Curing Chronic Pain: A Whole Person Approach

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"The Junction Box"



INTEROCEPTION

VISION

TOUCH/FEEL

SOUND

TASTE

SMELL

"JUNCTION BOX"

NERVOUS SYSTEM

PLEASANT

NEUTRAL

UNPLEASANT

"Junction
Box"
Nervous System

Pleasant

Neutral

Unpleasant

Oxytocin

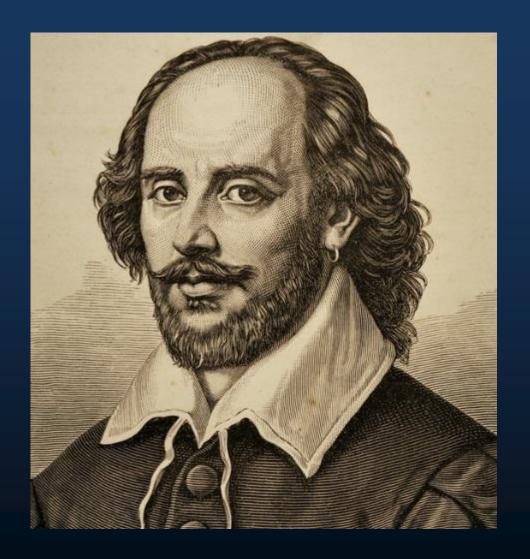
Dopamine

GABA receptors

Adrenaline

CortisoL

Endorphins



"There is nothing either good or bad, but thinking makes it so."

~ William Shakespeare Hamlet, Act 2, Scene 2

The first neuroscientist?

