

# **Wisconsin Public Psychiatry Network Teleconference (WPPNT)**

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# WPPNT Reminders

## How to join the Zoom webinar

- **Online:** <https://dhs.wi.zoomgov.com/j/1606358142>
- **Phone:** 669-254-5252
- Enter the Webinar ID: 160 635 8142#.
  - Press # again to join. (There is no participant ID)

## Reminders for participants

- Join online or by phone by 11 a.m. Central and wait for the host to start the webinar. Your camera and audio/microphone are disabled.
- [Download or view the presentation materials](#). The evaluation survey opens at 11:59 a.m. the day of the presentation.
- Ask questions to the presenter(s) in the Zoom Q&A window. Each presenter will decide when to address questions. People who join by phone cannot ask questions.
- Use Zoom chat to communicate with the WPPNT coordinator or to share information related to the presentation.
- [Participate live to earn continuing education hours](#) (CEHs). Complete the evaluation survey within two weeks of the live presentation and confirmation of your CEH will be returned by email.
- A link to the video recording of the presentation is posted within four business days of the presentation.
- Presentation materials, evaluations, and video recordings are on the WPPNT webpage: <https://www.dhs.wisconsin.gov/wppnt/2024.htm>

# Welcome!



Addiction Counselor, Manifest Wellness  
Somatic Experiencing Practitioner (in  
training)

Certified Yoga Teacher

Certified TRE (Trauma Releasing  
Exercises) Provider

**Kristy Kuecken**

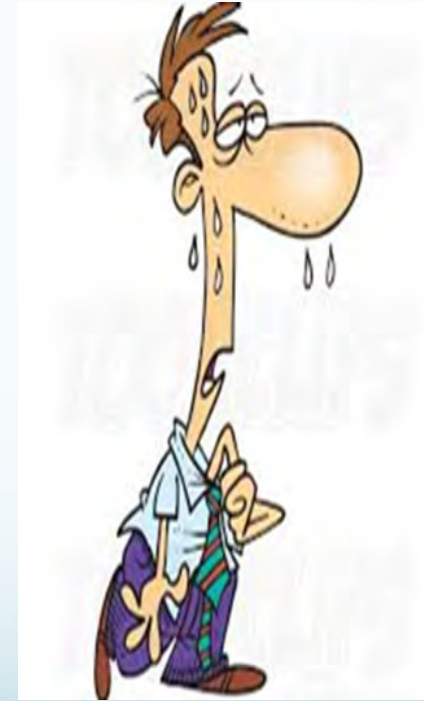
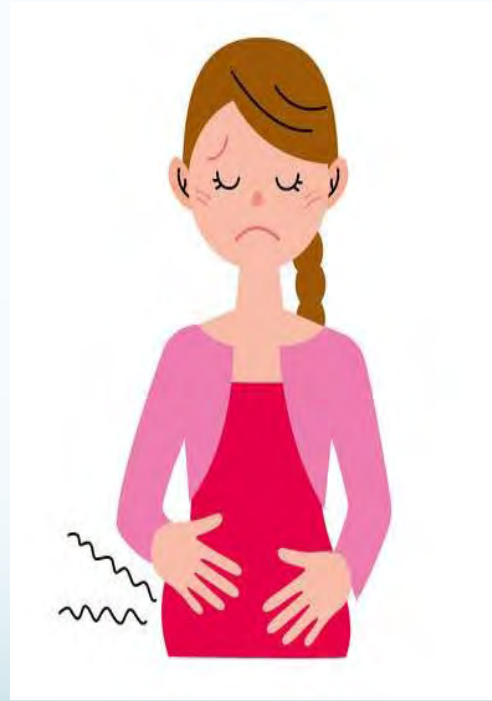
[mindbodemotion@gmail.com](mailto:mindbodemotion@gmail.com)

[Mindbodemotion.com](http://Mindbodemotion.com)

# Dr. Stephen Porges



# Experiment: What is happening in my body?



What did you notice?

