



FOR IMMEDIATE RELEASE

Arentha Launches NeuralTerrain™, a New Way to Measure Human Change Over Time

Nervous-system sensing and intelligence platform combines physiological, functional, cognitive, and experiential signals to create a longitudinal view of how an individual is changing.

COLORADO SPRINGS, Colo. — September 2026 — Arentha today announced the launch of NeuralTerrain™, a nervous-system sensing and intelligence platform designed to make physiological and experiential change visible over time.

Most health measurement happens in moments.

A patient is tested. An intervention occurs. Another test follows.

Those snapshots can be useful. But they often miss something larger: the trajectory between them.

NeuralTerrain was built to see that trajectory.

Rather than treating each measurement as an isolated event, NeuralTerrain is designed to establish an individual baseline and follow changes across the nervous system, sleep, cognition, physical state, and lived experience over time.

Seeing the terrain, not just the moment

The nervous system is constantly changing in response to stress, recovery, sleep, pain, environment, treatment, and experience.

Much of that change is difficult to see.

NeuralTerrain brings multiple signals together to create an evolving picture of the individual rather than a collection of disconnected measurements.

The platform is designed around three sensing components:

- A cardiac module for signals including heart-rate variability and autonomic activity.
- A spine module for physiological and somatic signals associated with tension and nervous-system state.
- An ear module for brainwave and related neurological signals.

Together, these components are designed to contribute to a longitudinal representation of nervous-system state and change.

NeuralTerrain does not simply ask what a signal means today.

It asks how that signal is changing relative to the individual's own baseline, what other signals are changing with it, and whether a larger pattern is beginning to emerge.

Three dimensions of human change

NeuralTerrain is designed to organize information across three connected layers.

Physiological

Signals may include heart-rate variability, autonomic state, sleep architecture, somatic tension, electrodermal activity, and brainwave activity.

Rather than displaying those measurements only as isolated values, NeuralTerrain is designed to examine how they move together and how they change across time.

Functional

The platform can incorporate information such as sleep quality, pain, medication or substance use, cognitive performance, social connection, and other functional outcomes relevant to the individual or use case.

Those observations can then be examined alongside physiological change.

Experiential

NeuralTerrain can also capture structured self-reported experience, including perceptions of coherence, identity continuity, meaning and purpose, safety in the body, recovery, and connection.

That layer matters because numbers rarely tell the entire human story.

A person may begin to feel fundamentally different before that change is visible through a conventional assessment. A nervous system may begin recovering before a single clinical score moves significantly.

NeuralTerrain is designed to hold both.

From snapshots to trajectories

Traditional measurement often asks:

What is happening right now?

NeuralTerrain asks another question:

What has been changing?

Over weeks, months, and eventually longer periods, repeated observation can create a terrain unique to the individual.

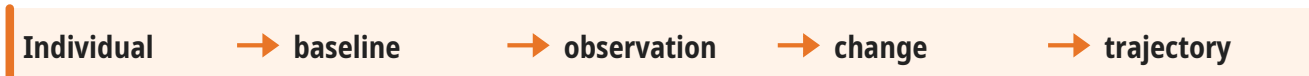
That terrain may show recovery.

It may show increasing strain.

It may reveal periods of stability, disruption, adaptation, or coherence.

And because change is examined against the individual's own developing baseline, NeuralTerrain is designed to help reveal patterns that can disappear when people are measured only against population averages.

The model is straightforward:



The longer the terrain develops, the richer the context becomes.

A single measurement tells us where someone is.

A trajectory begins to tell us where they are going.

Measurement without diagnosis

NeuralTerrain is not designed to diagnose disease or replace a physician, clinician, therapist, or other healthcare professional.

It is a measurement and intelligence platform.

Its purpose is to make patterns of change easier to see, preserve those observations across time, and give researchers, clinicians, practitioners, and individuals a more coherent view of what is happening.

Any clinical, diagnostic, therapeutic, or predictive application of NeuralTerrain would remain subject to appropriate research, validation, regulatory requirements, and professional oversight.

Why Arentha built it

NeuralTerrain began with a personal question.

Arentha's founder is a veteran who has lived with PTSD. For him, the effects of stress, memory, recovery, and nervous-system dysregulation were never abstract clinical concepts. They were lived experience.

That experience raised a larger question:

How do you measure change that a person can feel long before a conventional test can see it?

Human beings do not experience health as isolated appointments.

We change continuously.

