

Chronic Pain: Observations as a Patient and Provider about What Works Well and What Does Not....

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- I have no financial interests to disclose

Golden Gate Bridge



Facts

- 1.8 billion crossings since 1937
- 40-50 million crossings a year
- Since 1970, 36 fatalities, 17 from head-on crossover accidents
- Odds of head-on: about 0

Nonetheless...



Nonetheless !



What Happened?

- Medically
- Emotionally
- Cognitively
- Professionally

What Happened Medically

- 45 days in a coma
- 48 units RBCs, platelets, all factors, Day 1
- Almost 13 months of continuous hospitalization
- 13 operations in the first 13 days
- 5 major later operations
- 2 later TBIs

Buddhism

བདེན་པ་བཞི་ནི།

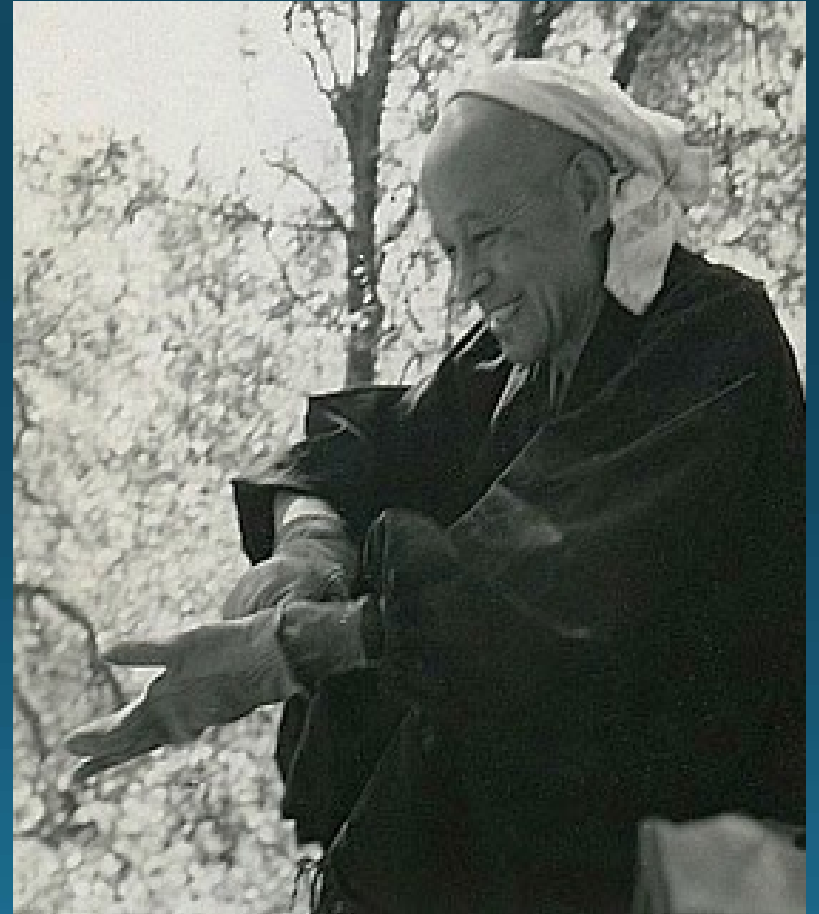
The Four Noble Truths

ཉ་སྣུག་བསྐྱེད་ལྱི་བདེན་པ་

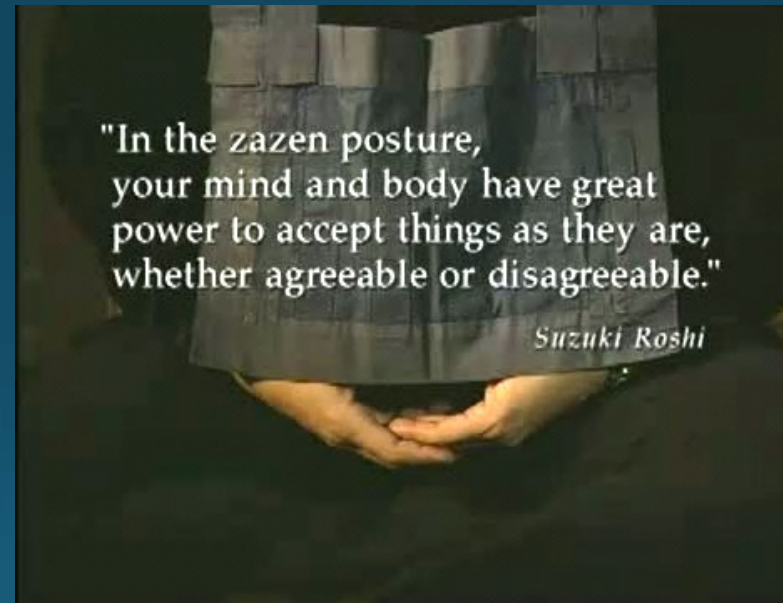
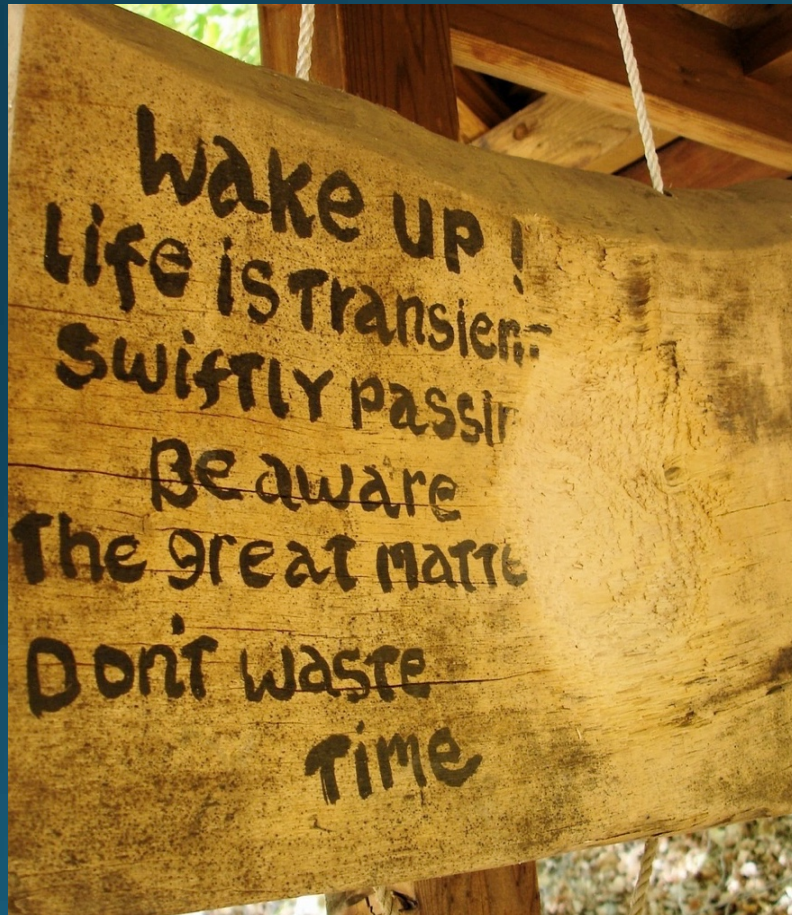
- 1) The truth of suffering
ཉ་ཀུན་འབྱུང་གི་བདེན་པ་
- 2) The truth of the origin of suffering
ཉ་འགོག་པའི་བདེན་པ་
- 3) The truth of the cessation of suffering
ལ་ལམ་གྱི་བདེན་པ་
- 4) The truth of the path



Why Buddhism?



Why?



Why?



Thoughts as Patient

*1) Remember that the most important thing for the patient's healing is being around happy people. Figure out what you need to do to be happy at work, and just do it. Help other members of your team be happy at work.

*2) The most important member of the team, for the patient, is probably the CNA.

*3) Take a long view on the time/meaning for recovery

Thoughts...

4) What is helpful are tools to deal with: a) pain, b) identity crises, c) not knowing, d) appreciating the smallest things and e) constant change

For you, and me, as health-care providers:

1) Try to figure out what mistakes we often make, and develop checklists to protect ourselves and others

Pain—What is it?

An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage...pain is always subjective...it is unquestionably a sensation in a part or parts of the body, but it is also unpleasant and therefore also an emotional experience...¹

Factors Influencing How Pain is Experienced

- *Biological*—the extent of an illness or injury and whether the person has other illnesses, is under stress, or has specific genes or predisposing factors that effect pain tolerance or threshold
- *Psychological*—anxiety, fear, grief, anger or depression and thinking the pain represents something worse than it does...
- *Social*—the response of significant others to the pain—whether support, criticism, or enabling