INTEROCEPTION

VISION

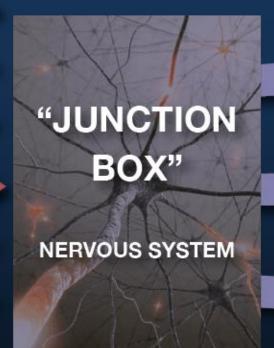
TOUCH/FEEL

THOUGHTS

SOUND

TASTE

SMELL



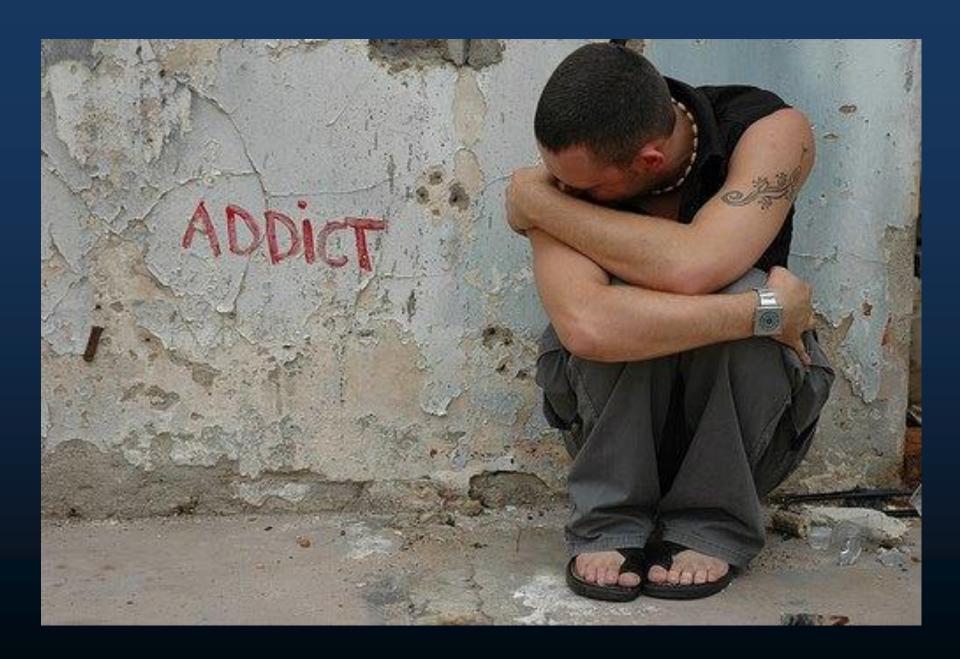
PLEASANT

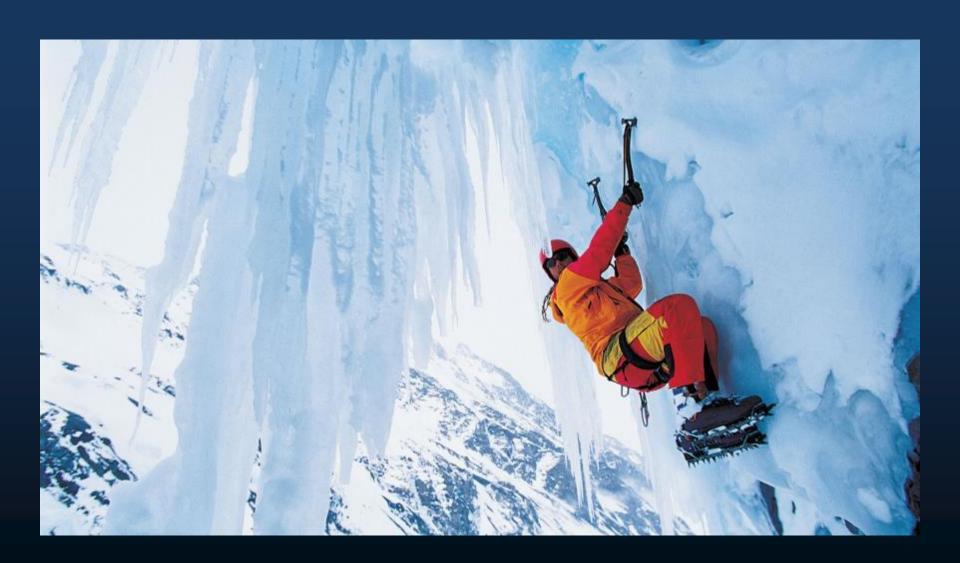
NEUTRAL

UNPLEASANT

Suffer Mask Suppress









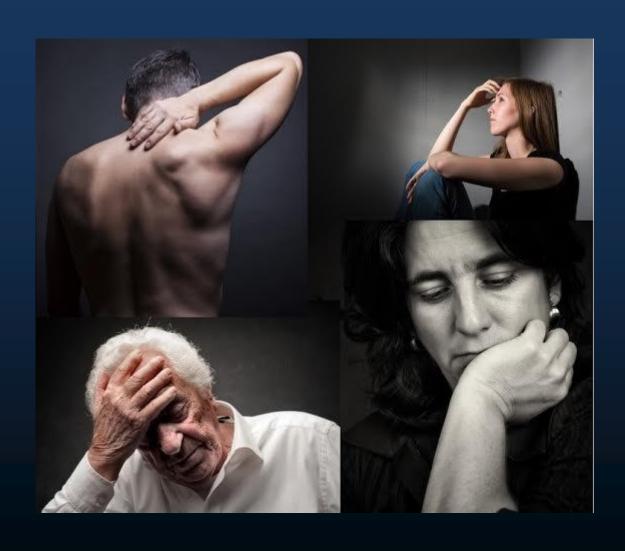


Paradoxical Effects of Thought Suppression

Daniel M. Wegner, David J. Schneider,

Samuel R. Carter III, and Teri L. White

Why is Chronic Pain So Persistent?