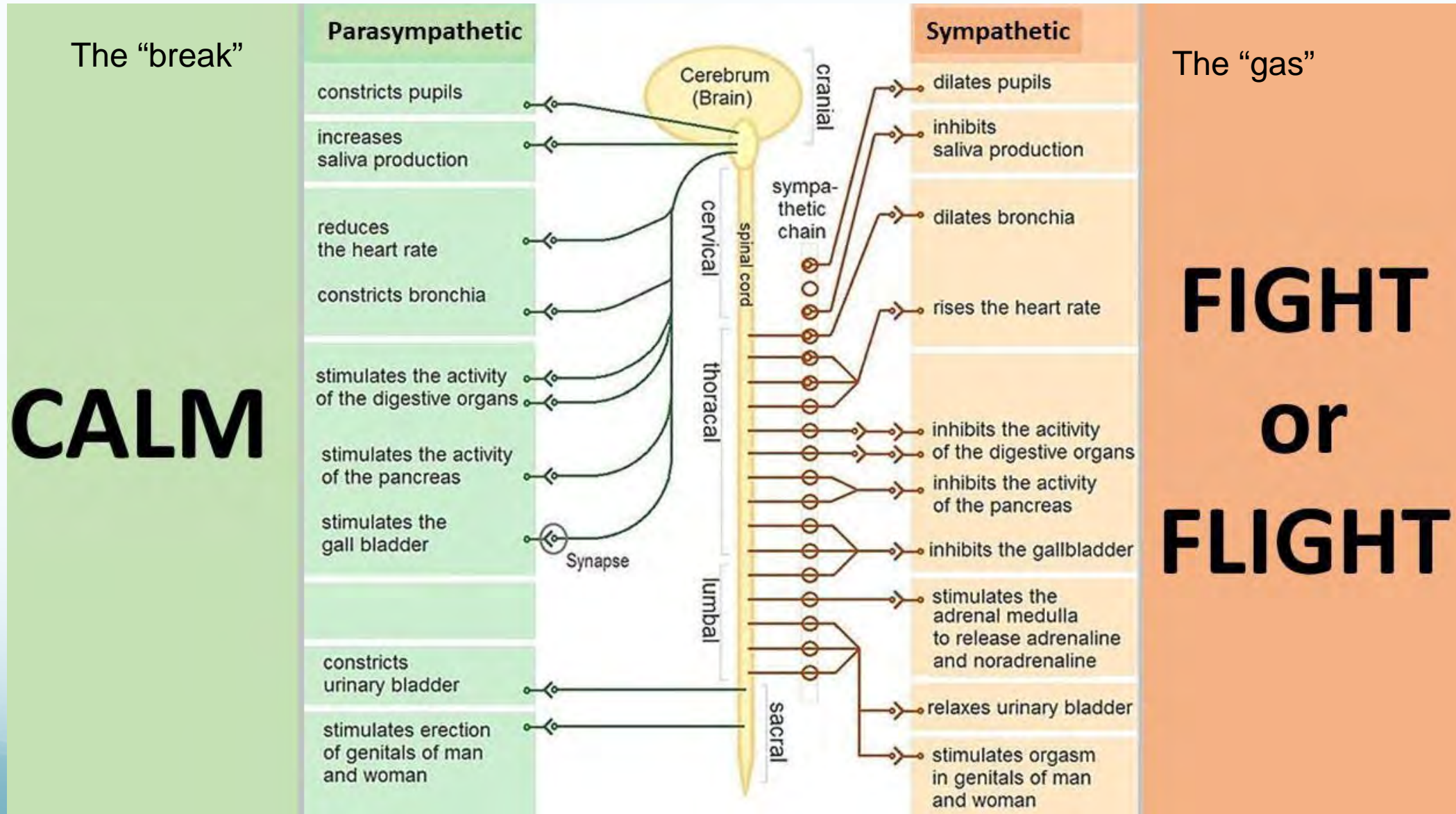
# The Autonomic Nervous System

Responsible for the automatic functions of the body  
Examples: Heart rate, breathing, muscle tension, digestion





