

## Yoga for Chronic Pain weekend - summary notes & additional resources

### Friday

- Don't panic!
  - Chronic pain is complex but simple practices can be very powerful.
- Koshas - the 'parts' can't be separated
  - Chronic pain is a whole person problem - yoga gets it
  - Minds stuff & body stuff are not separate
- Psych
  - 4 buckets of interventions
  - Buckets all affect each other
- Acute vs chronic pain
- Yoga
  - Yoga = Innercise (practicing interoception)
  - Yoga = the intense link
  - Yoga = repeated discipline to get to a previously seemingly unreachable goal
  - Yoga = a bio-psycho-social intervention
    - body-mind-divine/other humans
  - 
  - Remember a little goes a long way
  - Explore movement by degree
  - Take emphasis out of posture and into movement
  - Right left discrimination
  - Visualized movements
  - Cross midline (cross lateral) movement
  - Link breath body/movement and awareness
  - Kind & curious investigation
  - You're in charge of your body
  - Practice is a mirror - Showing you something about you
  - Breathing
    - Bumblebee brahmari pranayama great for pain relief
      - Slows down exhalation and has a calming effect on the entire nervous system
      - <https://www.artofliving.org/us-en/yoga/breathing-techniques/bhramari-pranayama>
      - <https://yogafordepression.com/bee-breath-brahmari-practice/>
    - Deep in breath through nose, long out breath through mouth
      - (same as chanting)

### Saturday

#### **Pain physiology**

- Whiteboard pain video on behealthavl.com
- Pain is in the brain
  - The brain can be retrained
  - Understanding pain helps reduce pain
  - On average 50% of pain is due to distress
  - Pain is not (always) in the tissues - in spinal cord and brain
  - Not necessarily tissue damage
- Acute pain

- Where is it?
- How do I feel about it?
- What do I know about it?
- What do I do about it?
- Blind men and elephant metaphor
  - pain is like...
- Sensitization leads to chronic pain
  - Chronic pain is a CNS disease
- Things that help retrain the brain
  - Differential movement - helps 'de-smudging'
  - Left right discrimination
  - Motor imagery (imagined movement)
  - Mirror therapy
  - Cross lateral movement
- Effect of adverse childhood events
  - Link to Schafferman Spine 1999 - effect of ACEs on spinal fusion success
- Pain ages the brain - reduces grey matter volume
  - But this can be quickly reversed by 2 weeks CBT
    - Link
  - Yoga & meditation increase grey matter volume

## Yoga

- Holding awareness of safety and sensation simultaneously
  - In breath "I am aware of sensation"
  - Out breath "And I am safe"
- Being in control of movement
- Being curious about you
- Compassionate body scan

## Psych

- Matrix - approach vs avoidance Internal vs external
  - Explanation of how these factors affect pain
  - Paperclip experiment
  - Same stimulus with different emotional background music means different pain levels
  - Fingertrap
    - Counterintuitive - "You have to lean in and twist a bit to get free"
- Acceptance & commitment therapy (ACT)
  - Importance of values
- Pain is isolating
  - Measured social contact can be important
  - Group stuff helps with others undergoing like challenge
- Realistic goal setting
  - Pacing is important
  - "Jumping off a piece of paper"
  - Keep adding pieces of paper to the pile

### Suggested phrasing to use as teacher:

- Acceptance
  - seeing if we can make room for the discomfort...
  - comfort is not always an option.
  - How we relate to discomfort really matters

- De-fusion
  - Treating pain like an annoying friend- thanks pain!
  - Thanks for the heads up, again! (refer only to the pain as discomfort, or get used to saying The Mind)
  - Mindfulness- let's just watch... observe.
  - No need to respond. Just witness (use of long speech sounds)
- 'Self-as-context'
  - you are so much more than your pain.
- Values
  - letting this practice be about something more important than current discomfort.
  - If you can learn to be uncomfortable here, you can do it with your family, your job, in all parts of your lives.
- Taking committed action
  - do as much as you can today.
  - Keep pushing yourself, and keep coming back.
  - What can you do today to improve your well being?
- Resilience
  - you've been through difficult experiences before.
  - You can get through this one as well.
- Compassion
  - thank you for working so hard-
  - you are doing the best you can;
  - what would a friend say to you?
- Physiological regulation
  - let's invite relaxation into the body, regardless of the discomfort.
- Pacing
  - Doing just enough today that so that you can do more tomorrow
  - Stop before it hurts
- Sleep hygiene
  - Sleep is your friend!
  - Let's treat it like that
  - (don't call it up at the last minute and expect it to be there...plan on your date all day long)

