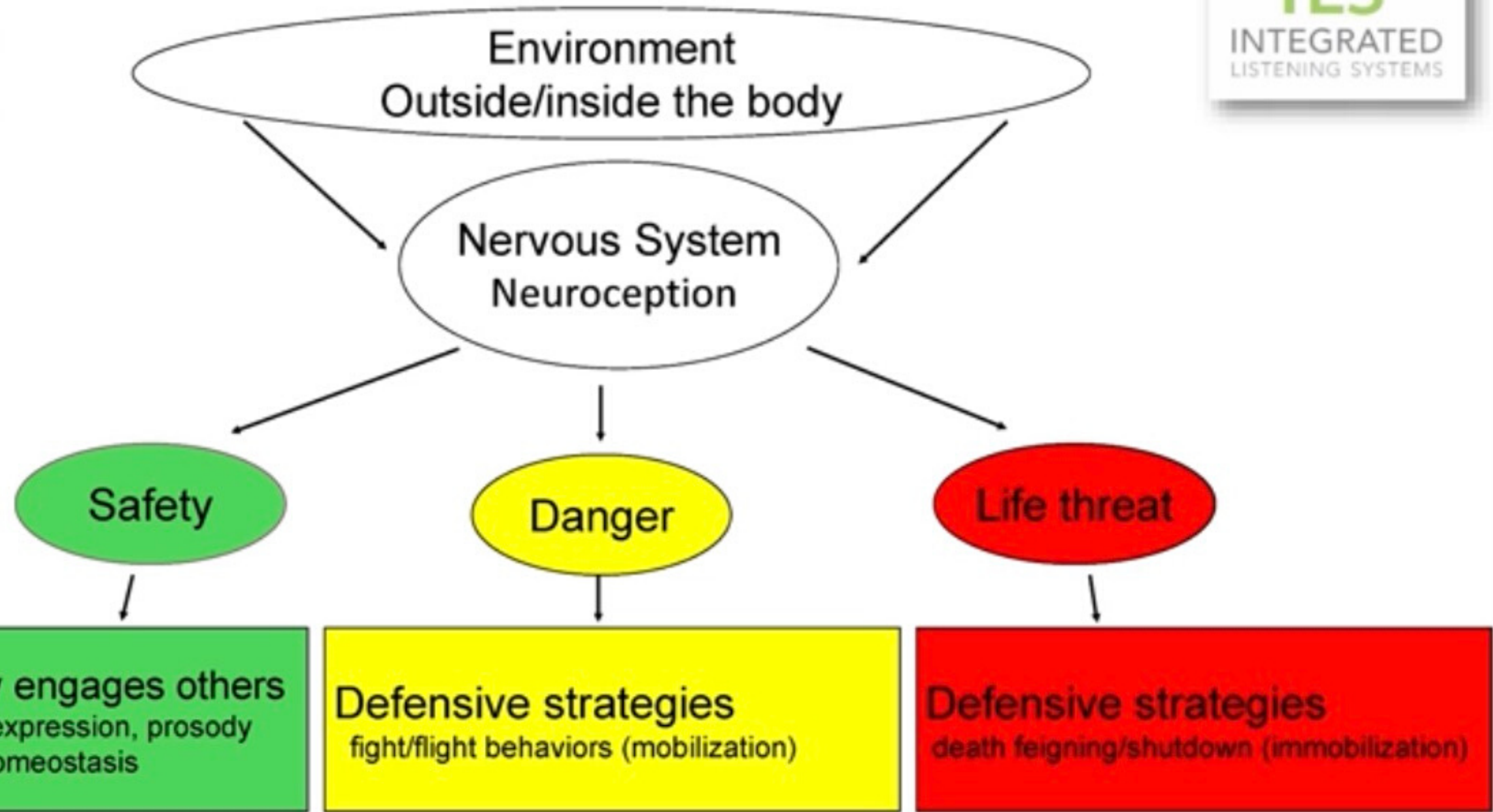

Safe & Sound Protocol



The Polyvagal Theory

“Neuroception” of danger or safety or life threat trigger these adaptive neural circuits.

The Quest for Safety: Emergent Properties of Physiological State



Spontaneously engages others
eye contact, facial expression, prosody
supports visceral homeostasis

Defensive strategies
fight/flight behaviors (mobilization)

Defensive strategies
death feigning/shutdown (immobilization)

The Face-Heart Connection:

A Critical Component of a Social Engagement System

- At birth for mammals the bidirectional neural communication between the face and the heart forms the core of a Social Engagement System.
- Metabolic demands, perceived danger, life threat, and illness retract the Social Engagement System, resulting in a face that is not “social” and a physiological state (removal of the vagal brake on the heart) that promotes defensive behaviors.
- The face reflects Polyvagal state.

Brief review: Neuroscience behind the Safe & Sound Protocol (SSP)

Designed to exercise middle ear muscles innervated by the Facial Nerve (Cranial Nerve VII) and the Trigeminal Nerve (Cranial Nerve V)

By exercising the middle ear muscles, the intervention helps the muscles regulate which frequencies can reach the brain

- When only very low frequencies are allowed to pass, individuals tend to feel anxious or hyper-vigilant
- When very low frequencies are successfully filtered out, individuals can focus on the frequencies related to human voice