People often think about chronic pain as only benefitting from exclusively from medical treatment and interventions. However, pain actually has two components:

\[
PAIN = \text{Pain Signal} + \text{Distress}
\]

While physicians can focus on nociception, or the pain signal, pain psychologists teach skills for lowering the distress associated with pain. Today’s presentation focuses on an essential strategy for lowering pain-related distress: being “unsympathetic.”

In this case, “unsympathetic” refers to the Sympathetic Nervous System, the part of the Autonomic Nervous System responsible for the Fight or Flight (or Freeze) Response. Pain psychology strategies can reduce Sympathetic Nervous System arousal.
Fight or Flight (or Freeze) fires automatically in response to a perceived threat. Pain is inherently threatening, because acute pain is a signal that injury or harm has occurred. The Fight or Flight response includes the following changes:

![Fight or Flight (or Freeze) Diagram]

It is important to know that we all need our Fight or Flight Response to survive. When it is functioning well, Fight or Flight does its job and then turns back off when the threatening situation has resolved.

A problem occurs when Fight or Flight gets stuck on, leaving us in this state most of the time. This is what happens with chronic pain.

Fight or Flight being stuck on leads to a range of problems in people with chronic pain. In the past, this was called “Chronic Pain Syndrome,” and it included a range of serious conditions such as chronic pain that was unresponsive to treatment, depression, anxiety, insomnia, stress-related illnesses, and psychosocial dysfunction.
You can see below what happens in chronic pain when Fight or Flight gets stuck on:

![Fight or Flight and PAIN diagram](image_url)

This process forms a vicious cycle. In fact, the chronic pain cycle involves progressive declines in physical, emotional, cognitive and behavioral functioning:
The goal in chronic pain management is to move from being Sympathetically dominated to having the Sympathetic and Parasympathetic Nervous Systems in balance:

**Fight or Flight and PAIN**

- SNS (Sympathetic Nervous System)
- PNS (Parasympathetic Nervous System)

**Nervous System Imbalance**

Being here is pretty miserable. The goal is to move from here...

**Being “Unsympathetic”**

- SNS (Sympathetic Nervous System)
- PNS (Parasympathetic Nervous System)

**Nervous System In Balance**

...To here. This is how our bodies function best.
What can be done to reverse the cycle? The key is to try to “do the opposite” of the Fight or Flight response in order to trigger the opposite response: the Parasympathetic Nervous System, or Rest and Digest (and Repair) Mode. Learning skills to access the Parasympathetic Response helps people become “unsympathetic.”

It is best to begin with physical techniques, including diaphragmatic breathing and relaxation. One can then move into cognitive and behavioral techniques. Emotions will change as a consequence of developing mastery over other parts of the cycle.

This process takes PRACTICE... months and months of practice: practice makes progress. Each person has to find his or her own most reliable skills and tools for accessing the Parasympathetic Nervous System.
Pain psychologists provide education about key aspects of chronic pain, the pain cycle, expectations about recovery, and sleep improvement. They then provide techniques to help people become “unsympathetic” and to bring the nervous system back into balance:

**Pain Psychology Techniques**

**Education**

- Acute versus chronic pain (harm versus hurt)
- Chronic pain cycle/Sympathetic Nervous System
- Baseline/flare ups/setting expectations
- Sleep hygiene

**Skills & Practice**

- Diaphragmatic breathing
- Relaxation training
- Meditation/Mindfulness
- Exercise (e.g., walking)
- Negative writing/Journaling
- Distraction/Diversion/Attentional strategies
- Pleasant activities (especially hobbies)
- Activity pacing & task persistence
- Social engagement
- Verbal communication
- Reframing pain
- Positive/encouraging self-talk
- Stress awareness: Pain as stress barometer
Here are a few resources you can use to start this process, or help loved ones to start this process:

## Resources

### How to find a pain psychologist:
- Call your insurance company and ask for people who specialize in chronic pain
- If using Medicare, find your home county’s Psychological Association webpage, and search by “chronic pain” or “pain” and “Medicare”

### Diaphragmatic breathing:
- Andrew Weil, MD’s “4-7-8 Breath”:
  - [http://www.drweil.com/drw/u/VDR00160/Dr-Weils-Breathing-Exercises-4-7-8-Breath.html](http://www.drweil.com/drw/u/VDR00160/Dr-Weils-Breathing-Exercises-4-7-8-Breath.html)
- Check [www.drpullins.com](http://www.drpullins.com) for a basic diaphragmatic breathing technique... when I get my act together.

### Communication and pacing:
- The Spoon Theory: a metaphor for communicating about pain and fatigue:

### Mindfulness meditation:
- [www.headspace.com](http://www.headspace.com)
- Mindfulness-Based Stress Reduction by Jon Kabat-Zinn:
  - [http://www.mindfulnesscds.com/](http://www.mindfulnesscds.com/)

### Books:
- *Take Charge of Your Chronic Pain* by Peter Abaci, MD
- *Back in Control* by David Hanscom, MD