



# **Practicing Multidisciplinary Pain Management in the Community Setting**

---

Theresa Mallick-Searle, NP

# Title & Affiliation

---

Theresa Mallick-Searle, MS, RN-BC, ANP-BC  
Adult Nurse Practitioner  
Stanford Health Care – Division Pain Medicine  
Redwood City, CA

# Disclosure

---

Speaker Bureau Allergan, Amgen, Lilly and Salix

Any unlabeled/unapproved uses of drugs or products referenced will be disclosed.

# Learning Objectives

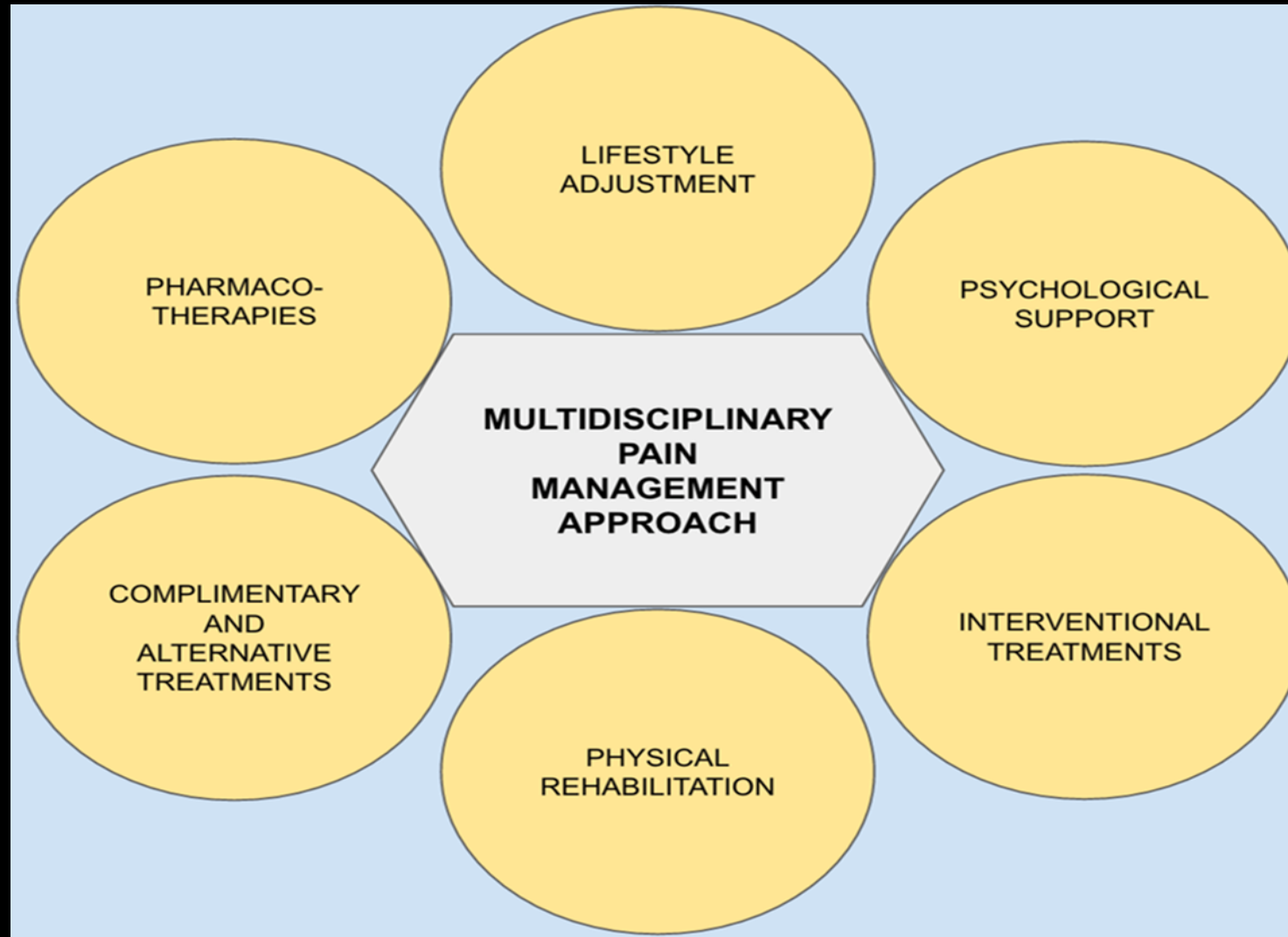
---

- Define multidisciplinary pain management
- Discuss available resources in the community
- Explore ways to empower the patient in self-management



# What is Multidisciplinary/Multimodal Care?

---



# Multidisciplinary Pain Management

---

## Why is it important?

- Coordinated care
- Chronic pain multiple co-morbidities:  
sleep, anxiety, depression, fatigue
- Engages self care strategies
- Enhances self efficacy
- Improved outcomes
- Managing pain holistically  
(co-managing symptoms)
- Reduce healthcare costs

- Gauthier K, Dulong C, Arg  ez C. Multidisciplinary Treatment Programs for Patients with Chronic Non-Malignant Pain: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines – An Update. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2019 May 10.
- Schultz R, Smith J, Newby JM, et al. Pilot Trial of the Reboot Online Program: An Internet-Delivered, Multidisciplinary Pain Management Program for Chronic Pain. *Pain Res Manag*. 2018 Sep 5;2018:9634727.
- Stein KF & Miculescu A. Effectiveness of multidisciplinary rehabilitation treatment for patients with chronic pain in a primary health care unit. *Scandinavian Journal of Pain*. 2013;4(4):190–197.
- Vasudevan S. Multidisciplinary Management of Chronic Pain—A Practical Guide for Clinicians. Cham, Switzerland: Springer; 2015.