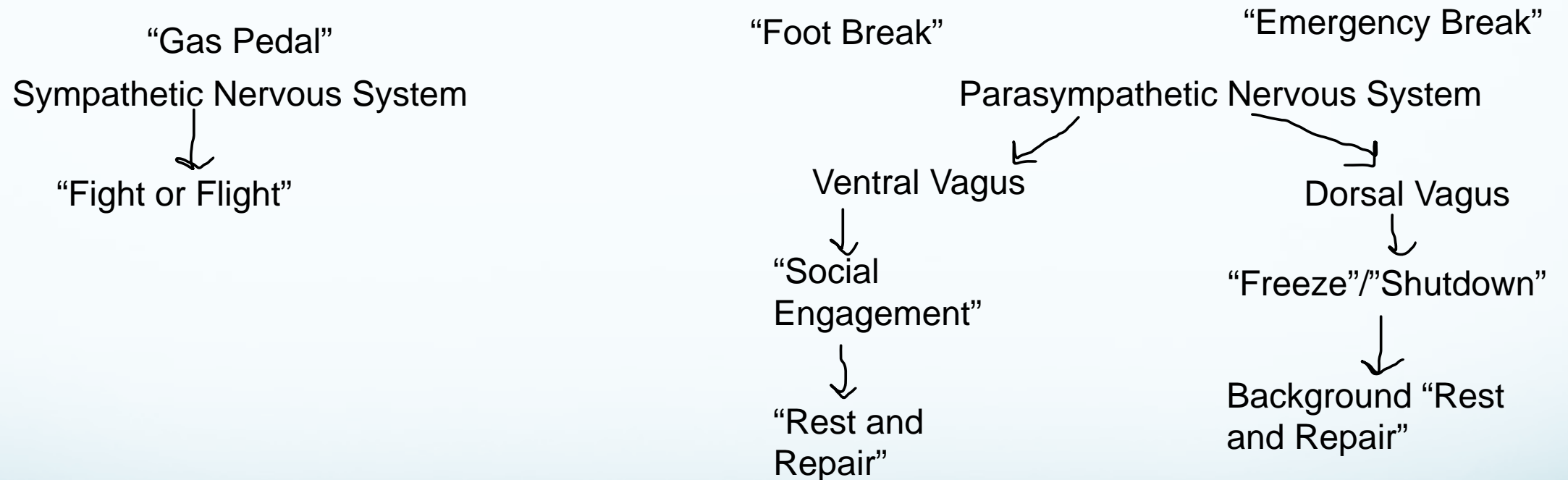
# The old model of the ANS



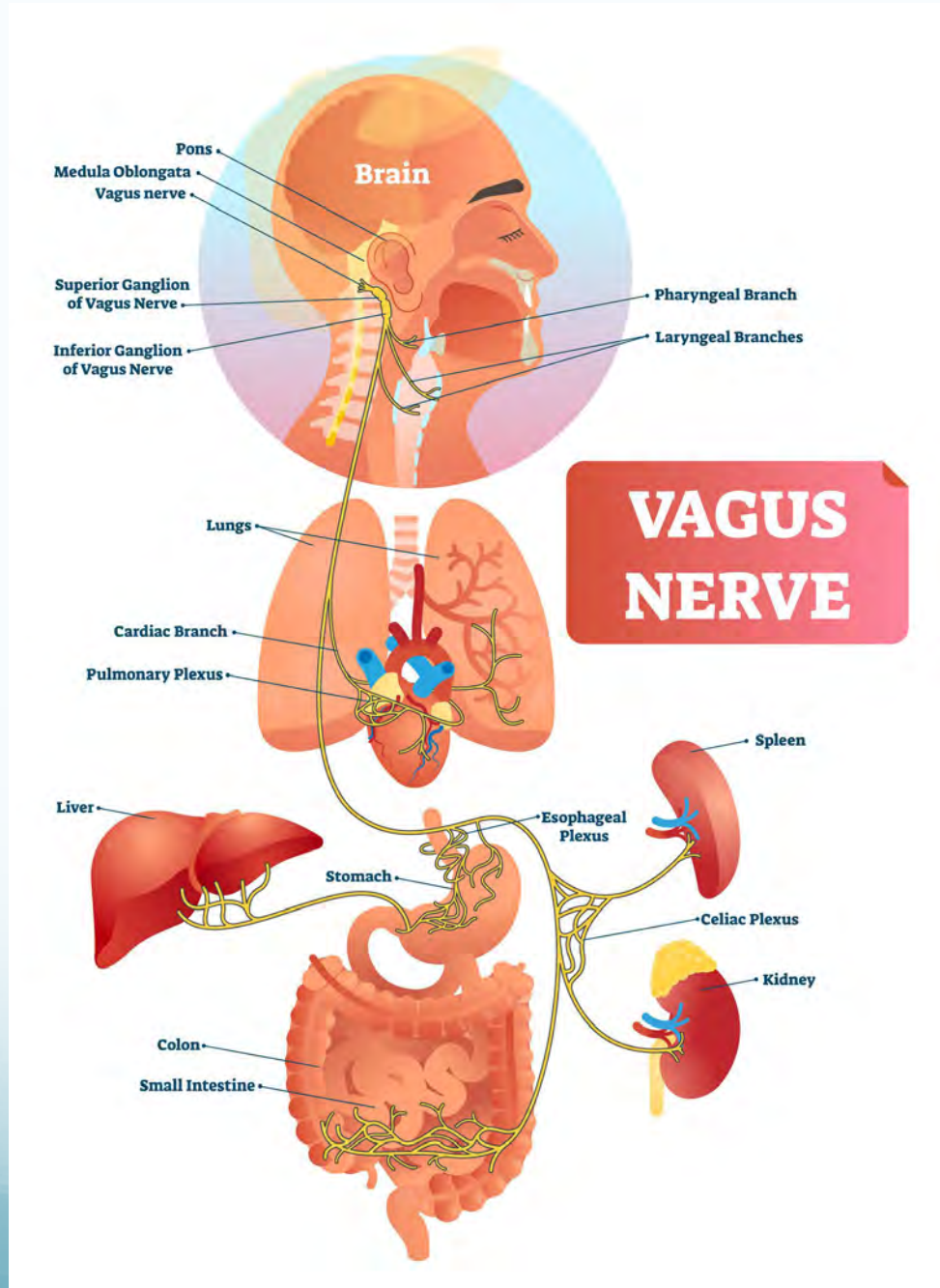


# New model of the ANS

## Autonomic Nervous System

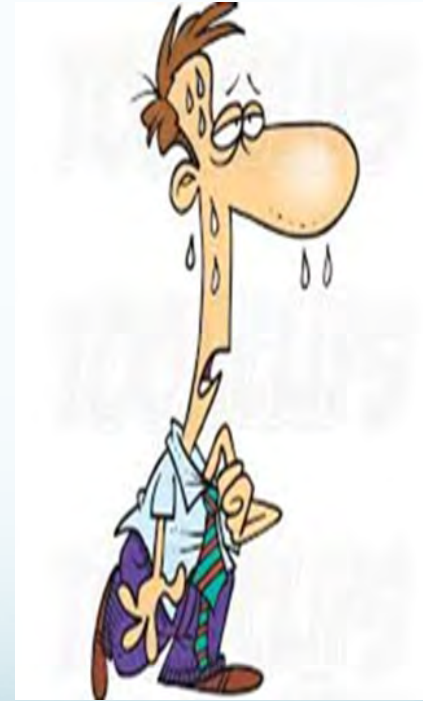
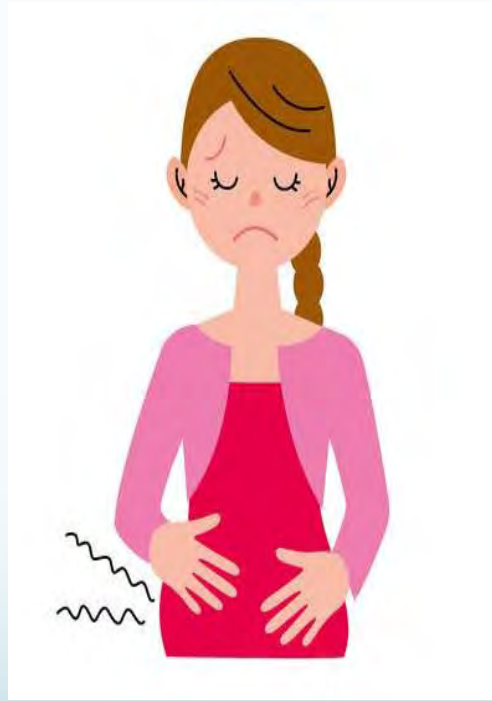


