Conquer Your Brain
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Objectives?
Have a great life with CRPS.
Structure and Function

• Gray matter - hardware
• White matter - cables and cords
• CRPS - changes in brain structure lead to changes in function
The Brain Game

• Neuroplasticity
• Neurogenesis
• Epigenetics
• Glial cells
• You’ve got the power!
CRPS Brain

- Impaired motor function
- Distorted body perception
- Neglect of involved limb
- Extreme sensitivity to touch
- Temperature changes
- Mood changes
Conquering the Pain Brain

• Create structural change

• Use the Rs- remodel, re-work, revise, reconfigure, regenerate, rejuvenate, repetition
5 Key Elements of Success

- Mobility
- Interaction
- Independence
- Validation
- Love
The Storm

• Trauma- mood swings, flashbacks, panic attacks, social isolation, nightmares

• Fight, flight…or freeze?

• The three faces of trauma

• Trauma symptoms- hyperarousal of the limbic system- amygdala, hippocampus, anterior cingulate cortex, insula, thalamus, hypothalamus
Calming the Storm

- Meditation - still or active, alters brain structure and function, more gray and better white
- Breathing exercises - parasympathetic induction
- Art therapy - periaqueductal gray, dorsolateral prefrontal cortex
- Yoga - neuroplastic changes, therapy not exercise
- EMDR - eye movement desensitization and reprocessing, uses rhythmic eye movements to quell traumatic feelings
Harmful Thoughts

Bad environment ➔ toxic inflammation ➔ epigenetic changes ➔ alters structure and function ➔ more pain
Harmful Thoughts - the Big 3

- Catastrophizing
- Fear
- Anger
Healing Thoughts

• Acceptance

• Gratitude – Heals, energizes, and transforms lives” –Dr. Robert Emmons
  Improves mood, sleep and life satisfaction.

• Compassion – Responding to the needs of others.
  Improves relationships, lowers heart disease, prolongs life
Exercise and the Brain

• Powerful effect in enhancing brain function

• Stimulates the production of neurotrophic factors

• Increases gray matter in the hippocampus

• Improves function in numerous brain regions including stress regulation pathways, motor cortex, somatosensory cortex, anterior cingulate cortex, insula
Gut/Brain Connection

- Microbiome composition linked to health, chronic disease, immune function, mood disorders
- Two-way communication between microbes in the gut and the brain
- Microbiota can be disrupted by diet, opioids, antibiotics, and environmental toxins
- Rule of 7
Sleep

“A good laugh and a long sleep are the two best cures for anything.”

• Sleep is key in the neuroplastic process

• The brain is very active during sleep - when it consolidates learning

• Less sleep = more pain

• Sleep hygiene is a must

• CBT works better than pills
Harry Potter
Movie Credits:
Harry Potter and the Deathly Hallows: Part 2 (2011)

Director:
David Yates

Writers:
Steve Kloves (screen play), J.K. Rowling (novel)

Company Credits:
Warner Brothers, Heyday Films, Moving Picture Company

Stars:
Daniel Radcliffe, Emma Watson, Rupert Watson

Resource www.painreliefrevolution.com