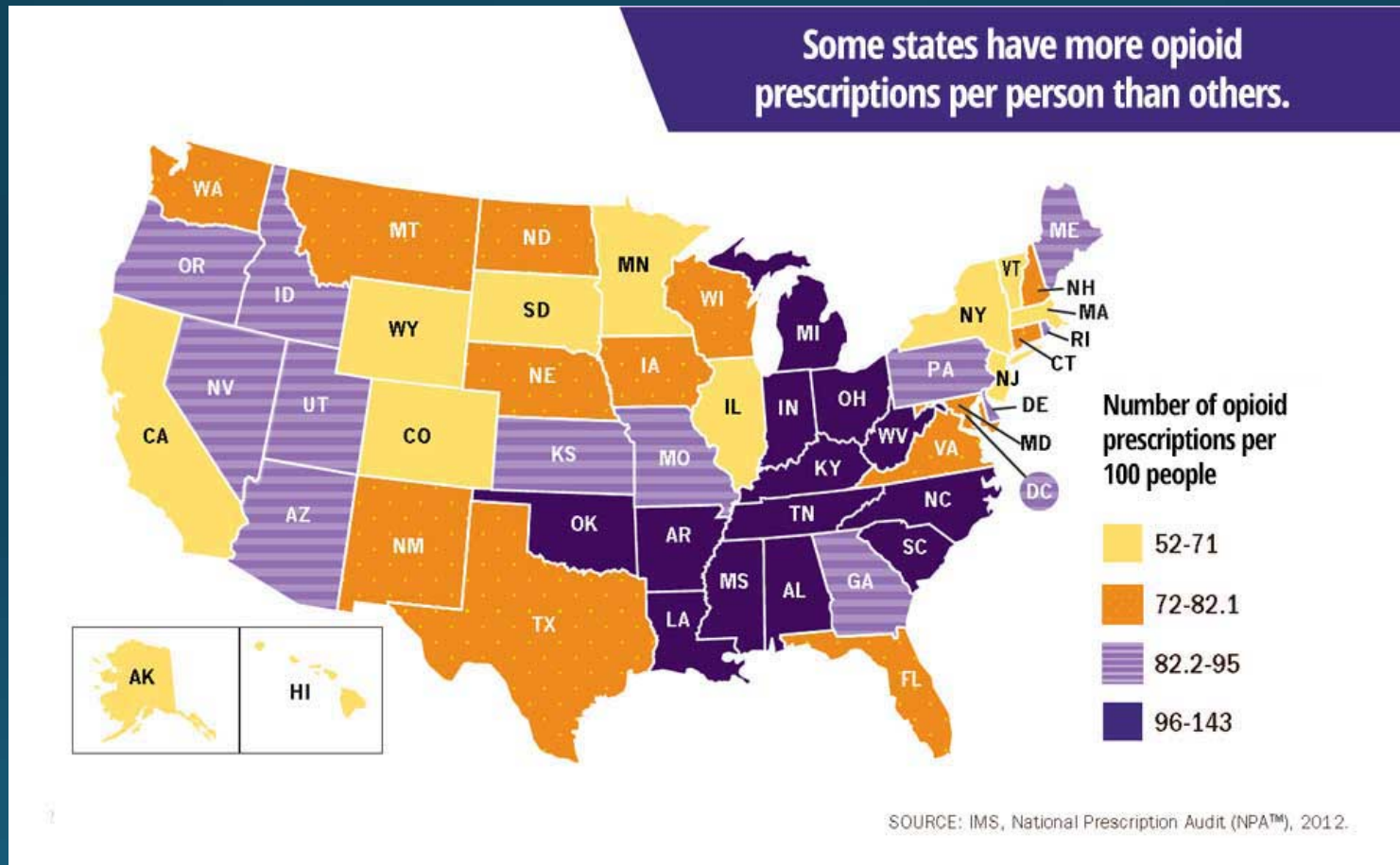
Neuromatrix Theory

- Pain is produced by the output of a widely distributed neural network that is genetically determined and modified by sensory experience throughout life
- Pain is the output of this neural network, and not a response to sensory input following tissue injury, etc.
- Chronic pain syndromes do not need to have an obvious cause, but are associated with changes in the central nervous system.
- Brain is not a fixed system, rather it is neoplastic...