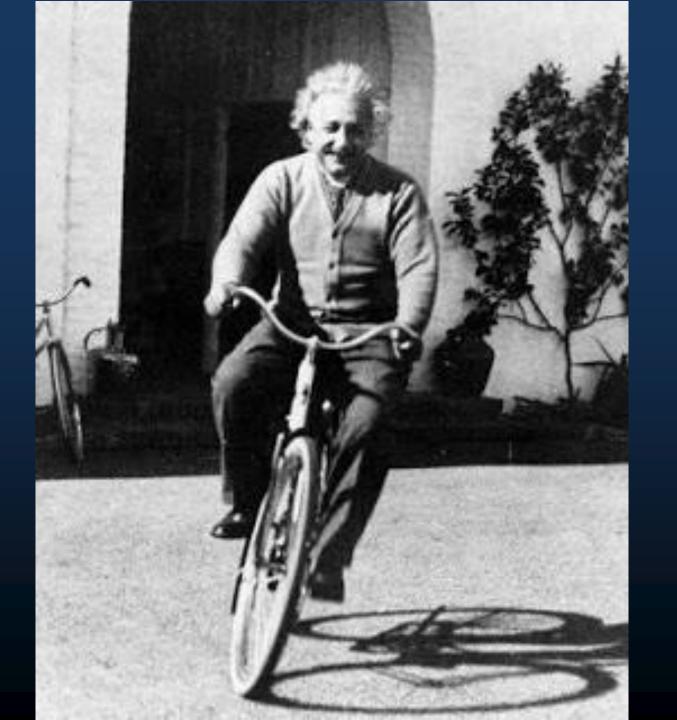


Pain Circuits are Reinforced







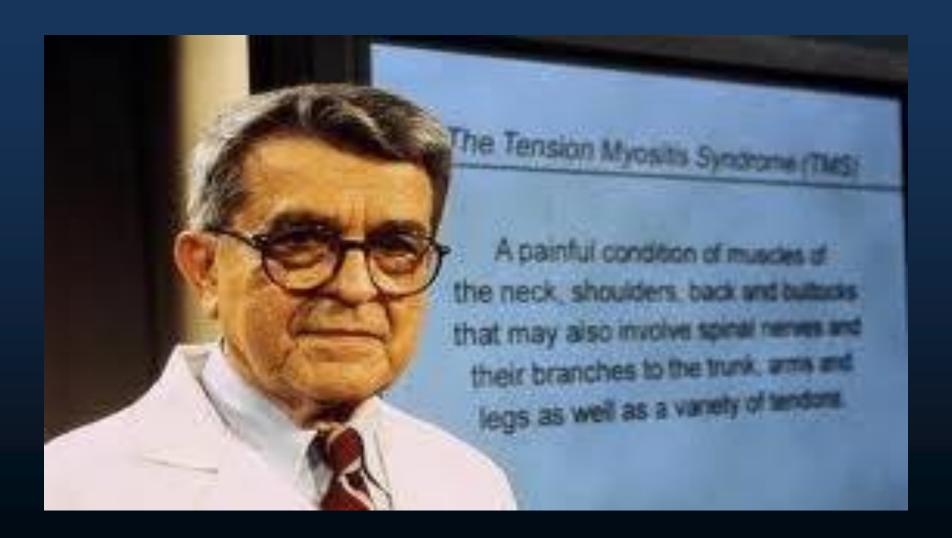


Mystery of Phantom Limb Pain

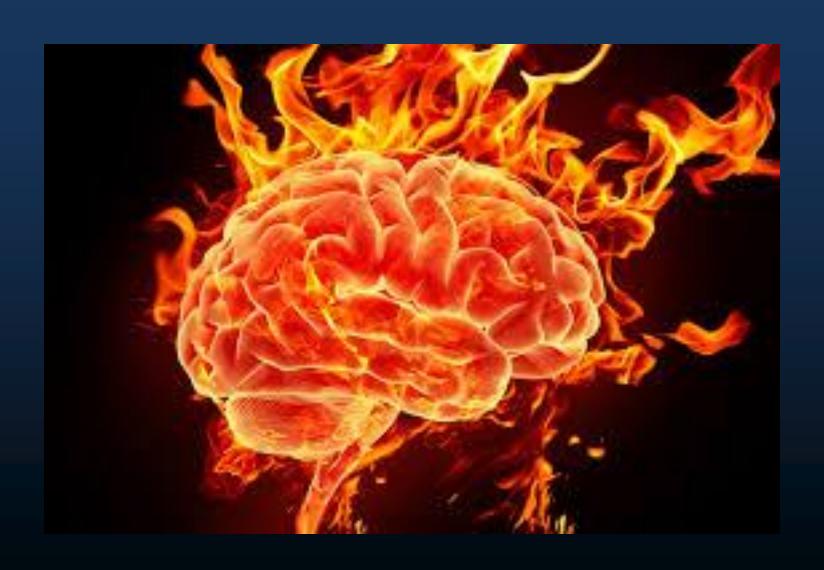


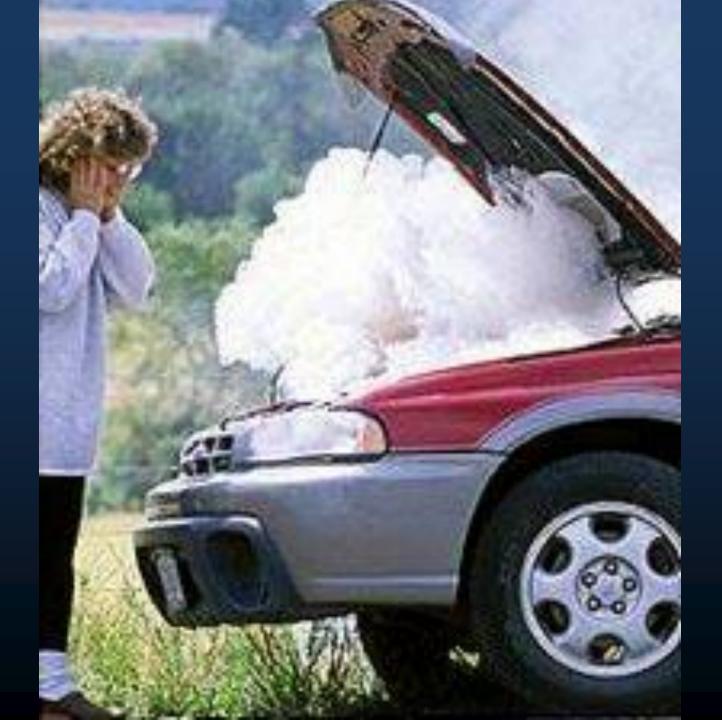


"Rage"



It's the Adrenaline





Direct diagnosis and management of emotional factors in chronic headache patients

- Striated muscle tension
- Smooth muscle tension
- Cognitive-perceptual disruption
- Conversion

Abbass A, et al. Cephalalgia, 2008

Benefits of Anger

Coping with Anxiety

Solving the Unsolvable

Awareness

Address all variables

Patient takes charge