# What Are the Barriers?

---

## Clinician:

- Time
- Limited Resources
- Knowledge

## Patient:

- Time
- Beliefs
- Knowledge
- Fear

Insurance (coverage)

# Barriers

---

- self-efficacy
- depression
- social support
- relationship with health care provider(s)
- pain intensity
- fear of exacerbating pain
- access to health resources
- health literacy

Mann EG, et al. What Are the Barriers and Facilitators for the Self-Management of Chronic Pain With and Without Neuropathic Characteristics?  
*Pain Manag Nurs.* 2017;18(5):295-308.

# Multidisciplinary Pain Management

## CLINICAL MANAGEMENT

pharmacotherapeutics  
interventional therapies

## BEHAVIORAL MANAGEMENT

psychology/psychiatry  
social re-engagement  
stress reduction

## BODY THERAPIES


physical therapy  
functional rehabilitation  
sleep regulation

## NUTRITION

weight control  
anti-inflammatory, anti-allergenic

### Comprehensive Pain Medicine

Pain Medicine treats more than **800** chronic pain conditions using a multi-modal approach



- Neck & back pain
- Headache & facial pain
- Abdominal & pelvic pain
- Musculoskeletal pain
- Fibromyalgia
- CRPS
- Peripheral neuropathy
- Pre-operative optimization
- Chronic post-surgical pain
- Chronic CSF leak

#### Physical therapy

Pain therapists prescribe regimens of exercise, tissue manipulation, and other treatments focused on maximizing function to help relieve pain

- Therapy for fear of movement
- Home exercise program
- Restorative movement group

#### Interventional procedures

Pain Medicine specialists master more than **250** types of interventional procedures

- Epidural steroid injections for nerve impingement
- Radiofrequency nerve ablation for painful nerves for facet joint neck & back pain and for painful scars after surgery & trauma
- Cryoneurolysis for painful nerves for occipital headache
- Spinal cord stimulation for failed back surgery syndrome and peripheral neuropathy
- Intra-spinal medication delivery systems

#### Non-opioid medications

There are **200** medications in pain, only about **20** are opioids

Non-opioid medications for non-cancer pain management

#### Psychology

Pain is a product of the brain. It has sensory and emotional components. Psychological skills help individuals modulate pain and engage in life. Psychological treatments reduce depression, anxiety, and helplessness.

- Pain coping skills
- Biofeedback & meditation
- Free support group for individuals, family & friends
- Acceptance and commitment therapy

#### Complementary & alternative


Pain acupuncture & evidence-based supplements

#### Pre-habilitation

Pre-operative conditioning to optimize surgical outcomes with pre-operative nerve and psychology treatments

#### Precision health care

Outcomes-based care using our open source platform for learning health systems, CHOIR (Collaborative Health Outcomes Information Registry)




#### Coordinated care

Dedicated Complex Care Case Managers (CCCMs) to connect community resources and reduce barriers to care

#### Self-management

Empowering patients to manage their pain for patient-centered care

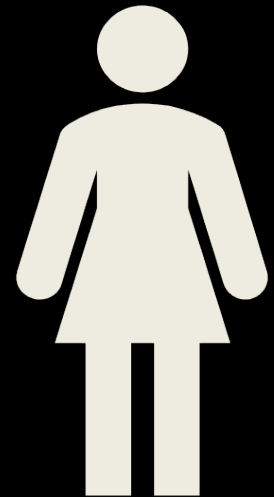


COMPLEMENTARY THERAPY  
(acupuncture, aroma therapy)

# Introducing Lisa

---

- 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression.
- Previously employed as a receptionist, stopped working when she was pregnant.
- Married with a 12 year old daughter.
- Does not exercise regularly because of generalized fatigue.
- Sees a Neurologist for her migraines.
- PCP manages HCM, including episodic pain management.
- “Under-insured”



# Multidisciplinary Pain Management

□ CLINICAL MANAGEMENT

□ BEHAVIORAL MANAGEMENT

□ BODY THERAPIES

□ COMPLEMENTARY THERAPY

□ NUTRITION

## Comprehensive Pain Medicine



Pain Medicine treats more than **800** chronic pain conditions using a multi-modal approach



- Neck & back pain
- Headache & facial pain
- Abdominal & pelvic pain
- Musculoskeletal pain
- Fibromyalgia
- CRPS
- Peripheral neuropathy
- Pre-operative optimization
- Chronic post-surgical pain
- Chronic CSF leak

### Non-opioid medications

There are **200** medications in pain only about **20** are opioids

Non-opioid medications for non-cancer pain management

### Psychology

Pain is a product of the brain. It has sensory and emotional components. Psychological skills help individuals modulate pain and engage in life. Psychological treatments reduce depression, anxiety, and helplessness.