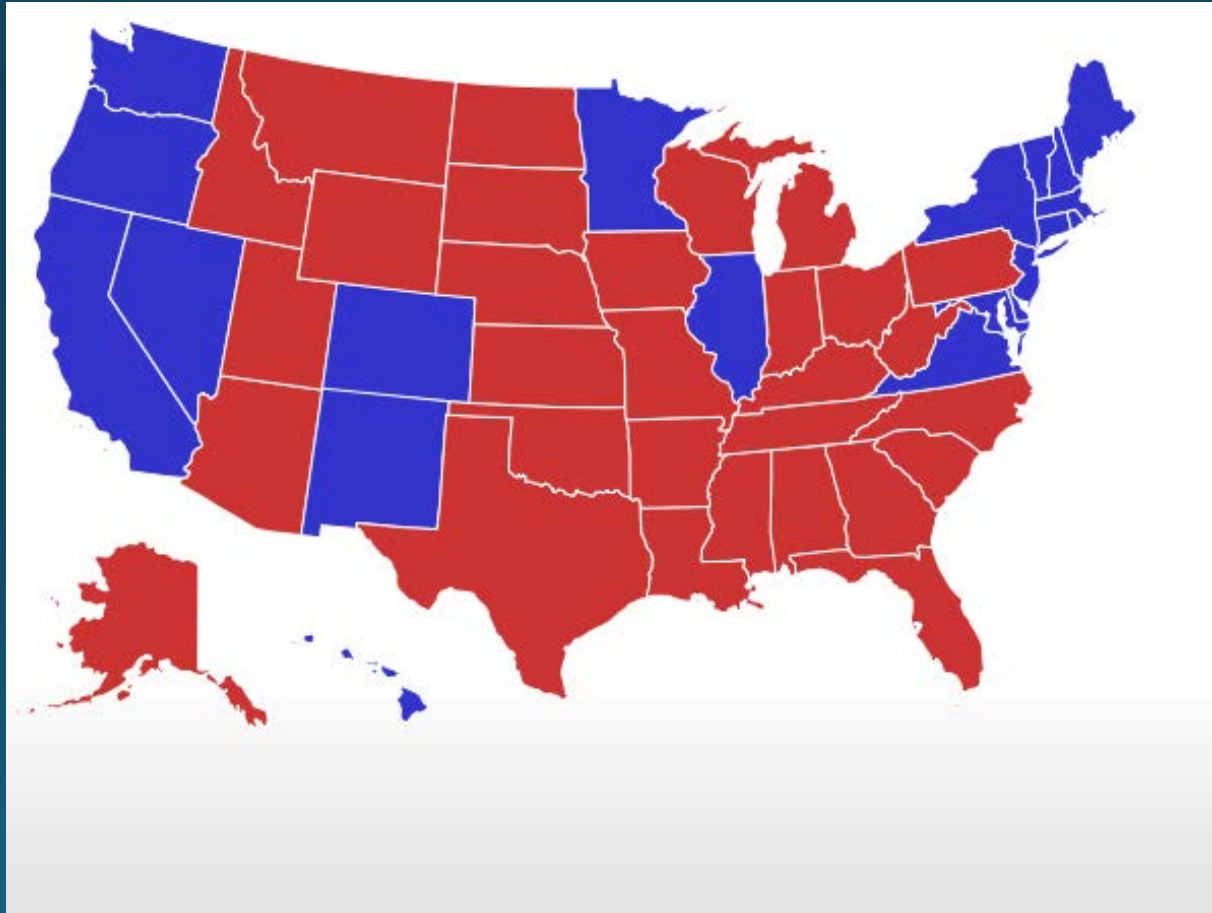
Institute of Medicine Conclusion

"Pain affects the lives of more than 100 million Americans, making its control of enormous value to individuals and society. To reduce the impact of pain and the resultant suffering will require a transformation in how pain is perceived both by the people with pain and by those...who care for them..."¹

Painkiller Prescriptions, by State



Presidential Election Results 2016₁



Trends

- Between 1970 and 2007, the rate of unintentional ODs rose rapidly
- The rise was driven mostly by an increase in prescription opioid overdoses
- This led the NIH, NIDA, the CDC, and lawmakers to declare the prescription, use, and diversion of opioid analgesics a “national emergency”

Causes of Death: 2011₁

- 1. Motor Vehicle Accidents: 34,000
- 2. Firearms: 33,000
- 3. Falls: 28,000
- 4. Drug Induced Mortality: 43,000

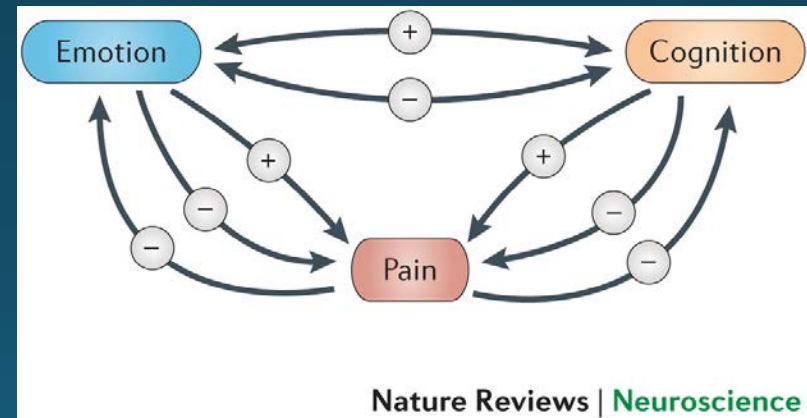
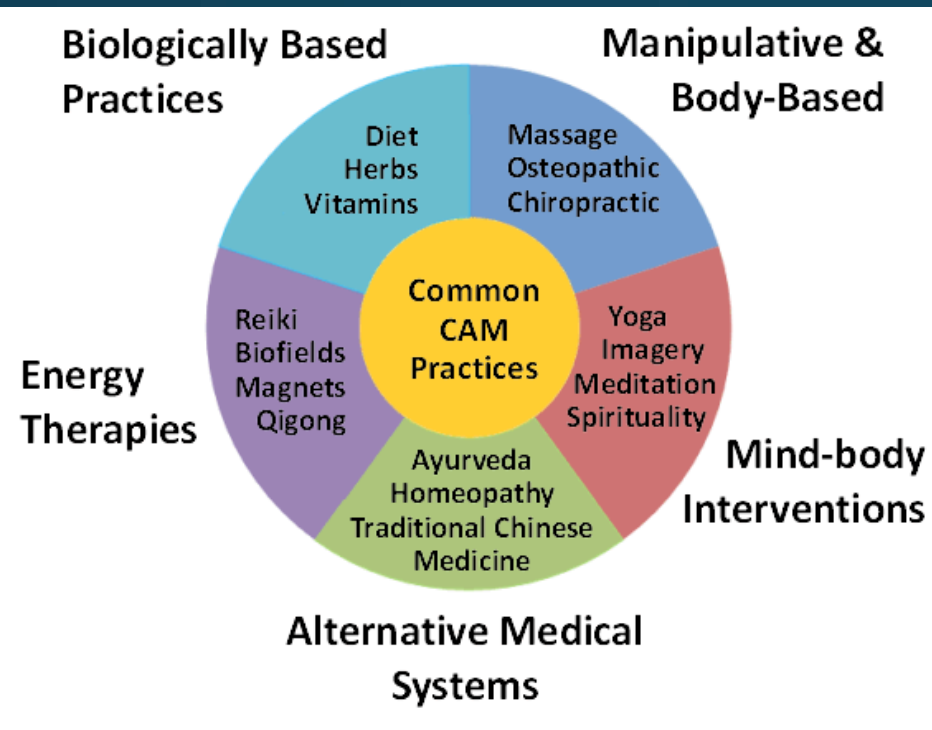
What Have the Guidelines Taught Us? (according to NIH expert panel)