# The Vagus Nerve-The Mindbody Connection

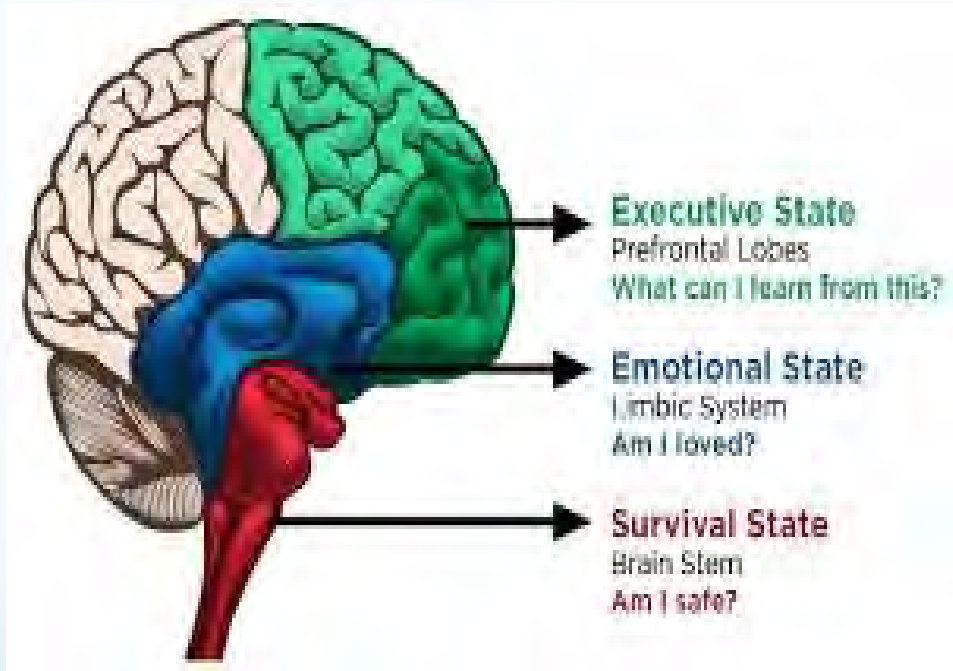


Messages go both ways

# How does the nervous system “decide” how to respond?



# Threat Detection



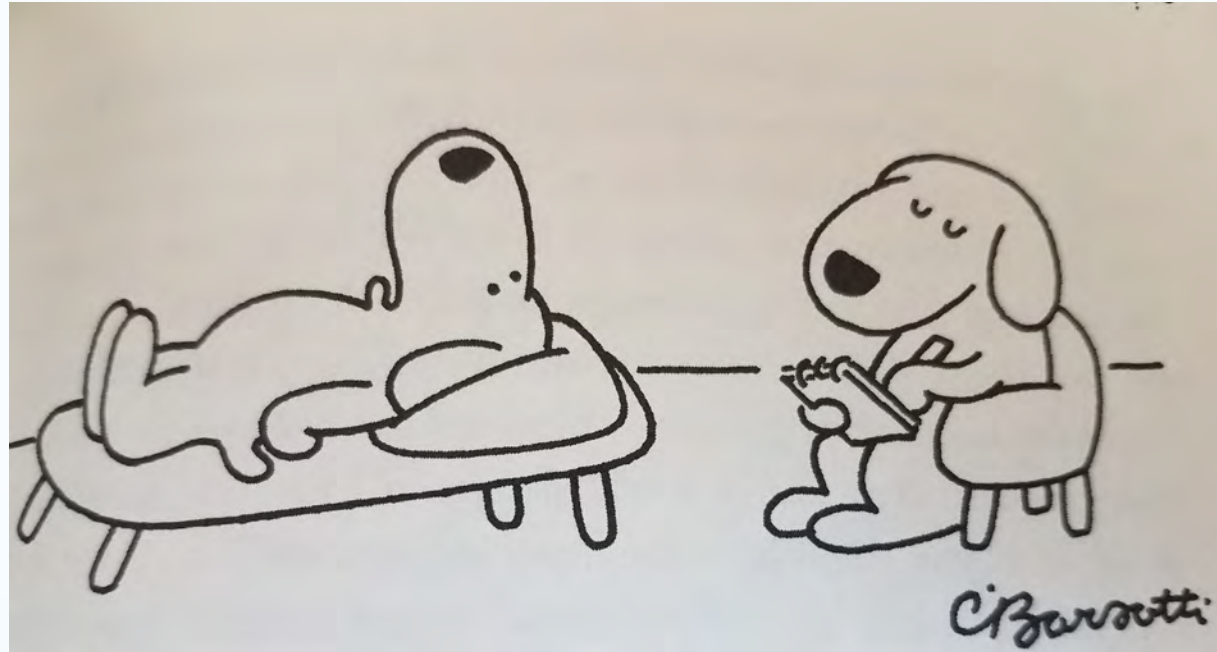
Threat Detection happens completely out of our conscious awareness.  $1/10^{\text{th}}$  of a second!

