

WHAT'S HAPPENING AT THE HEALING SPACE

USING INNOVATION TO OPTIMIZE HUMAN WELLBEING

BY ALLEN GEE PHD, MD, FAAN

Becoming forgetful as we age is accepted as a normal part of life. The interesting piece is, memory loss is not a normal process of aging. We expose ourselves every day to contributing factors which can injure the brain and lead to memory loss and brain atrophy and many of these activities are modifiable.

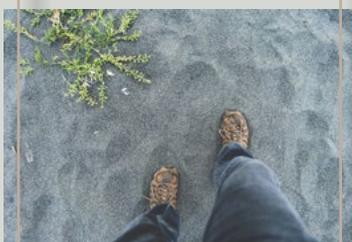
Rather than accept memory loss and declining cognitive function as an absolute, there are many interventions we can embrace and lifestyle modifications we can pursue that will help us age more gracefully, more resiliently, and in our homes. We are not aware of all the things we don't know, and we work through any challenges that come up in our lives.

Technological innovation, however, is surfacing opportunities to impact our lives in a positive way. We can digitize human form and function. Based on your posture, your walking, and your speech characteristics, we can assess in a matter of minutes the status of your mobility and cognition. Knowing your abilities, we can support your needs and ultimately, this will impact your ability to live independently.

External imaging can be done with cameras and we can generate a 3D representation of your body and more importantly use this technology to predict medical issues and outcomes. Gait is an indicator of decreased mobility as well as cognition as we see different patterns of gait with Alzheimer's versus other types of dementia. By walking on a mat of sensors we can characterize all aspects of your gait. The production of speech is also very powerful in identifying cognitive issues and can be assessed in a matter of minutes by listening to you speak. The vision system is also very reflective of cognitive function and with new technologies such as virtual reality headsets we can assess your vision system in an efficient manner.

Thanks to digital assessments assessing function, it becomes possible to screen large populations and find those that are showing evidence of cognitive impairment and decreased mobility. Once identified, it then becomes possible to intervene and change patient outcomes. Intervention begins with assessing sleep, nutrition, movement, and mindfulness as these are the foundational drivers of good neurophysiology in the body. By optimizing your physiology, we can enhance your body's ability to stay healthy and start to shift the narrative of memory loss being a normal part of aging and help you live independently, longer.

"Very little grows on jagged rock. Be ground, be crumbled, so wild flowers will come up where you are. You've been stony too many years. Try something different. Surrender." -Rumi



FRONTIER WELLNESS TIP

GROUNDING FOR BALANCE

In electricity, grounding is the process of a charge returning to the ground to achieve neutrality. In other words, it is the idea that power seeks the earth for balance. Humans are complex electrical and chemical systems, and we too seek the ground for balance.

This month we invite you to implement a grounding practice in your life. Grounding practices are diverse and meant to help bring you back to the present moment especially during moments of anxiety. The goal is to connect you to the larger world around you to cultivate steadiness and composure. You can find [a list of grounding practices here](#). One of our favorites is to feel your feet connecting with the earth – even better if you can get your toes into the dirt or grass.

Grounding allows you to be a conduit, to allow the energies and emotions you experience throughout your day to flow through you instead of becoming absorbed by you. You are of this earth; let the ground you live upon be a resource that can both bring you out of yourself and also back to yourself.

THE DYSREGULATED NERVOUS SYSTEM

BY REGINA GEE

When we talk about the nervous system, we are talking about a physiological system designed to perceive information, process it, and respond accordingly in a multidimensional and complex world. When the nervous system is optimally functioning, it is fluctuating between periods of alertness and rest, finding a dynamic equilibrium that vacillates between sympathetic and parasympathetic tone in response to our environment. However, this equilibrium can be disrupted due to trauma, toxic stress, or other negative experiences. This disruption results in a dysregulated nervous system – a system that spends too much time in fight, flight, or freeze mode, or too much time in rest mode, fixated in either state instead of gracefully transitioning between them.

When the interface that orchestrates how we understand and respond to the world is dysregulated, our interpretations and perceptions are thrown into disarray. Our system is no longer able to appropriately interpret external stimuli, thus creating and perpetuating illness and disease states such as chronic stress, inflammation, depression, anxiety, and obesity to name a few. The vital work now is to discharge the traumatic stress being held in the body to return to optimal function.

Healing from trauma and regulating your nervous system is about recovering ownership and agency of how your body responds to the world. For many, this journey looks like developing a method to calm down and focus, learning to maintain that calm, being present and alive to the present, and being able to navigate the natural fluctuations of nervous system function with ease. For specific resources and treatment programs to regulate your nervous system, you can read more [here](#).

WE'RE READING:

[Becoming Wise By Krista Tippett](#)
[Mindset By Carol Dweck](#)
[Can't Hurt Me By David Goggins](#)

WE'RE WATCHING:

[What the Health](#)
[The Bleeding Edge](#)
[Take Your Pills](#)

WE'RE LISTENING:

[Unlocking Us with Brene Brown](#)
[Armchair Expert: Daniel Goleman](#)
[Nurture vs Nurture with Wendy Mogul](#)



NEURO RESOURCE ACES & TRAUMA PATTERNS

BY REGINA GEE

The English word 'trauma' is the Greek word for 'wound.' The Merriam Webster dictionary defines trauma (noun), as a deeply distressing or disturbing experience. Peter Levine describes trauma as a highly activated, incomplete biological response to threat, frozen in time. What we are learning, and why trauma is an important topic, is that traumatic experiences have profound impacts on how our body functions on a cellular level.

A powerful example of the impact of trauma comes in the form of

[Adverse Childhood Experiences \(ACEs\)](#). [The original ACE study](#) was done from 1995-1997 and screened over 17,000 people. This study identified ten adverse childhood events including: physical, emotional, sexual abuse, physical or emotional neglect, domestic violence in household, parent with a mental illness, divorce, incarcerated relative, and substance abuse in the household. What this study found ACEs are extremely common – 67% of adults have at least one, and 13% have four or more. They also found that the higher your ACE score, the worse your health outcomes are.

Specifically, for a person with four or more ACEs, their risk of COPD is 2.5x more than a person with zero ACEs. Their risk of hepatitis? 2.5x. Depression? 4.5x. Suicidality? 12x.

This knowledge is power – and it asks us to shift our medical systems and interventions to recognize that life experiences have profound impact on our physiology. We know, both physically, scientifically, and spiritually that our experiences matter and influence our patterns of behavior. Trauma patterns are observable; ACE screenings and other trauma informed care practices are access points. When we (medical professionals, family, friends, individuals) pay attention to the effects of trauma, a doorway opens and we are offered a choice – we can continue to move through the world with the conditioned results of our trauma, or we can move forward understanding that what happened has profound effects but that we have the power to change the story.

[More Resources Here](#)