- Pain coping skills
- Biofeedback & meditation
- Free support group for individuals, family & friends
- Acceptance and commitment therapy

### Physical therapy

Pain therapists prescribe regimens of exercise, tissue manipulation, and other treatments focused on maximizing function to help relieve pain

- Therapy for fear of movement
- Home exercise program
- Restorative movement group



### Interventional procedures

Pain Medicine specialists master more than

**250** types of interventional procedures

- Epidural steroid injections for nerve impingement
- Radiofrequency nerve ablation for painful nerves for facet joint neck & back pain and for painful scars after surgery & trauma
- Cryoneurolysis for painful nerves for occipital headache
- Spinal cord stimulation for failed back surgery syndrome and peripheral neuropathy
- Intra-spinal medication delivery systems

### Complementary & alternative

Pain acupuncture & evidence-based supplements

### Pre-habilitation

Pre-operative conditioning to optimize surgical outcomes with pre-operative nerve and psychology treatments

### Precision health care

Outcomes-based care using our open source platform for learning health systems, CHOIR (Collaborative Health Outcomes Information Registry)



### Coordinated care

Dedicated Complex Care Case Managers (CCCMs) to connect community resources and reduce barriers to care

### Self-management

Empowering patients to manage their pain for patient-centered care

# CLINICAL MANAGEMENT: Pharmacotherapeutics

---

- Opioids
- OTC analgesics
- Anticonvulsants
- Antidepressants (SNRI)
- Muscle relaxants
- Sleep aids

## Tips

- Generic is ok
- Patient-assistant programs
- Samples
- Sales reps & medical science staff → assist with prior authorizations, education, etc.
- Specialty pharmacies {NimbleRx: <https://www.nimblerrx.com> Alto: <https://alto.com>}
- Choose smart (pick the right drug for the right symptom; neuropathic v/s nociceptive pain)
- Benefit from side effects



# National Prescription Assistance Programs

---

**Medicare:** <https://www.medicare.gov/your-medicare-costs/help-paying-costs/save-on-drug-costs/save-on-drug-costs.html>

<https://www.rxhope.com/> We act as your advocate in making the patient assistance program journey easier and faster by supplying vital information and help.

## Drug Discount Card

- |                   |   |              |
|-------------------|---|--------------|
| ▪ NeedyMeds:      | <a href="http://www.needymeds.org">http://www.needymeds.org</a>                       | 800-503-6897 |
| ▪ GoodRx:         | <a href="https://www.goodrx.com">https://www.goodrx.com</a>                           | 888-277-3911 |
| ▪ MedicationCard: | <a href="http://www.medicationcard.net/m/sp/">http://www.medicationcard.net/m/sp/</a> | 888-553-5751 |

**Discount pharmacy programs:** Kmart, Walgreens, Costco, Sam's Club, CVS, Target, Walmart, Kroger

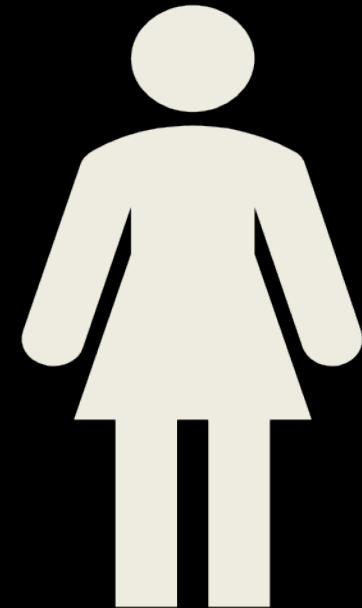
# LISA : 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression

---

## Clinical Management : Pharmacotherapy

- pregabalin
- duloxetine

Tip: Ask about sleep (co-manage)



# LISA : 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression, *poor sleep*

---

Clinical Management : Pharmacotherapy

- pregabalin
- duloxetine

Co-pay savings card, specialty pharmacy, other patient assistance:

<https://www.lyrica.com/co-pay-savings-card>

<https://www.pfizerRxpathways.com>

<http://www.lillycares.com/findprogram.aspx>

Lilly Cares Foundation Patient Assistance Program:

800-545-6962

Consider obtaining samples - <https://www.pfizerpro.com/support-services>

# CLINICAL MANAGEMENT: Procedural

---

Simple to learn in-office procedures (with or w/o ultrasound)

- Patient satisfying
- Reimbursable
  - Work with your billing office to identify coding & create templates for documentation
  - Work with industry – practitioner support for training and reimbursement
- Save the need for more invasive procedure or ED visit