Our brains are constantly on guard, **looking for perceived danger or threat**—this is called “**negativity bias.**”

Throughout our lives, our brain, especially our lower brain function, learns and *remembers* threats.

The lower function of the brain **decides if we are generally safe or generally unsafe in the world**—this is called “**neuroception.**”

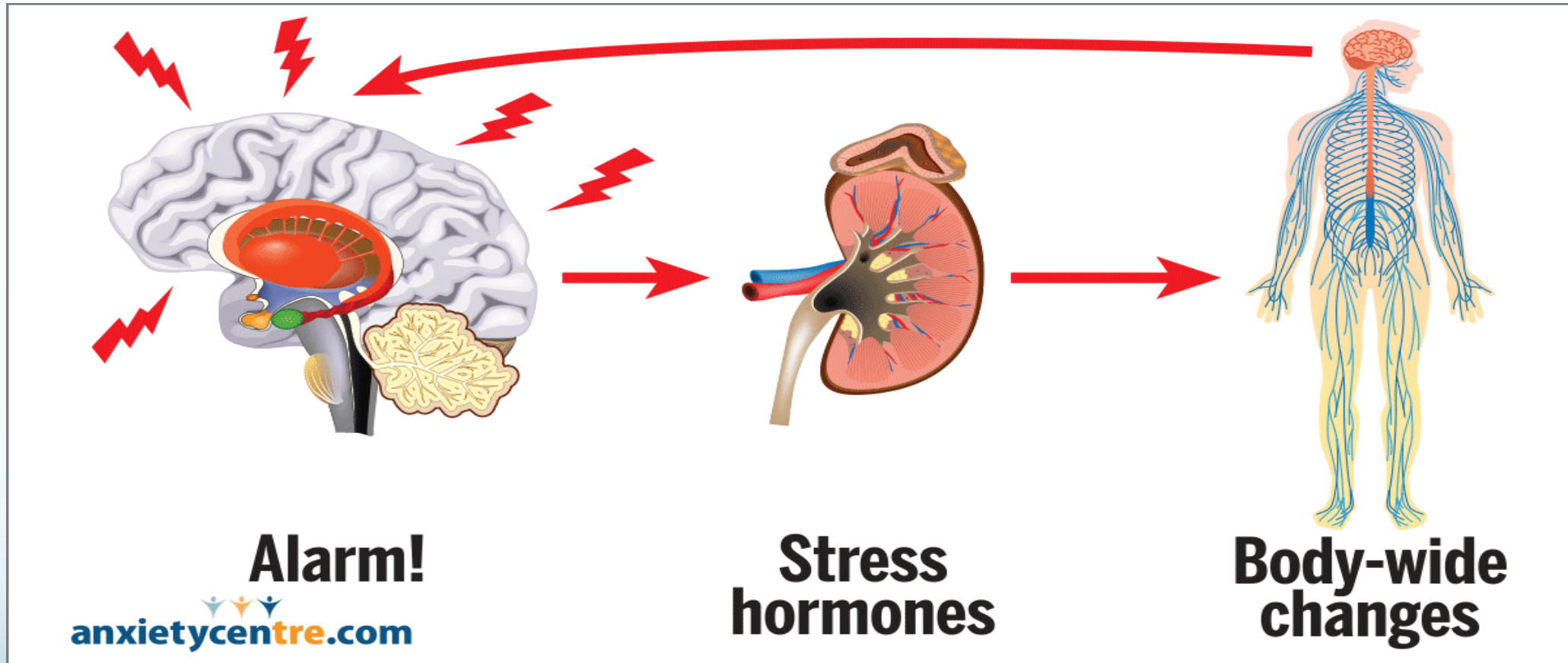
Any threat (real, perceived, or imagined/anticipated) can trigger a stress response in the brain and body.



*"I bark at everything. Can't go wrong that way."*



# Neuroception



Example: A mouse in the bathroom  
Hierarchy of Nervous System Responses

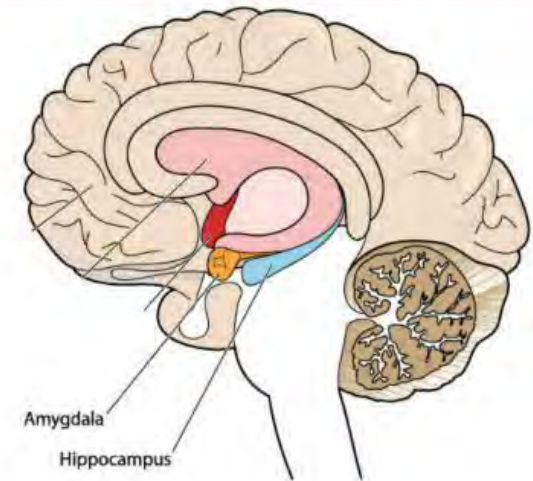


When not under stress, the hippocampus can help to “calm down” the amygdala.

When under stress the hippocampus gets flooded with cortisol and goes offline. Not only does this mean it can't help calm the amygdala, but it doesn't put a “time stamp” on the memory.