“...evidence is
insufficient for every
clinical decision that a
provider must make
about the use of opioids
for chronic pain...”¹

Pain and Wellness Clinic

- We began in June of 2011
- We provide a safe space, a therapeutic milieu, using a team approach of creating wellness and a sense of well-being while patients learn to live with pain
- Team includes 3 massage therapists, a pharmacist, a volunteer MD, a volunteer Buddhist Chaplain, an MD acupuncturist, an MD, an APN, a social worker, and music therapist and volunteers who practice various complementary therapies
- Patients seen weekly X 12, then biweekly < then monthly, while effective
- Since we began, we've seen 246 unduplicated patients, as of June, 2014
- We had 2476 treatments in calendar year 2014 for 89 patients with chronic non-malignant pain, for 838 clinic visits

CAM services



Complementary Alternative Medicine

1. Risk mitigation (liberal use of surgery, interventions, drugs)—VA is now using body based therapies first 1
2. Mind-Body Medicine: communication systems in the brain—cortex, limbic system, and hypopituitaryadrenal axis influence output to the periphery...modulates mind, brain and body “psychoneuroendocrinimmunology”
3. Neuroplasticity: ability of brain and nervous system to change themselves. Somatosensory cortical changes develop in chronic pain states → changes in sensory perception, motor patterns, and co-contractions in what should be isolated muscle groups. 1

Rationale for CAM

5. Cost-effectiveness of MBM techniques

6. Effect of MBM strategies in reducing pro-inflammatory states that characterize chronic stress and aggravation of pain states through mediation of hypothalamic-pituitary-adrenal axis.

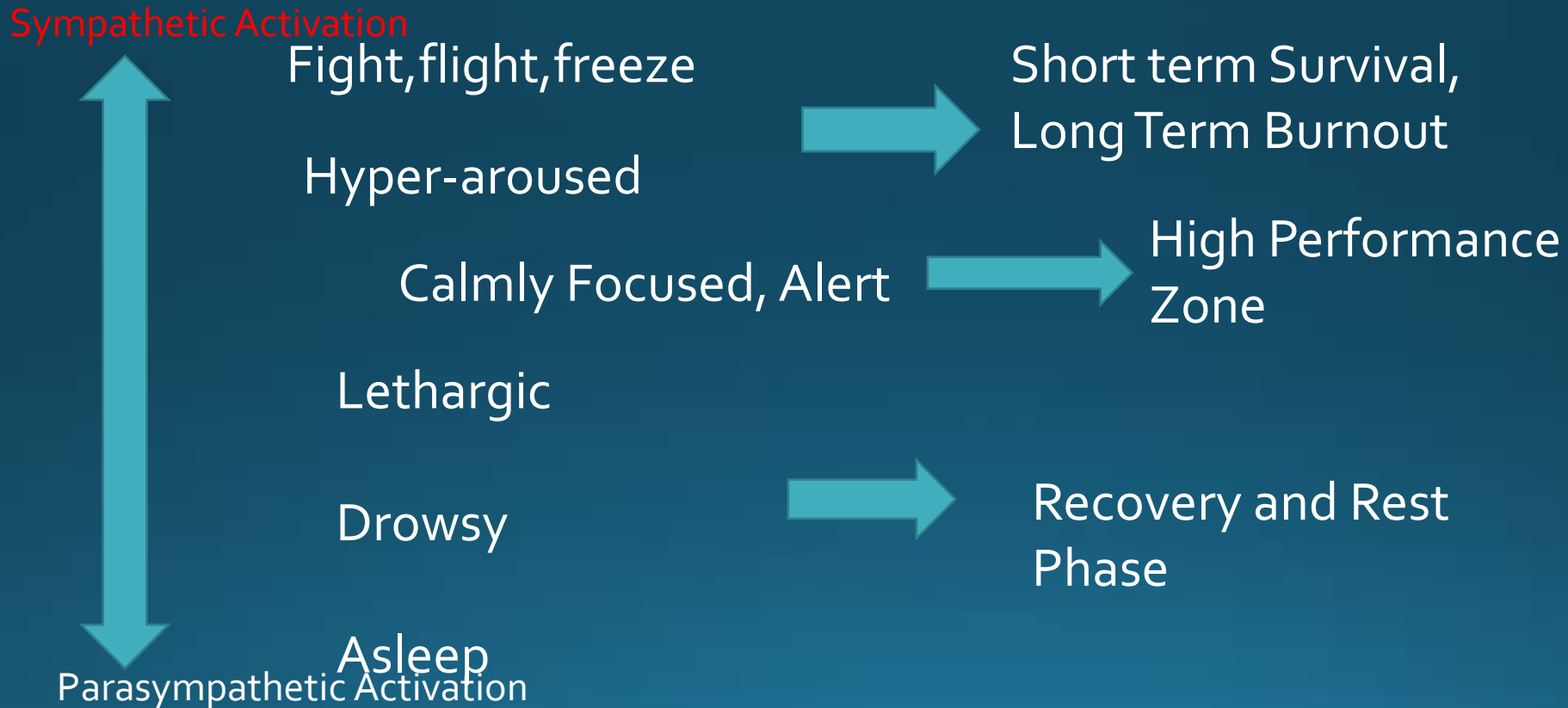
7. Most CAM strategies work to disrupt pain pathways in much the same way as opiates do but at different receptor sites or intervals.

