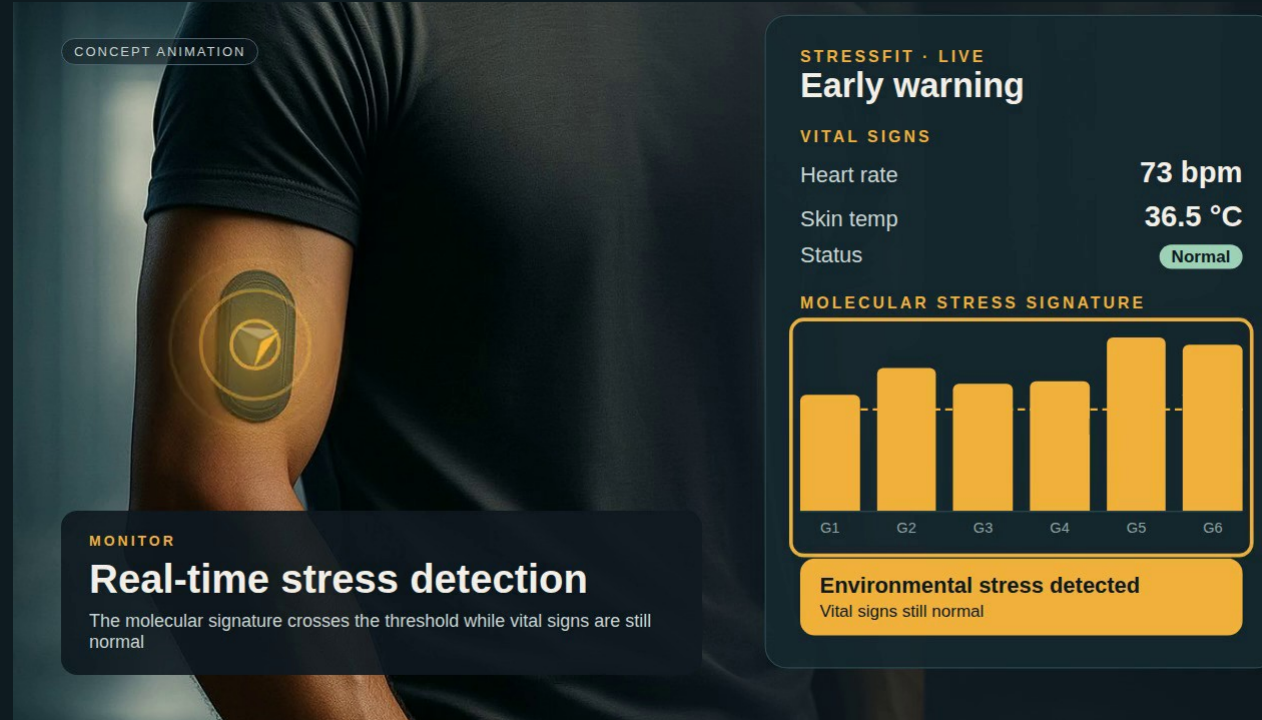


EVIDENCE FROM THE FIELD



Pilot study: 6-gene panel, **about 1.6× to 5× higher** in stressed subjects than controls. [n = 12 subjects, collected in 4 expeditions]