# CLINICAL MANAGEMENT: Procedural

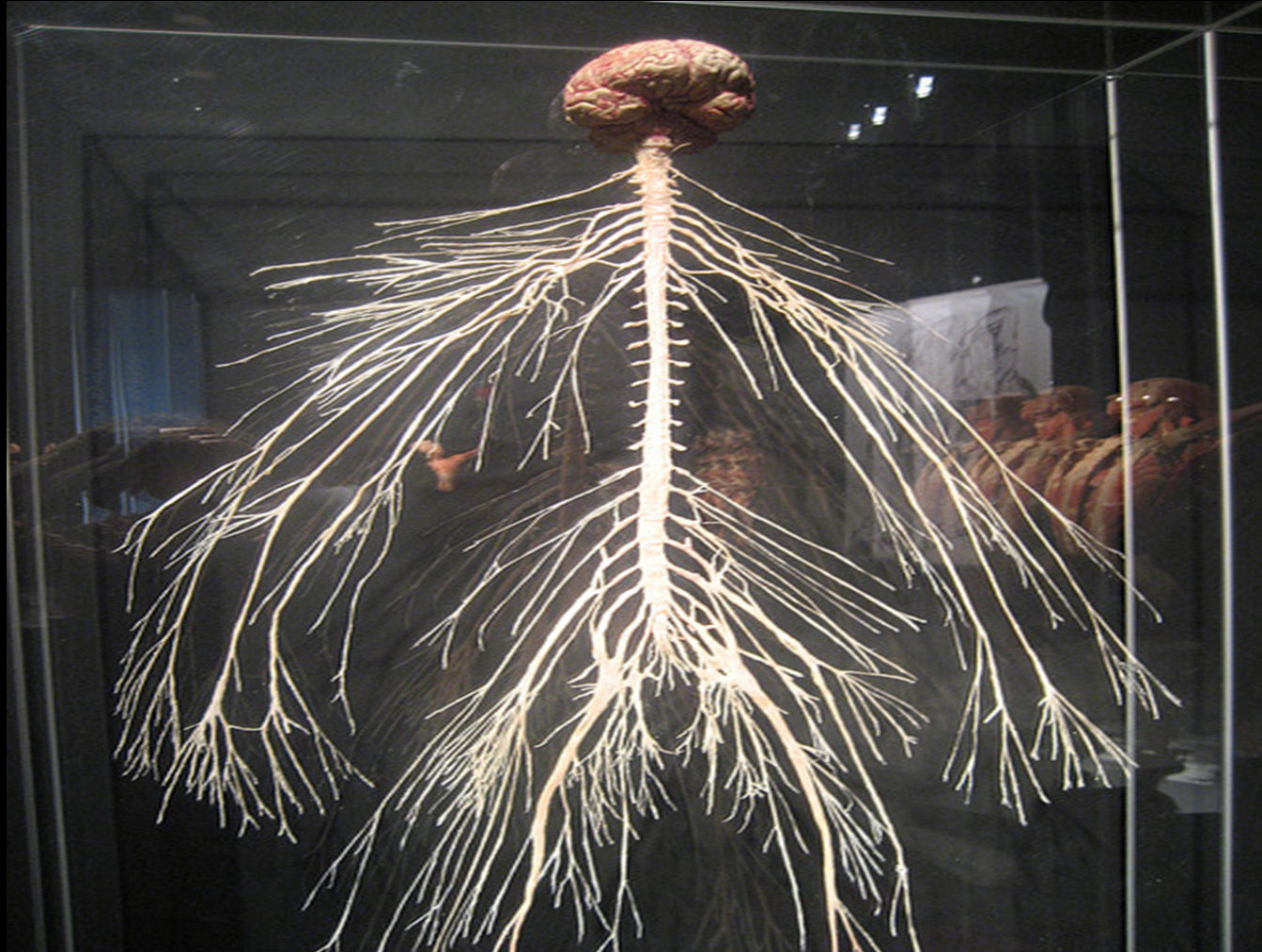
---

Make contacts with local interventionalists  
interventional pain/anesthesia practitioners, PM&R, etc.

- Save time getting patient treatment
- Patient compliance, trust
- Create partnerships with community practitioners
- Save time w/diagnostics {MRI, CT, X-ray, EMG, etc.}