The memory is stored in “implicit memory” and the brain doesn't recognize that the danger is in the past. This is what leads to “triggers.”

## AMYGDALA + HIPPOCAMPUS



- The amygdala controls emotional responses & helps your brain store memories
- It works closely with the hippocampus
- The hippocampus plays a role in memory, navigation, & emotional response

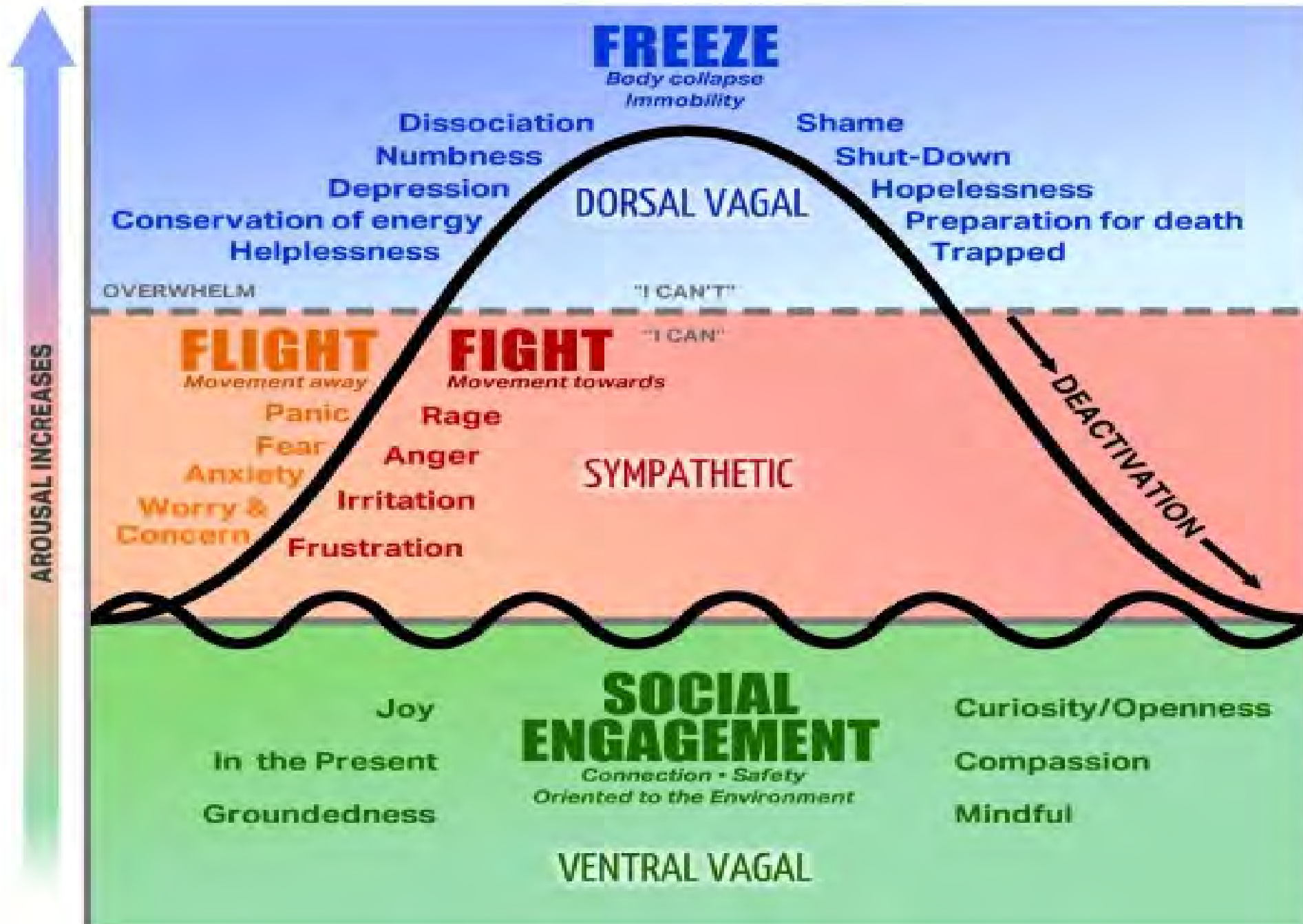
# What is “stressful” is determined by the nervous system, NOT the event



# Threat Detection in the Wild

- <https://www.youtube.com/watch?v=-QgglTik6G4>

**Don't worry, the Impala  
gets away, as you will see  
later!**



**PARASYMPATHETIC NERVOUS SYSTEM**  
DORSAL VAGAL - EMERGENCY STATE

Increases

Fuel storage & insulin activity  
Endorphins that help numb and raise the pain threshold.