Threat Response Mechanisms: Cognitive Response BAD TRUMPS GOOD₁

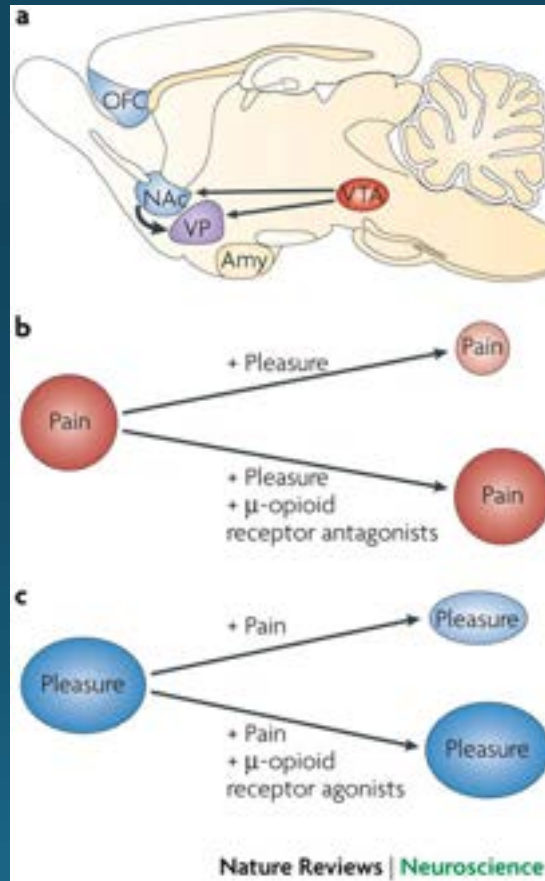
- 1. Bad emotions, parents, feedback have more impact
- 2. Bad information processed more thoroughly
- 3. Bad impressions and stereotypes quicker to form and more resistant to change