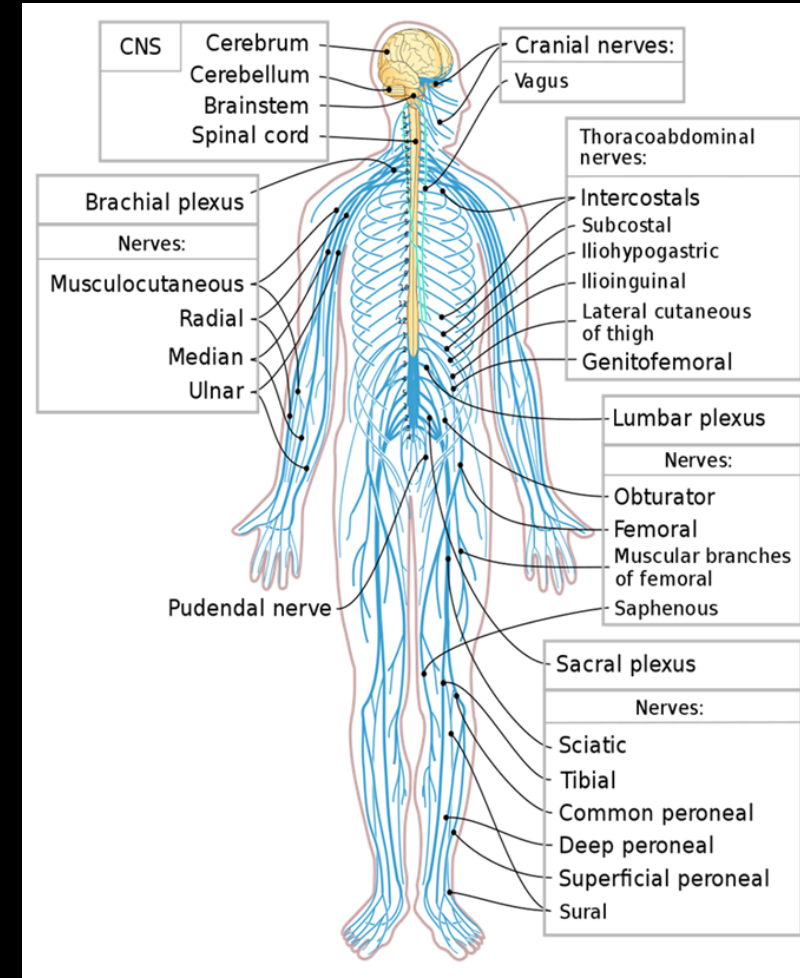
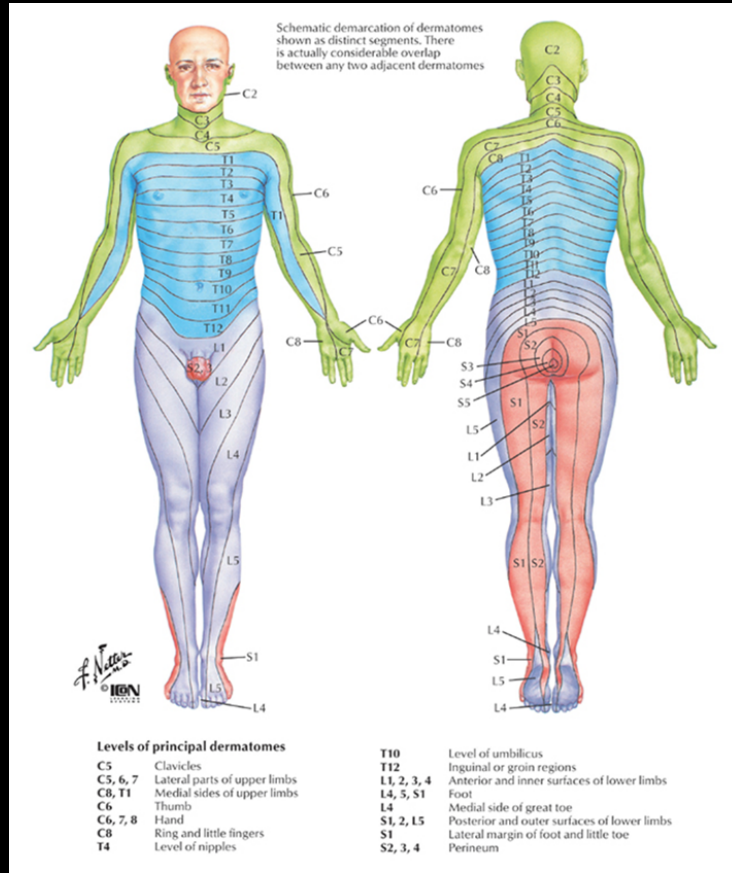
**If there's a nerve, there's a way: aka "I can inject that"**

---





# If there's a nerve, there's a way: aka "I can inject that"



# If there's a nerve, there's a way: aka "I can inject that"

---

## **Spinal:**

facet, epidural, selective nerve root blocks, sacroiliac joint

## **Joint injections:**

Hyaluronic acid, corticosteroid, platelet rich plasma

## **Headache/face pain:**

Occipital, greater auricular, gasserian ganglion block, V2/3 selective, supra-orbital, PREEMPT