## Sunday

### **From student teaching**

- Nesting pose (in the book)
- Child's pose on your back (Lisa has video)
- Knee release at the wall with supporter lower leg (Lisa has video)

### **Round up of key elements from group**

- **Importance of pacing**
  - Used to 'crash & burn' cycle
  - How long can you do it before you cause a pain flare?
  - +2 in pain = signal to shift from high intensity to low intensity / low stress activity
  - Good planning is key
  - Listen to advice from other ppl with chronic pain
    - 'Spoons' theory / community

- <https://www.thepaincenter.com/news/how-the-spoon-theory-helps-individuals-chronic-pain>
- **Connect with body in a positive way**
  - Making peace with a painful body
  - Compassion
  - Kindness
  - Befriending the body
  - Appreciating the body
  - Important to remind & cue safety as teacher
    - Sensation is not tissue damage
- **Give permission**
  - Being allowed to experience emotion in a safe place
  - Requires teacher courage
    - 'Being with' rather than fixing
      - Dropping the agenda to fix
      - Don't be scared of other ppl's pain
      - Sitting with discomfort
      - Invite & observe what arises
- **Show empathy**
  - Brene Brown
    - <http://brenebrown.com/>
  - From DBT
    - The right kind of empathy & validation supports behavior change
- **Importance of community**
  - Peer support in classes
- **How do we get chronic pain ppl into classes?**
  - Talk about it in your community
  - Plan an event with mini sessions
  - Bring the yoga to them
  - Name the class something that focuses on the solution (not the pain)
  - Cultivate referral from MDs etc
    - You now know a lot about chronic pain! - so feel confident
    - Look up yoga research
    - The opioid epidemic means docs may be more interested in non pharmaceutical treatments
    - ??National survey of ppl using yoga in their practices - student is researcher
    - Many sequences from research projects are available for free (PubMed)
- **Remind ppl to have fun!**
- **Restore internal locus of control**
  - You're in charge of you

### Hot or cold?

Cold for acute injuries (within 24-48 hrs)

Hot or hot/cold contrast therapy for chronic injuries

<https://www.painscience.com/articles/contrasting.php>

"Movement is the best heater"

### Additional resources

## Teacher websites

ashevilleholisticpt.com - Libby  
behealthavl.com - Will  
acupunctureavl.com - Lisa

## Books

Cathryn Jakobson Ramin

'Crooked - Outwitting the Back Pain Industry and Getting on the Road to Recovery'

<https://www.harpercollins.com/9780062641786/crooked>

Rick Hanson

'Buddha's Brain'

'Hardwiring Happiness'

<http://www.rickhanson.net/books/buddhas-brain/>

<http://www.rickhanson.net/books/hardwiring-happiness/>

Matthew Sanford

'Waking - A Memoir of Trauma and Transcendence'

<http://www.matthewsanford.com/content/book>

Kulreet Choudhary

'The Prime'

<http://drkulreetchaudhary.com/>

Stephanie Romine

'No Meat Athlete'

<https://go.nomeatathlete.com/cookbook-info>

## Wim Hof Method

<https://www.wimhofmethod.com/>

## Accessing peer reviewed scientific studies

PubMed

Database of peer reviewed scientific studies

<https://www.ncbi.nlm.nih.gov/pubmed/>

Google Scholar

Search engine for peer reviewed scientific studies

<https://scholar.google.com/>

Sci-hub

Bypasses publisher paywalls by allowing access through educational institution proxies

<https://sci-hub.cc/>

## Lisa's 'whole body breathing' meditation script from Friday night

<https://docs.google.com/document/d/1G-hEu4e6bTyjlaAP5obwB73ytxYQn4VsT79yFDjOW8/edit?usp=sharing>

## Dermatome image

<https://bonesmart.org/forum/attachments/dermatome-map-jpg.58823/>

## Leaky gut test

Tests for zonulin (= marker of intestinal permeability) plus other important biomarkers

Dunwoody Labs - Advanced Intestinal Barrier Assessment 5150

<http://www.dunwoodylabs.com/index.php/profiles/intestinal-barrier-assessments-dao-hist-lps/>