Awareness

Address All Variables

Variables

- Understanding Pain
- Sleep
- Stress
- Meds
- Life Outlook
- Physical conditioning



Table 1 Incidence of chronic pain after surgery

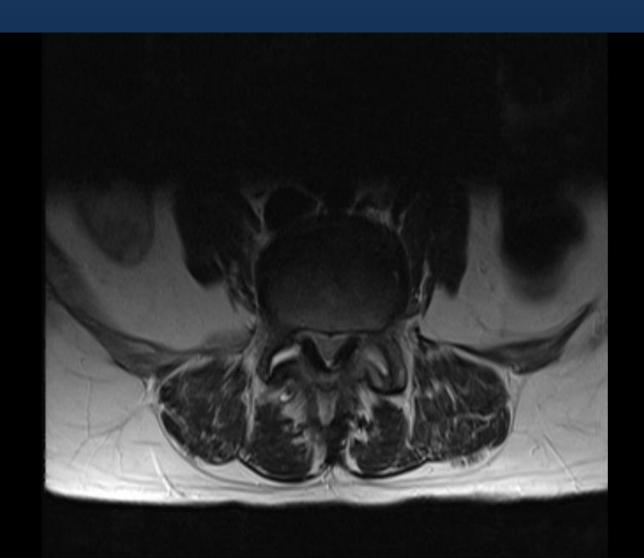
Type of Operation	Incidence of Chronic Pain (%)	Estimated Incidence of Chronic Severe Pain (>5 out of 10) (%)
Type of Operation	(%)	(>3 Out 01 10) (%)
Amputation	30–85	5–10
Thoracotomy	5–65	10
Mastectomy	11–57	5–10
Inguinal hernia	5–63	2–4
Coronary bypass	30–50	5–10
Cesarian section	6–55	4
Cholecystectomy	3–50	Not estimated
Vasectomy	0–37	Not estimated
Dental surgery	5–13	Not estimated