Threat Response Mechanisms: Emotional Response—Fight, Flight

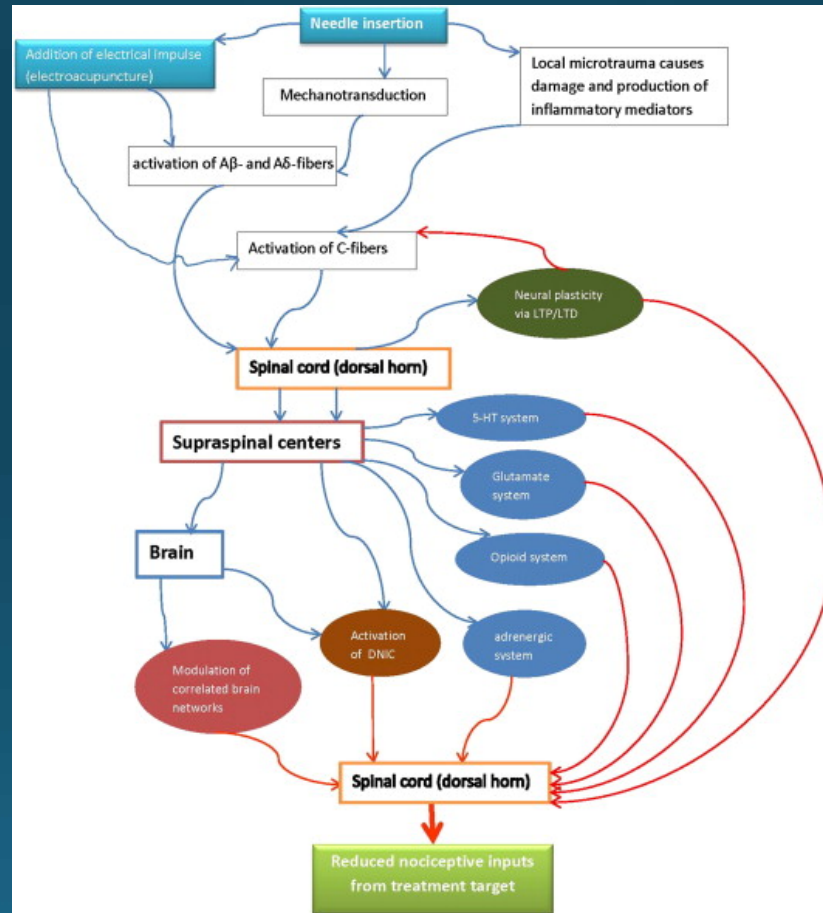
- Mapping Stress in the Nervous System



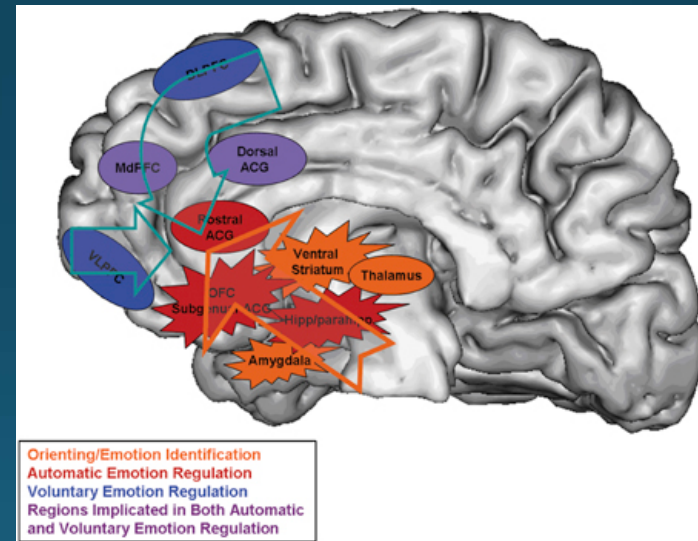
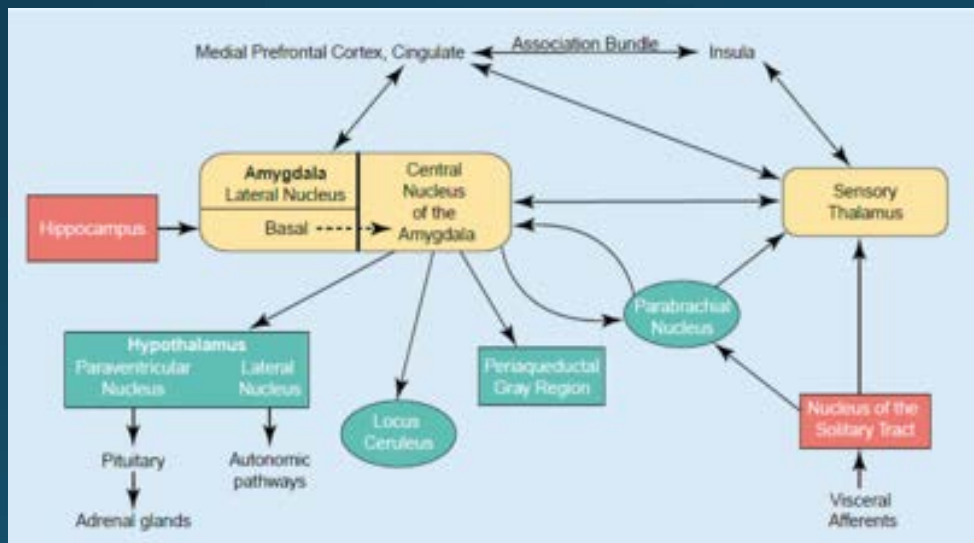
Pain/Pleasure₁