Stress accumulates. Sleep improves. Pain recedes or returns. The nervous system adapts. Memory shifts. Recovery unfolds. A treatment that appears insignificant in one moment may become meaningful when viewed across weeks or months.

Yet much of healthcare still captures those experiences as disconnected snapshots: a test, a visit, a score, another appointment.

NeuralTerrain was built to connect those moments.

Its purpose is not to reduce a human being to data. It is to give context to the changes already taking place, combining physiological signals with function and lived experience so that recovery, strain, adaptation, and change can be seen across time.

FOUNDER QUOTE

"Living with PTSD taught me that what is happening inside a person doesn't always arrive neatly in words or show up during an appointment," said David Owen-Bard, Founder and Chief Architect of Arentha. "Sometimes you know something is changing long before anyone can measure it. NeuralTerrain grew from the question of whether we could make more of that change visible, and then carry it forward instead of losing the story between visits."

That question became NeuralTerrain.

Not simply a way to measure a moment, but a way to understand a human trajectory.

A different kind of health intelligence

The deeper opportunity behind NeuralTerrain is not simply collecting more data.

Healthcare already produces enormous amounts of data.

The problem is that much of it remains fragmented across separate devices, tests, assessments, applications, visits, and records.

NeuralTerrain is designed around continuity.

Instead of looking at sleep in one place, nervous-system activity in another, self-reported experience somewhere else, and cognitive performance only during periodic testing, NeuralTerrain is designed to bring relevant observations into a coherent longitudinal view.

That opens the possibility of asking richer questions.

Did sleep begin changing before pain improved?

Did autonomic regulation shift before the individual reported feeling safer?

Did cognitive performance change alongside nervous-system strain?

Did an intervention create a temporary response, or did it alter the person's longer-term trajectory?

These are questions that become easier to explore when observations are connected across time rather than examined in isolation.

The individual as the baseline

Population averages are useful.

But they are not the whole person.

Two individuals can produce the same measurement while arriving there through very different histories, environments, health conditions, experiences, and trajectories.

NeuralTerrain is designed to preserve that individual context.

The platform is intended to help establish what is normal for a particular person and then observe meaningful deviation from that evolving baseline.

Over time, this may allow researchers and practitioners to identify change earlier, understand interventions more deeply, and distinguish temporary fluctuations from more persistent patterns.

That capability remains subject to appropriate research and validation.

But it begins with something simple:

Remember the individual.

Beyond more sensors

Arentha believes the next generation of human measurement will require more than additional wearable devices.

Sensors can tell us what happened.

Intelligence has to help us understand what changed.

Continuity allows us to understand what came before.

NeuralTerrain brings those ideas together.

The result is a platform designed not merely to collect physiological information, but to preserve the developing relationship between signals, experience, intervention, and time.

The goal is not a bigger pile of health data.

It is a clearer picture of the human being inside it.

A different question

NeuralTerrain is ultimately built around a different approach to measurement.

Not simply:

Did the intervention work?

But:

What changed?

When did it change?

What changed with it?

And is the individual moving toward a different trajectory?

Those questions may matter across recovery, resilience, cognitive health, chronic conditions, research, performance, aging, and other areas where the most meaningful signal develops gradually rather than during a single appointment.

Arentha believes the future of human measurement will require continuity.

NeuralTerrain is designed to make that continuity visible.

About NeuralTerrain™

NeuralTerrain™ is Arentha's longitudinal nervous-system sensing and intelligence platform. It is designed to combine physiological, functional, cognitive, and experiential information into an evolving representation of individual change over time.

NeuralTerrain is not a diagnostic or therapeutic product. Descriptions of potential clinical, predictive, or future capabilities remain subject to research, validation, regulatory requirements, and continued product development.

About Arentha

Arentha builds persistent intelligence infrastructure designed to carry context, knowledge, and observation forward across changing systems and time.

The company's work is built around a simple premise: intelligence becomes more useful when it does not have to continually begin again.

Arentha develops systems around continuity, governance, computational efficiency, human authority, and longitudinal intelligence.

Arentha is patent-pending.

Media Contact

Arentha Media Relations media@arentha.net

Forward-Looking Statements

This release contains statements regarding the design, intended capabilities, potential applications, and future development of NeuralTerrain. Terms such as "designed to," "intended to," "may," "can," and similar expressions identify capabilities or outcomes that may remain subject to research, technical development, clinical validation, regulatory requirements, and real-world testing. Arentha does not represent that NeuralTerrain currently provides diagnosis, treatment, clinical prediction, or guaranteed health outcomes.