Source: Reproduced with permission from: Macintyre et al.33

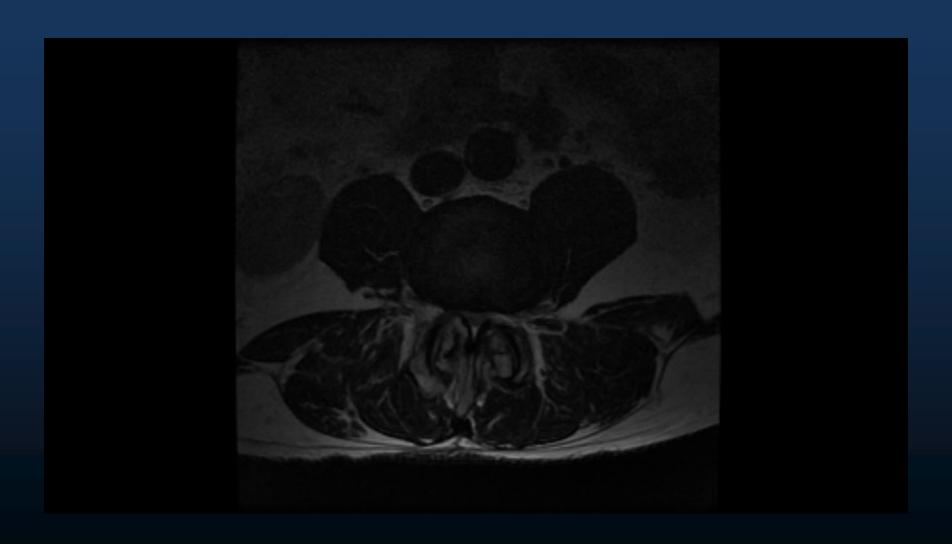
Prehab

www.backincontrol.com

62 y/o female with neurogenic claudication



Hunting elk



Patient Takes Control

David Hanscom MD



A surgeon's roadmap out of chronic pain

INTEROCEPTION

VISION

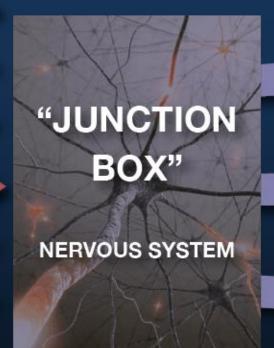
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PLEASANT

NEUTRAL

UNPLEASANT



journal of continuing professional development

Emotional and physical health benefits of expressive writing

Karen A. Baikie and Kay Wilhelm APT 2005. 11:338-346.

Access the most recent version at DOI: 10.1192/apt.11.5.338

This article cites 54 articles, 8 of which you can access for free at: References

http://apt.rcpsych.org/content/11/5/338#BIBL

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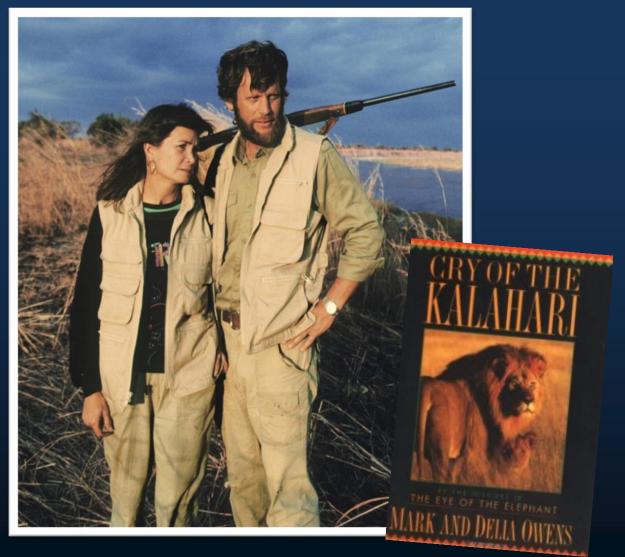
You can respond http://apt.rcpsych.org/letters/submit/aptrcpsych;11/5/338 to this article at

