

KATHLEEN (KAT) JOHNSON

Psychophysiology | Integrative Healthcare | Organizational Leadership

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Website: <https://katscratch.online> — in progress

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IDENTITY STATEMENT

Polymath systems architect and psychophysiology researcher specializing in the autonomic–interoceptive–predictive architecture of human experience, identity, and adaptation. Developer of the AIPP Model and cross-domain frameworks integrating physiology, psychology, systems science, and neuro-innovation.

CORE COMPETENCIES

Autonomic + Interoceptive Systems — HRV analysis, autonomic profiling, vagal regulation, interoceptive pattern mapping

Predictive-Processing + Psychophysiology — multisystem modeling, symptom pattern architecture, AIPP-based analysis

Identity Science + Intergenerational Systems — lineage patterns, identity architecture, psychodynamic leadership

Trauma-Informed Systems + Somatic Interventions — multisystem resilience, somatic pattern recalibration, safety-based frameworks

Neuro-Innovation + Applied Systems Design — mobile neuro-wellness lab development, biometrics integration, HRV technologies

Performance + Stress Physiology — cognitive load, resilience engineering, high-performance psychophysiology

Integrative Health + Coaching Frameworks — identity-informed coaching, positive psychology, applied AIPP models

Organizational + Systems Leadership — cross-domain strategy, systems thinking, identity-informed leadership development

RESEARCH + SCHOLARSHIP

Primary Research Architecture

My research centers on the autonomic–interoceptive–predictive architecture of human experience, with emphasis on multisystem regulation, identity formation, and adaptive patterning across physiological, psychological, and relational domains.

Core domains include:

Autonomic regulation, vagal tone, and HRV-based pattern analysis

Interoception, predictive processing, and multisystem symptom architecture

Trauma physiology, resilience, and safety-based systems

ENS–brain axis and psychoneuroimmunology

Sleep, glymphatic function, and recovery physiology

Identity science, lineage patterns, and intergenerational systems

Signature Contribution

Autonomic-Interoceptive Predictive-Processing (AIPP) Model

A unified regulatory ontology explaining multisystem symptom patterns and adaptive behavior across biological, psychological, relational, and cultural scales.

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Manuscripts Under Review

Johnson, K. (2026). *Persistent somatic symptoms: A psychophysiological and predictive-processing perspective*. Manuscript under review at the Journal of Psychosomatic Research. <https://doi.org/10.13140/RG.2.2.34268.96648>

Johnson, K. (2026). *Substance use disorder as a multisystem dysregulation pattern: A psychophysiological and predictive-processing model*. Manuscript under consideration at Addiction Research + Theory. <https://doi.org/10.13140/RG.2.2.15814.02889>

ENTERPRISE + PROJECT LEADERSHIP

KatScratch — Founder + Principal

Multi-division ecosystem integrating psychophysiology, systems science, identity architecture, and neuro-innovation. Serves as the umbrella for research, applied frameworks, coaching, education, and community-based resilience initiatives.

Website: <https://katscratch.online> — in progress

Div. 1 Vital Insights — Science + Systems + Neuro-Innovation (Future Launch)

Research and innovation division focused on multisystem pattern architecture and applied psychophysiology:

- Mobile neuro-wellness lab development
 - HRV profiling, biometrics, autonomic assessment
 - Trauma-informed psychophysiology + somatic science
 - Identity + ancestral systems; FIGG integration
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Div. 2 Inner Edge — Coaching + Applied Frameworks

Applied systems division translating AIPP, identity science, and psychophysiology into human-centered development frameworks:

- Health + wellness coaching (secular + faith integrated)
 - Positive psychology + resilience
 - Somatic and nervous system coaching
 - Trauma-informed support
 - Identity-informed + psychodynamic leadership development
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Div. 3 Psych-ish — Media + Education

Educational media division translating complex multisystem science into accessible, narrative-driven content:

- Nervous system science
- Trauma-informed care
- Identity + resilience

501c3 Spring Creek Ranch

Community-based resilience and equine rescue organization integrating somatic, experiential, and relational systems:

- Equine rescue + horsemanship instruction
 - Somatic + experiential training
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501c3 Debra Louise Thompson Kucera Memorial Fund

Resource network and scholarship fund expanding access to trauma-informed care and resilience programs:

- Trauma-informed care + resilience programs
 - Domestic violence references, resources, and access to care
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EDUCATION

Bachelor of Science, Psychology (Summa Cum Laude)

University of Northwestern – St. Paul

Concentrations: Health Psychology; Marriage + Family Counseling

Master of Health Science, Integrative Care (Trauma-Informed Care)

Northwestern Health Sciences University — GPA 4.0 (Expected Spring 2027)

Focus: multisystem regulation, psychophysiology, trauma-informed systems

Graduate Certificate, Integrative Health + Wellbeing Coaching

Northwestern Health Sciences University — GPA 4.0 (Expected Summer 2026)

Graduate Certificate, Organizational Leadership

University of Northwestern – St. Paul — GPA 4.0 (Expected Summer 2026)

Graduate Certificate, Biblical Counseling

Master's International University of Divinity (Expected Spring 2027)

Graduate Certificate, Forensic Investigative Genetic Genealogy

University of New Haven (Expected Spring 2027)

Doctoral Pathway (Ph.D. – Research Track, Global Online/Hybrid Programs)

Target Start: Fall 2027

Focused on psychophysiology, systems science, and cross-domain pattern theory (AIPP).
Actively evaluating internationally accredited online and hybrid research doctorates.

CERTIFICATIONS + TRAINING

- NBC-HWC (eligibility upon practicum) — integrative health + wellbeing coaching
 - BCIA Biofeedback (BCB-P) — in progress — psychophysiological assessment + regulation
 - Polyvagal Theory Training — autonomic patterning + safety-based systems
 - Somatic Breathwork Certification — interoceptive modulation + somatic recalibration
 - Functional Medicine coursework (IFM) — multisystem physiology + integrative health
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SELECT UNIVERSITY CERTIFICATES

Stanford University — Psychology for High Performance; Epigenetics + Microbiomics

MITx — Systems Biology; Genetics; Population Genetics

Duke University — Mindfulness-Based Stress Reduction

Harvard University — Neuroscience of Learning + Stress Physiology

TECHNICAL + CLINICAL SKILLS

- Autonomic + HRV Systems — HRV analysis, autonomic profiling, vagal regulation
- Biofeedback + Neurofeedback — psychophysiological assessment, multisystem regulation
- Trauma-Informed Interventions — somatic pattern recalibration, safety-based frameworks
- Sleep + Recovery Physiology — glymphatic function, recovery optimization
- Stress + Performance Physiology — cognitive load, resilience engineering
- Identity-Informed Coaching — psychodynamic leadership, identity architecture
- Predictive-Processing Applications — symptom pattern modeling, AIPP-based analysis
- Movement + Breathwork — trauma-sensitive movement, interoceptive modulation

STRATEGIC GOALS

AIPP Model Dissemination — publish, refine, and expand the Autonomic-Interoceptive Predictive-Processing (AIPP) Model as a unified regulatory ontology across research, clinical, and applied systems.

Neuro-Innovation Development — advance CardioLens HRV technology and launch the mobile neuro-wellness lab to integrate biometrics, psychophysiology, and predictive-processing frameworks.

Ecosystem Expansion — continue building the multi-division KatScratch ecosystem (Vital Insights, Inner Edge, Psych-ish) to bridge science, systems, coaching, and education.

Research Trajectory — pursue doctoral-level research in psychophysiology, systems science, and cross-domain pattern theory, with emphasis on multisystem regulation and identity architecture.

Community Impact — expand 501c3 programs (Spring Creek Ranch; Debra Louise Thompson Kucera Memorial Fund) to increase access to trauma-informed care, resilience programs, and experiential somatic training.