INTRODUCING stressFIT: A VERT BIODEVICE



stressKIT

qPCR lab kit on a blood sample

TRL 4 · 12–24 months



stressFIT Monitor

Sweat patch, real-time biomarkers

TRL 3 → 4 · 24–36 months



stressFIT Modulate

Detect and respond with adaptogens

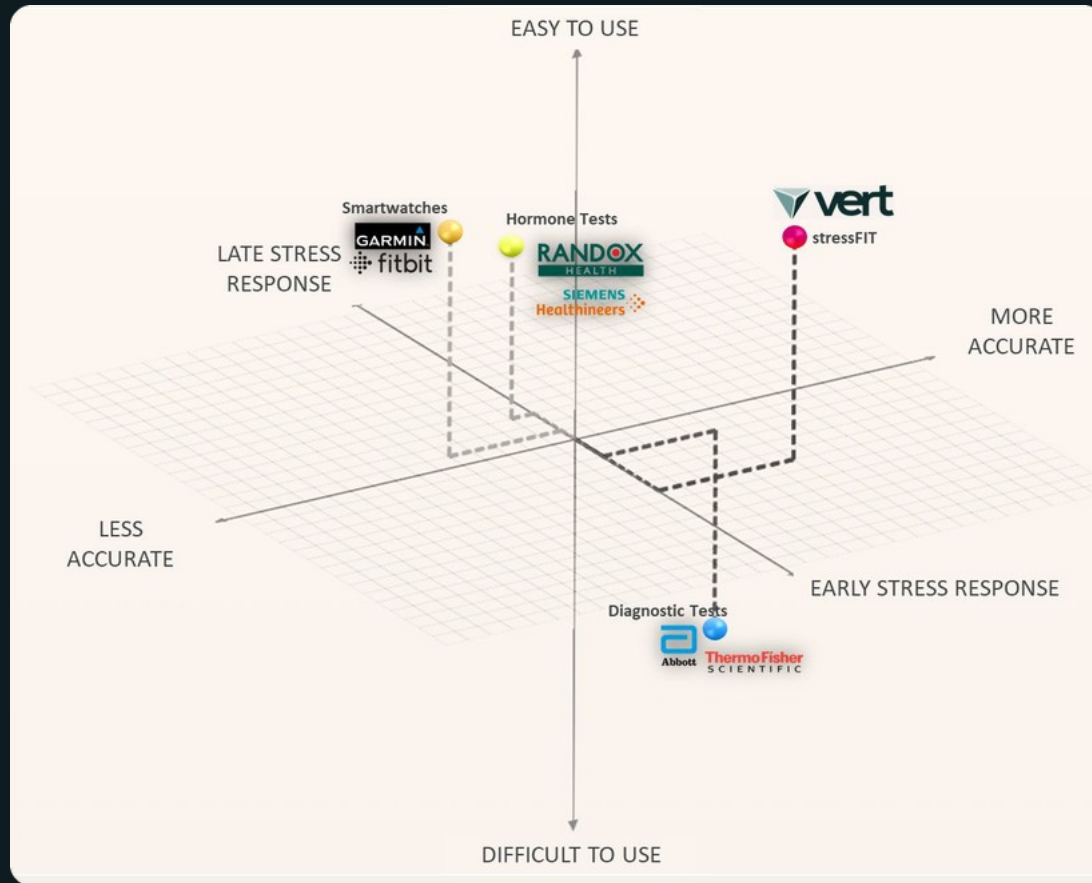
Vision · 3–5 years



Watch the stressFIT concept video

youtu.be/Msk7teebRZY

COMPETITOR LANDSCAPE



Smartwatches

Easy to use, but late and only physiological.

Hormone tests

Capture the late stress response.

Lab diagnostics

Accurate, but slow and tied to a lab.

stressFIT

Molecular, early and built for the field.

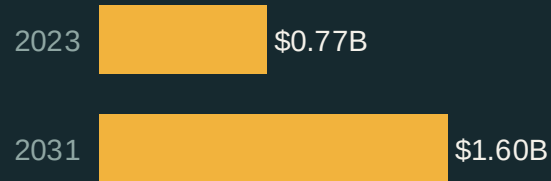
TESTING GROUNDS FOR SPACE & EARTH



ENTRY 1 · SPACE

\$1.6B

space medicine by 2031 · +11%/yr



ENTRY 2 · HEAT AT WORK

\$106M

heat stress monitors by 2030 · +8%/yr



SCALE · WEARABLES

\$429B

wearable medical devices by 2030



HOW WE EARN

stressKIT sales

Analysis as a service

Research contracts



Lazio



Sources: Coherent Market Insights 2024 · Mordor Intelligence 2025 · Fortune Business Insights 2023



OUR MULTIDISCIPLINARY TEAM

A multidisciplinary team: six co-founders from science, politics, culture and architecture, with field and media expertise.



Valerio Azzimato, PhD
Co-founder & CEO
Science, business



Marco Ruperto
Co-founder & CEO
Business dev,
expeditions



Karen Iacono
Co-founder & COO
Management,
institutions



Francesco Spallotta, PhD
Co-founder & CTO
Science



Rocco Caroselli
Co-founder
Social media,
expeditions



Matteo Ruperto
Co-founder
Media, dissemination



Michael Manasseri
PRO
Media production

**Science · Business ·
Field · Media**

From the lab to the cave

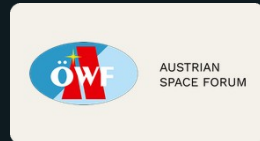
MAIN COLLABORATIONS & PARTNERSHIPS

Sapienza start-up

Incubated at ESA BIC Lazio

Field campaigns: caves, cave diving, Arctic

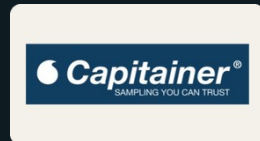
SPACE



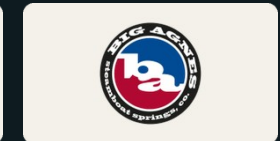
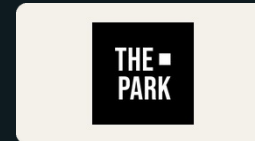
ACADEMIA & RESEARCH



SAMPLING & OMICS



FIELD LOGISTICS



DISSEMINATION



CONSULTANCY



CALL TO ACTION

We are raising **€800K** entry funding

Prototyping

stressKIT ready for pilots, first stressFIT prototype

R&D

Validate the signature on more subjects and in more environments

Workforce

Grow the team to carry the product to market

Also looking for: partners in diagnostic kit manufacturing and distribution, and pilot customers.



We tackle stress before the body shows it.

EXPLORE. ADAPT. CONNECT.

CONTACTS

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Scan to watch our
research teaser