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Write and Rip

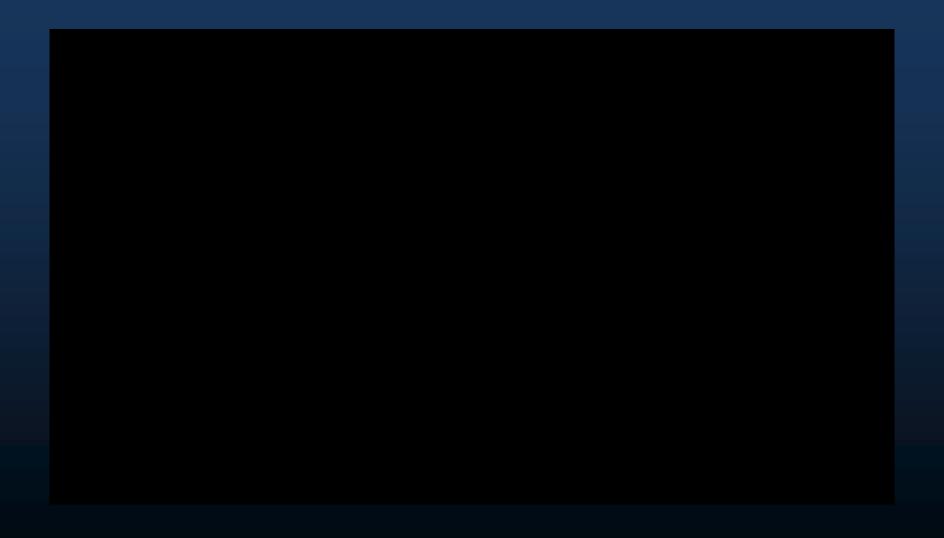




Awareness



MARK'S STORY



Awareness

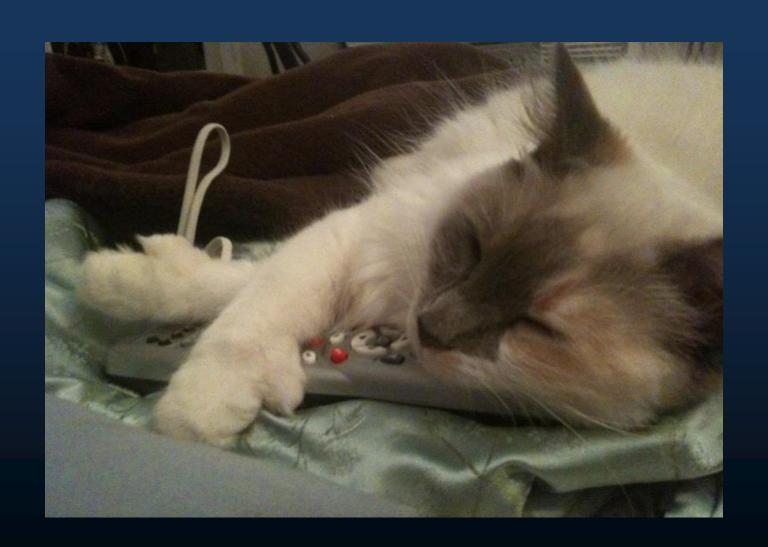
Address all variables

Patient takes charge



Thank You!