## **Upper extremity:**

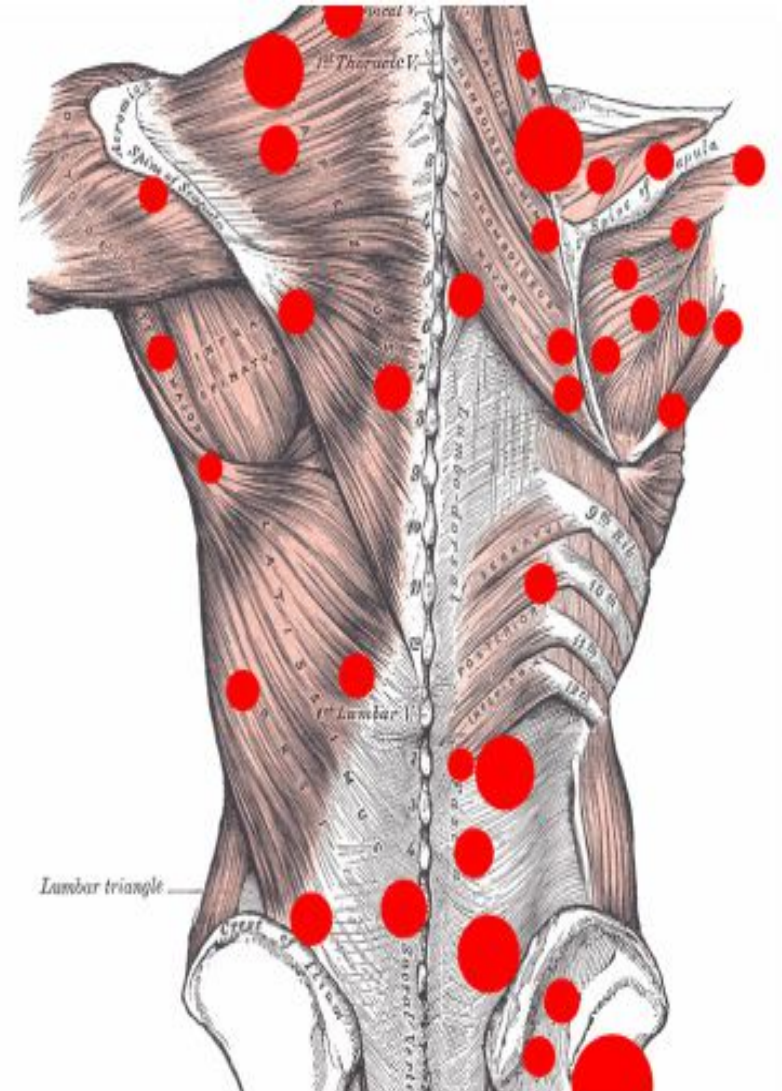
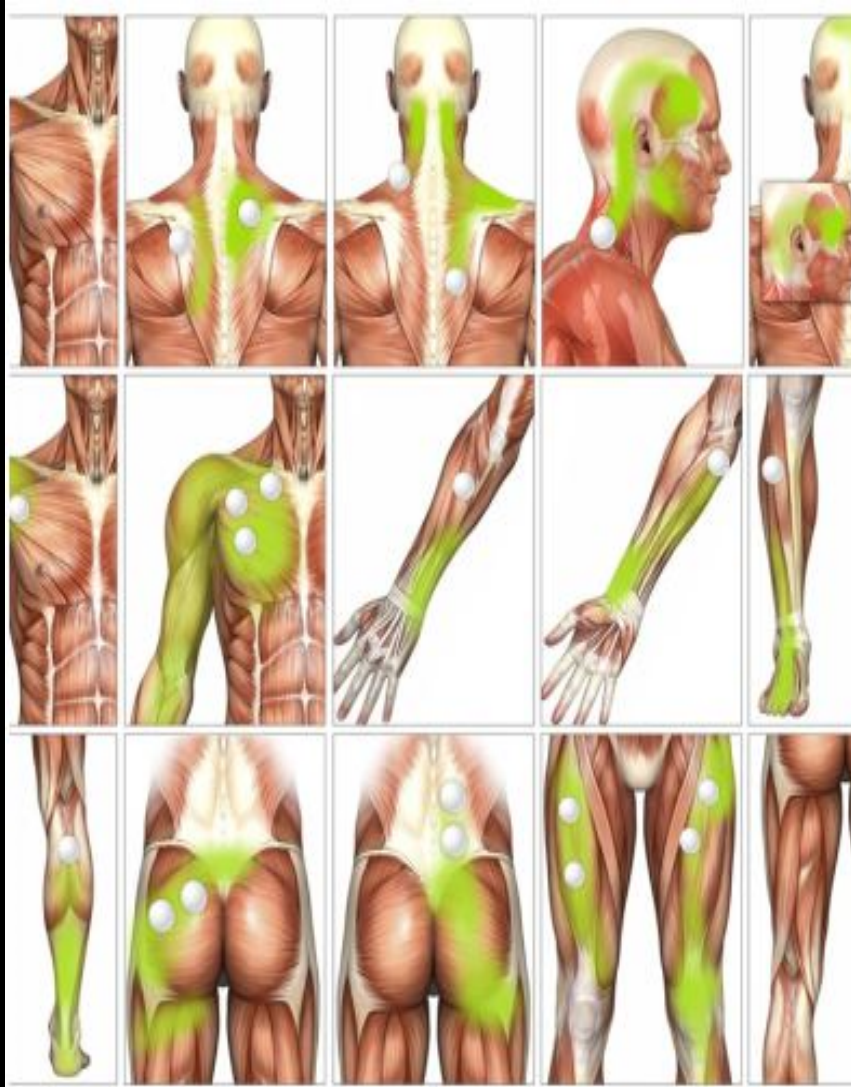
Shoulder (suprascapular), elbow/wrist/forearm (median, ulnar & radial), digital/trigger finger