Decreases

Heart Rate • Blood Pressure  
Temperature • Muscle Tone  
Facial Expressions • Eye Contact  
Intonations • Awareness of the Human Voice • Social Behavior • Sexual Responses • Immune Response

**SYMPATHETIC NERVOUS SYSTEM**

Increases

Blood Pressure • Heart Rate  
Fuel Availability • Adrenaline  
Oxygen circulation to vital organs  
Blood Clotting • Pupil Size

Decreases

Fuel Storage • Insulin Activity  
Digestion • Salvation  
Relational Ability  
Immune Response

**PARASYMPATHETIC NERVOUS SYSTEM**  
VENTRAL VAGAL

Increases

Digestion • Intestinal Motility  
Resistance to Infection  
Immune Response  
Rest and Recuperation  
Circulation to non-vital organs (skin, extremities)  
Oxytocin (neurotransmitter involved in social bonds that allows immobility without fear)  
Ability to Relate and Connect

Decreases

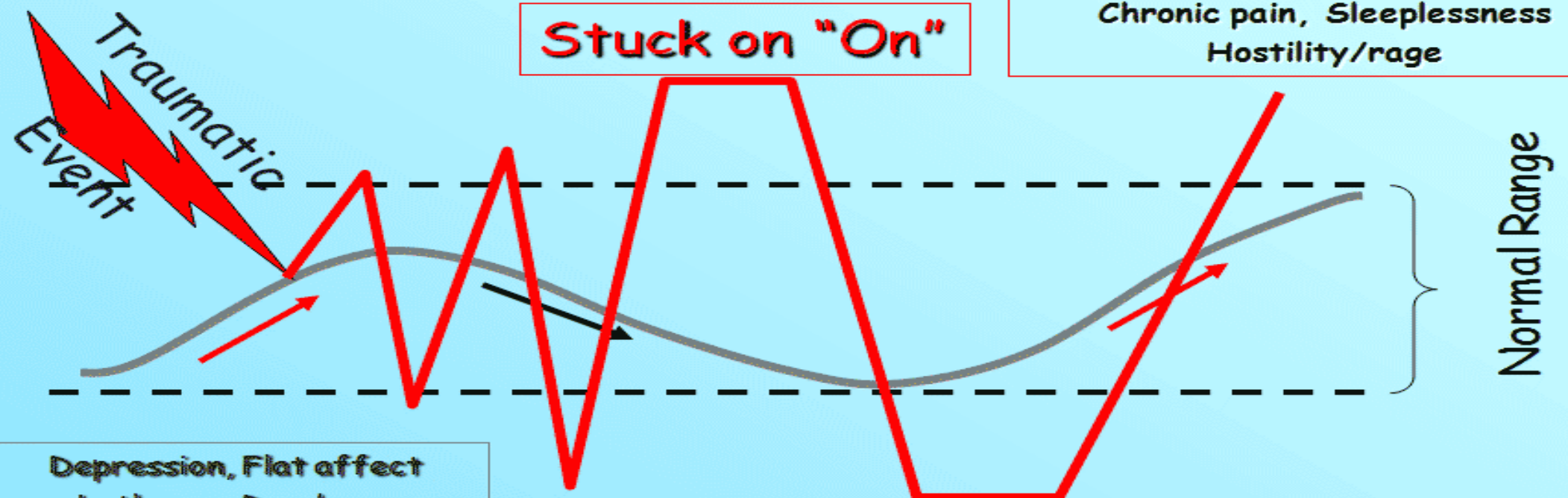
Defensive Responses





Remember, stress in and of itself isn't the problem. The problem is when the stress response isn't allowed to complete!

Anxiety, Panic, Hyperactivity  
Exaggerated Startle  
Inability to relax, Restlessness  
Hyper-vigilance, Digestive problems  
Emotional flooding  
Chronic pain, Sleeplessness  
Hostility/rage



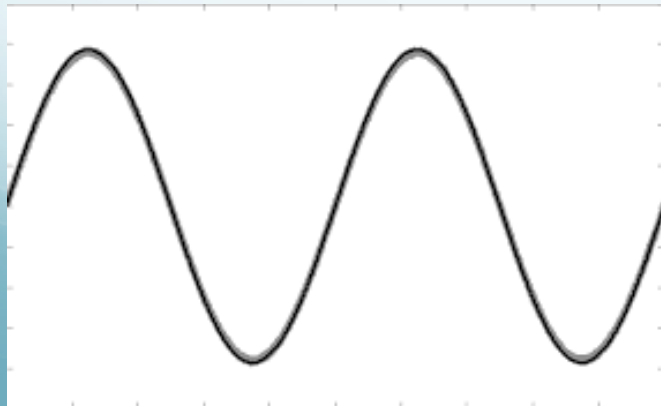
**Stuck on "On"**

**Stuck on "Off"**

Depression, Flat affect  
Lethargy, Deadness  
Exhaustion, Chronic Fatigue  
Disorientation  
Disconnection, Dissociation  
Complex syndromes, Pain  
Low Blood Pressure  
Poor digestion



# Car Metaphor





## GREEN LIGHT • All Safe

Social Nervous System • Ventral Parasympathetic

- Heart rate slows • Settled / Grounded
- Saliva & digestion are stimulated
- Facial muscles are activated
- Increased vocal expressiveness & eye contact
- Middle ear muscles turn on — human voice range
- Self soothing • Interconnected / Bonding



## ORANGE LIGHT • Danger / Fight or Flight

Sympathetic Nervous System

- Heart races
- Saliva & digestion shuts down
- Grim / focused / intense facial affect
- Monotone voice • Avoid direct eye contact
- Middle ear muscles turn off — tuned to highs & lows



## RED LIGHT • Freeze • Trauma

Survival System • Dorsal Parasympathetic

- NO CONSCIOUS CONTROL
- Heart rate slows
- Dissociation / Not present • Flat facial affect
- Immobilization / Freezing / Collapse
- Disconnected • Auto pilot
- Death feigning • Low energy • Sleepy
- Trauma Vortex • Altered State of Consciousness  
encodes traumatic memories