Thank You



A Silent Epidemic

116 million Americans suffer from chronic pain

\$635 billion is spent each year on treatments that are often ineffective and frequently do more harm than good

The Many Faces of My Neurophysiologic Disorder

- Migraines
- Tinnitus
- Burning feet
- Anxiety/ panic attacks
- Insomnia
- Severe depression
- PTSD
- Chronic tendonitis

- OCD
- Acid Reflux
- Back/neck pain
- Migratory skin rashes
- Itching scalp
- Tension Headaches
- Crushing chest pain
- Palpitations



Unresolved Pain Shifts in the Brain Over Time

doi:10.1093/brain/awt211

Brain 2013: 136; 2751–2768

2751



Shape shifting pain: chronification of back pain shifts brain representation from nociceptive to emotional circuits

Javeria A. Hashmi, Marwan N. Baliki, Lejian Huang, Alex T. Baria, Souraya Torbey, Kristina M. Hermann, Thomas J. Schnitzer and A. Vania Apkarian, **

Study reviewed in Brain: A Journal of Neurology

Prospective fMRI Study LBP

- Acute pain = 94
 - < 2 months</p>

- Chronic pain = 59
 - > 10 years

Location of brain activity

Acute pain – nociceptive area

Chronic – emotional area

Longitudinally followed 39 acute LBP

19 recovered

• 20 become chronic

Scans every 3 months for 12 months

Pain Resolved

Became Chronic

Nociceptive area quiet

- Activity shifted to emotional centers
- Nociceptive quiet

Chronic pain exists in the emotional not the nociceptive areas of the brain



Rita

Behavior is guided by your body's chemical response to sensory input

Neurological pathways are permanent

Strengthen with Repetition

Solution Principles

Awareness

Hope

Forgiveness

Play

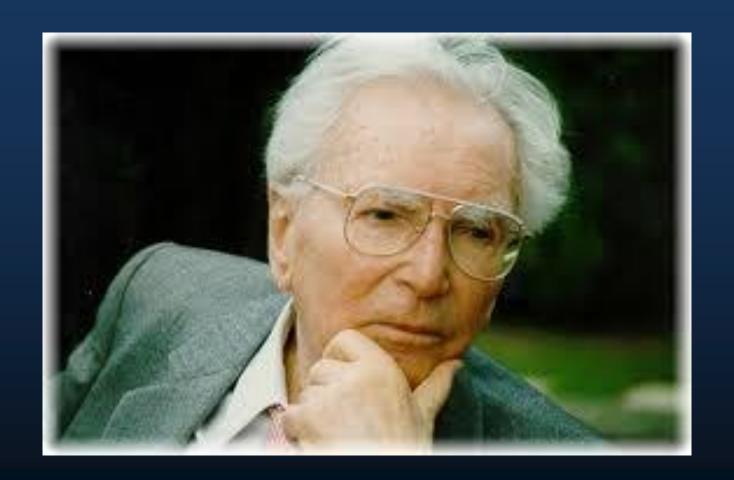
Awareness

Hope

Forgiveness

Play

I believe that one of the most basic needs that makes us human is to be in charge of our destiny with a sense of purpose. Successfully treating patients suffering from chronic pain requires re-connecting them with their original sense of vision and purpose in life.