## **Lower extremity:**

Hip (bursa, articular branches of the obturator & femoral nerves), knee (genicular), ankle/foot (sural/popliteal)



# Myofascial Trigger Points



# LISA : 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression, poor sleep

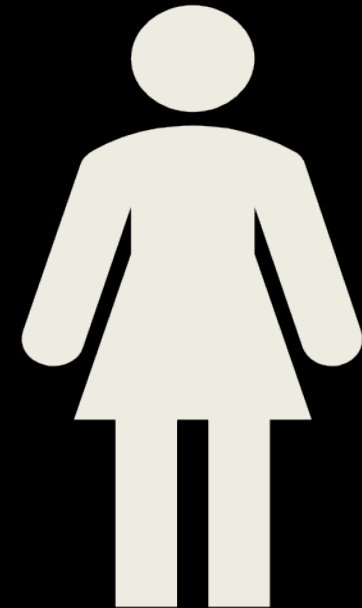
---

Clinical Management : Interventional/procedural therapies

- PREEMPT injections for chronic migraine
- Trigger point injections

Tips:

- ✓ Education & setting patient/treatment expectations important
- ✓ Community relationships



# Behavioral Management

---

Truths” – mostly

- Insurance rarely covers behavioral management
- Behavioral management is instrumental to effectively managing chronic pain
- Requires an individualized treatment plan
- Most effective when the patient is fully vested/compliant
- Could require life-long investment
- Goals
- Change behavior
- Develop self-control/self-reliance/self-efficacy (internal locus of control)
- Stress reduction

# Behavioral Management: Tips

---

- Sub-specialization
- Psychiatrist – medication management & significant co-morbid mental health needs
- Psychologist/Psycho-pharmacologist
- Social Workers (therapists)
- Community classes/groups/1:1 therapy
- Plethora of online resources

*If insurance covers – optimal refer to psychologist (experience/graduate training in pain management)*

Northern California Association of Pain Psychologists (NCAPP) [www.ncapp.net](http://www.ncapp.net)  
<https://www.psychologytoday.com/us/therapists/chronic-pain>

# Introductory Chronic Pain Educational Resources

---

**BRAINMAN Series: Understanding pain & what to do about it in less than five minutes?**

Brainman, the “brainchild” of the team at Hunter Integrated Pain Service at John Hunter Hospital & Hunter Medicare Local

<https://www.youtube.com/watch?v=5KrUL8tOaQs>



# Introductory Chronic Pain Educational Resources

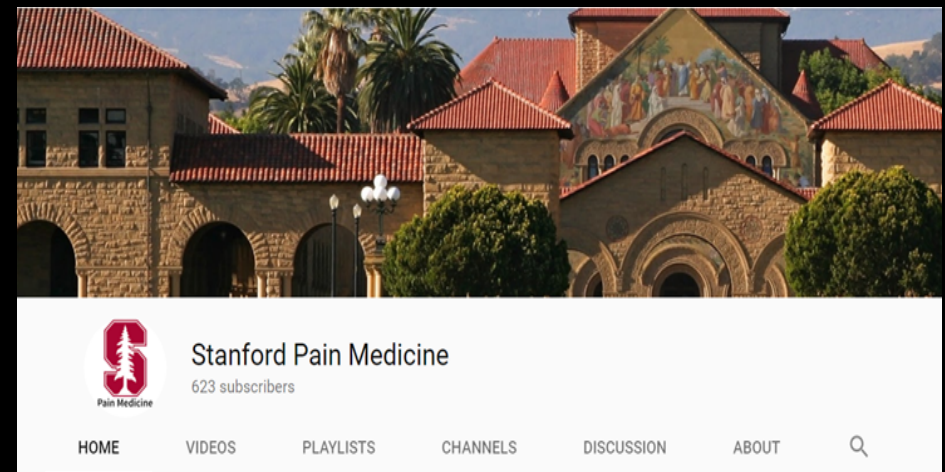
---

Retrain Pain Foundation:

<https://www.retrainpain.org>

Stanford Pain Management Educational videos:

<https://www.youtube.com/user/stanfordpainmedicine>





# Resources: Stress Reduction

---

Online Mindfulness-Based Stress Reduction (MBSR)

<https://palousemindfulness.com/index.html>

University of Massachusetts Center for Mindfulness

<https://www.umassmed.edu/cfm/>

University of California San Diego's Center for Mindfulness

<https://health.ucsd.edu/specialties/mindfulness/Pages/default.aspx>

Macquarie University, Australia:  
Free cognitive behavioral therapy (CBT) pain course:

<https://ecentreclinic.org/?q=PainCourse>

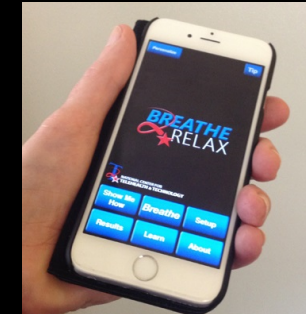
# Resources: Stress Reduction: Apps

HEADSPACE – Teaches the basics of meditation & mindfulness in just 10 minutes a day