# THE STRESS BUCKET MODEL

FINANCES  
WORK STRESS  
RELATIONSHIP  
NUTRITION  
FAMILY  
TRAINING  
ARSEHOLE BOSS  
LACK OF SLEEP

Stressors = Sympathetic System

IF THE BUCKET OVER FLOWS WITH WATER THE RESULT COULD BE:

- INJURY
- DEPRESSION
- GETTING SICK
- MENTAL BREAK DOWN



Release Valve= Social Engagement System

YOGA, MEDITATION,  
REST, RELAX, LAUGH,  
FRIENDS, EXERCISE,  
HEALTH EATEN, SLEEP

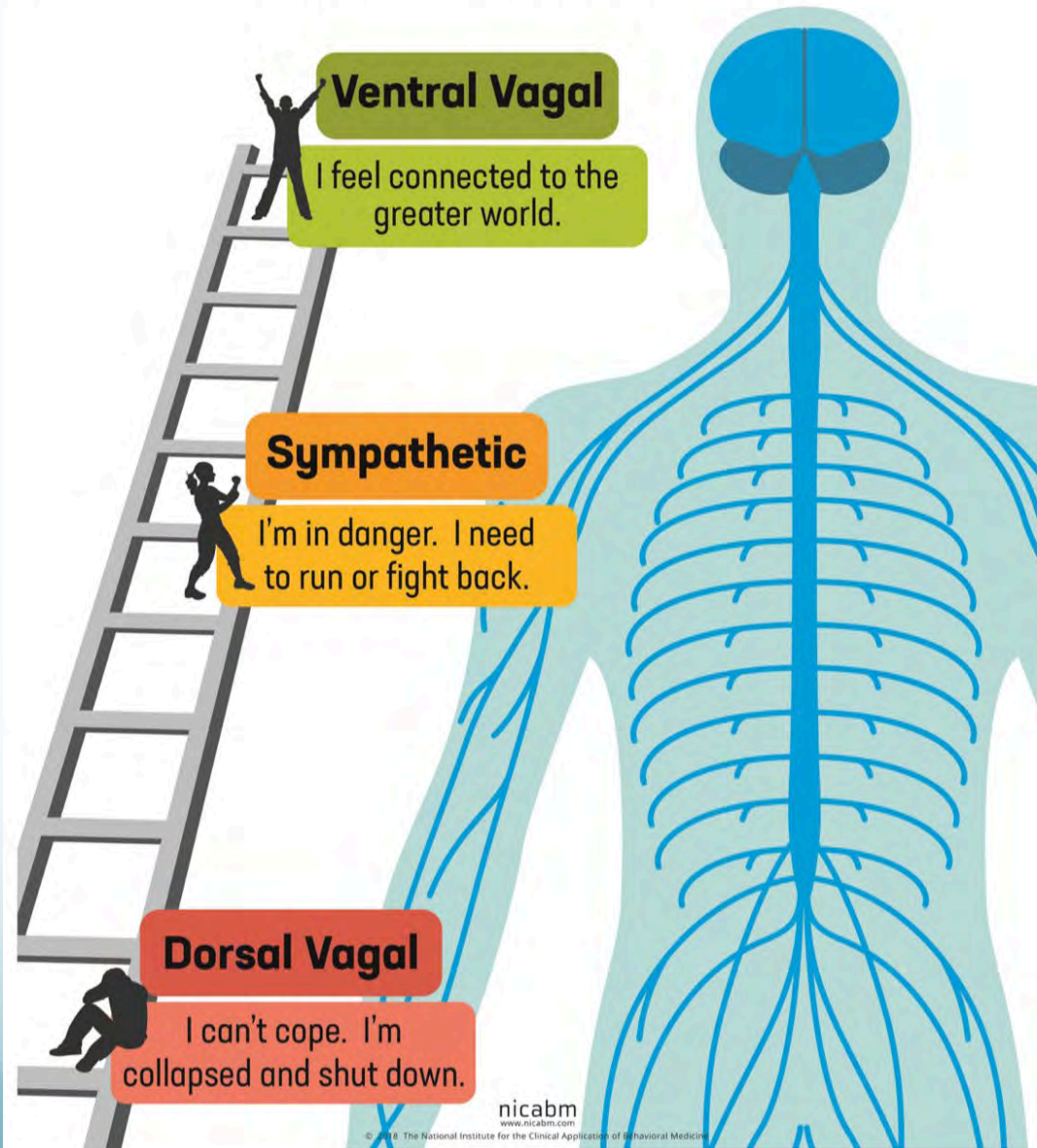
Bucket Overflow =  
Dorsal System

- Imagine a bucket filled stress. It hits maximum capacity and threatens to overflow.
- Without a release valve, the stress response can become chronic and overwhelms the brain and body.
- The overwhelmed brain will now interpret minor or innocuous stimuli as being threatening, thus intensifying the stress response. This creates a vicious cycle.

# Polyvagal Theory: The Autonomic Ladder

## Understanding the Nervous System

Adapted from Deb Dana, LCSW



# Practical Applications

The background of the slide features a series of overlapping, wavy, light blue shapes at the bottom, creating a sense of depth and movement. The rest of the slide is a plain, light blue gradient.

# Ideas for Strengthening Ventral Tone