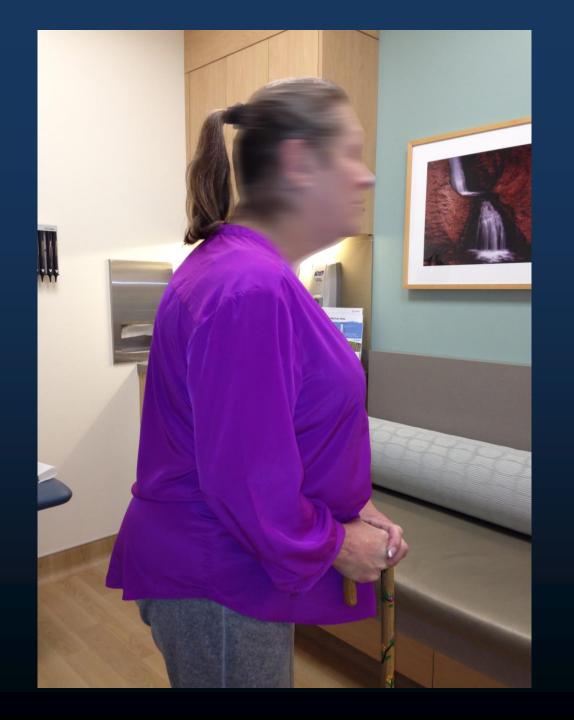












Hope

Forgiveness

Play



Holding a Grudge is Hazardous to Your Health

Forgive for Good

A PROVEN Prescription for Health and Happiness

The Breakthrough Stanford Forgiveness Program

Dr. Fred Luskin

Director and Co-Founder of The Stanford University Forgiveness Project



REACTIVE



CREATIVE

"C" first





Addressing anger is the "Continental Divide" of healing from chronic pain

Hope

Forgiveness

Play

Does Rejection Hurt? An fMRI Study of Social Rejection

- Science 302, 290 (2003)
 - Naomi I. Eisenberger, et al.



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The Neuroscience of Human Relationships

2nd edition

Attachment and the Developing Social Brain

Louis Cozolino

Copyrighted Material



OMEGA EXPERIENCE



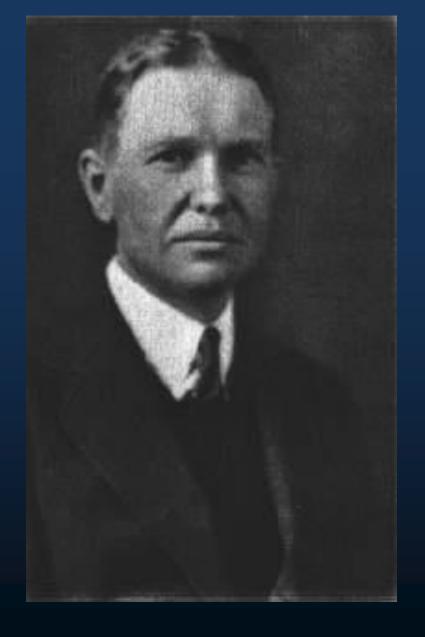






Disease in man is never exactly the same as disease in an experimental animal, for in man the disease at once affects and is affected by what we call the emotional life. Thus the physician who attempts to take care of the patient while he neglects this factor is as unscientific as the investigator who neglects to control all of the conditions that affect his or her experiment.

One of the essential qualities of the clinician is interest in humanity, for the secret of care is in caring for the patient.



Frances Peabody

The Care of the Patient - 1927

Hope

Forgiveness

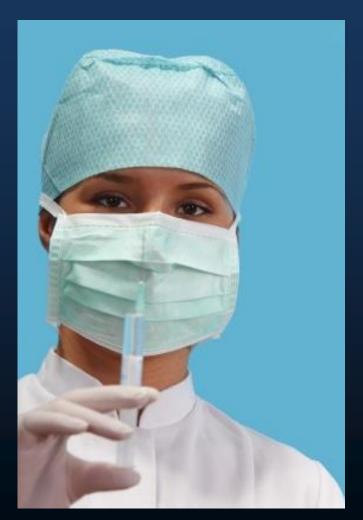
Play

Anxiety is a Neurophysiological Response to Sensory Input

Why is Chronic Pain Hard to Treat?







"We propose that chronic pain is the consequence of plastic changes in cortical-limbic circuitry, leading to new learning and to memory formation that are continuously reinforced and thus cannot be extinguished, as a consequence of the emotional and motivational associations with the painful stimulus"

Mansour 2014



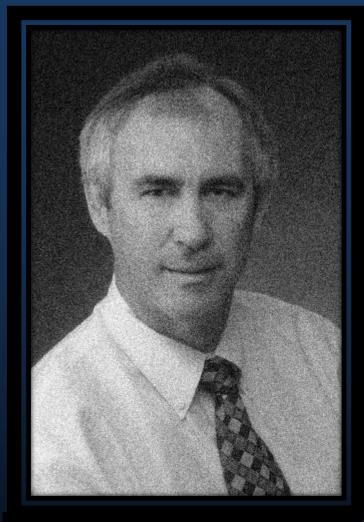
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David Hanscom, MD Chronic Pain Sufferer