Acupuncture

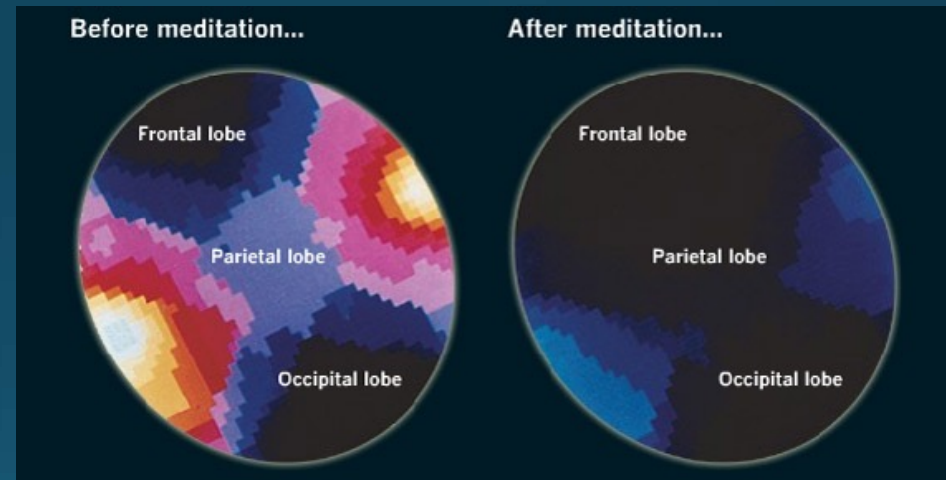


Meditation

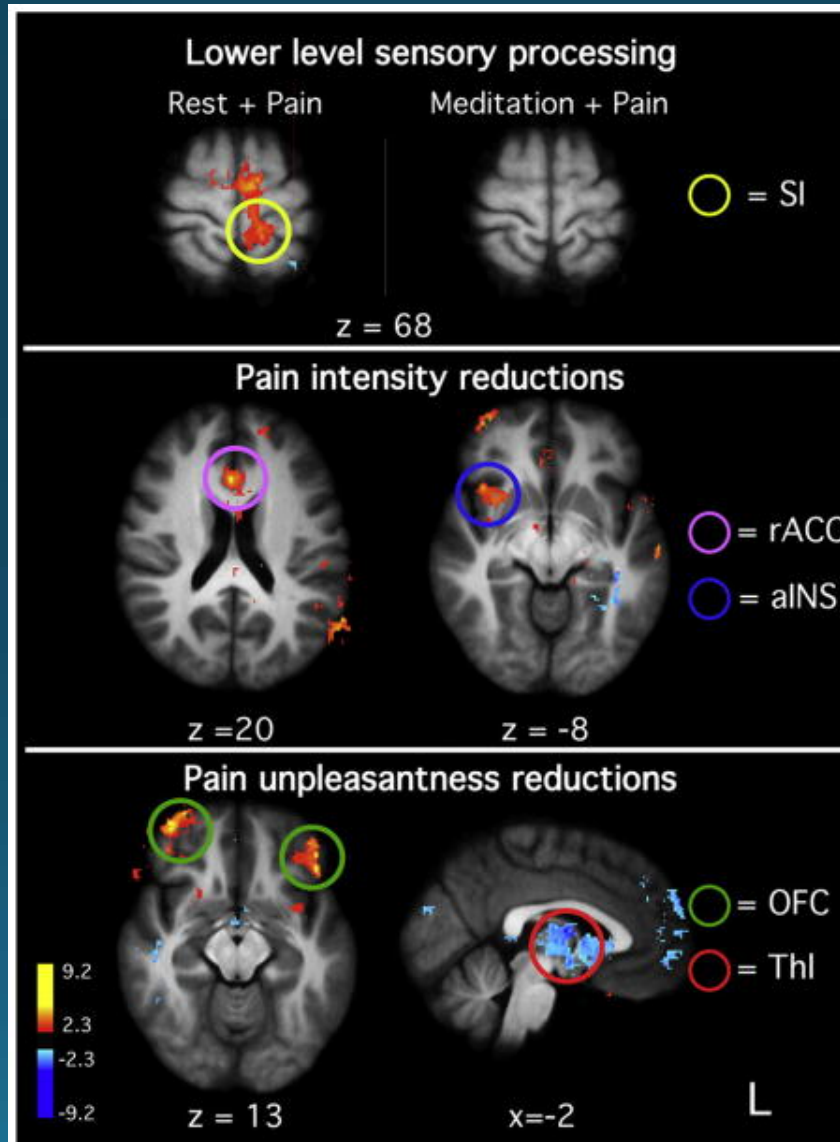


How Meditation Changes the Brain

- Enhances cognitive functioning by improving working memory, sustained attention, monitoring faculty (to avoid mind wandering), perceptual abilities, problem-solving, executive functioning, slowing age-related cognitive decline
- Enhances emotional functioning by promoting prosocial behavior, self-awareness, and emotional regulation



More on Meditation and Pain



Therapeutic Modalities Outcome

6/1/2013-12/31/2014

Therapeutic Modality	Number of Visits	Post-Treatment Outcome				
		"better"	"much better"	"worse"	"same"	No answer or other
Acupuncture Only	68	43	5	0	5	15
Massage Only	9	5	0	0	1	3
Music Only	8	3	1	0	1	4
Qi-Gong Only	0					
Acupuncture + Massage	359	245	18	0	9	87
Qi-Gong + Massage	17	4	2	0	1	10
Music + Acupuncture+ Qi Gong	1	1				
Music + Acupuncture+ Massage	291	213	10	2	10	56
All 4 modalities	49	33	1	0	3	12

Totals from Treatment Slide

• Number of visits	802	• Types of Rx	
• “Much better” after Rx	37	• Acupuncture only	68
• “Better” after Rx	547	• Massage only	9
• “Same” after Rx	80	• Music only	8
• No answer	187	• Massage & acupuncture	359
		• Qi Gong & massage	17
		• Qi, music and massage	1
		• Acu., massage, music	291
		• All 4	49

Well-being/Happiness

- 4 Underpinnings of well-being:
 - 1. Sustained positive emotion
 - 2. Recovery from negative emotion
 - 3. Empathy, altruism and pro-social behavior
 - 4. Mindfulness, less mind-wandering, less being pulled involuntarily by irrelevant emotional distractors
- Neural pathways underlying each of the 4 components above ALL EXHIBIT PLASTICITY and thus can be transformed during experience and training.¹

Thoughts as Provider

- Virtually no one says: "I want to suffer" ...
- Staff included

- Work on the positive, the 'do no harm'
- With patients and staff alike

- Recognize that we are all in this together
- It always takes a supportive village to achieve what is truly worthwhile

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