MINDFULNESS – Has a large variety of meditations for both relaxation & mindfulness exercises

KARDIA – Hands-op paced breathing exercise

Breathe2Relax – Personalized stress management tool





# Resources: Sleep Improvement

---

Journal Sleep Review (2014): 6 Online Options for Insomnia Therapy

<http://www.sleepreviewmag.com/2014/12/online-options-insomnia-therapy/>

SHUTi is a Cognitive Behavioral Therapy for Insomnia

<http://www.myshuti.com/>

# Resources: Pain Coping Skills Training (PCST)

---

<https://www.webmd.com/webmdpaincoachapp>

<http://www.mobihealthnews.com/tag/pain-coach>

Acceptance and Commitment Therapy (ACT): aims to help you live with unpleasant thoughts, feelings, and impulses without avoiding them or being controlled by them.

<https://mobile.va.gov/app/act-coach>



# Internet-Delivered Cognitive Behavioural Pain Management: “The Pain Course”

---

Explore the efficacy & acceptability of a previously developed Internet-delivered cognitive behavioral pain management course, *The Pain Course*, for adults with FM.

60 participants randomized to either to the Pain Course (n = 30) or to a waiting-list control group (n = 30).

## **METHODS:**

- Five-lesson course was delivered over eight weeks
- Brief weekly contact, via telephone and secure email, with a guide throughout the course.
- Symptoms were assessed at pre-treatment, post-treatment & 4-week follow-up.

# Internet-Delivered Cognitive Behavioural Pain Management: “The Pain Course”

---

## RESULTS:

- 18% reduction in global symptoms
- 20-28% reduction in depression
- 11% reduction in pain
- 12% reduction in “fear” of pain

Smaller effects were also observed on measures of generalized anxiety & physical health.

The changes were maintained at four-week follow-up.

Friesen LN, Hadjistavropoulos HD, Schneider LH, et al. Examination of an Internet-Delivered Cognitive Behavioural Pain Management Course for Adults with Fibromyalgia: A Randomized Controlled Trial. *Pain*. 2017 Apr;158(4):593-604.

# Ways to Lift Barriers to Care for Chronic Pain Patients

---

To evaluate the impact of Internet-based patient self-management education & activities on patients' pain, anxiety & quality of life.

200 patients from one community pain clinic in Toronto, Canada (Toronto Poly Clinic).

Patients were encouraged to visit two Internet sites (a blog & Twitter postings) for educational postings written by the author about exercise, nutrition, mindfulness meditation, disease management methods, evidence-based supplements, daily relaxation exercises & overall self-management methods **15 minutes per day for six months.**

- Activity logs were kept by patients and reviewed by physician at follow-up visits.
- Compliance was encouraged via weekly email reminders and phone calls during the observation period.

# Ways to Lift Barriers to Care for Chronic Pain Patients

Rating scale	Before treatment	After treatment	Change
Pain (NPRS)			
Severe	40%	25%	15%
Moderate + severe	100%	55%	45%
Depression (HDRS)			
Severe	30%	10%	20%
Moderate + severe	100%	50%	50%
Anxiety (HADS)			
Severe	25%	15%	10%
Moderate + severe	100%	70%	30%
Quality of Life (QOL)			
Ability to function/daily activities	25%	60%	35%
Patient Global Impression of Change (PGIC)			
Change in activity, symptoms, emotions, and overall QOL	N/A	60%	N/A

**RESULTS:** Modest improvements were noted in pain, anxiety, depression & QOL

Rod K. Finding Ways to Lift Barriers to Care for Chronic Pain Patients: Outcomes of Using Internet-Based Self-Management Activities to Reduce Pain and Improve Quality of Life. *Pain Res Manag.* 2016; 2016: 8714785.

# LISA : 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression, poor sleep

---

## Behavioral Management:

- Stanford Pain Management Educational videos
- HEADSPACE APP
- SHUTi

## Tips:

- ✓ Assign “homework”, simple, achievable
- ✓ Hold patients accountable, involve them actively in their treatment plan



# BODY THERAPIES

---

PHYSICAL THERAPY/FUNCTIONAL  
IMPROVEMENT

PAIN PSYCHOLOGY WITH PT  
(fear avoidance)

Why is it important?

**Human body was made to move**

- Circulation
- Sleep
- Metabolism
- Digestion
- Endorphin release
- Joint mobility/flexibility/bone health/strength
- Improves coordination, reduces risk of injury



# Fear-Avoidance Model

---

Numerous cross-sectional studies have consistently demonstrated:

- Pain-related fear has consistently been associated with more severe disability.
- Treatments designed to reduce pain-related fear may improve disability outcomes.
- The fear-avoidance model - graded exposure treatments:
  - ✓ Development of an individualized hierarchy of feared and avoided activities
  - ✓ Graded confrontation of activities across the hierarchy (beginning with least feared)
  - ✓ Promotion of functional gains

# BODY THERAPIES: Resources

---

Therapeutic - Mindful Movement – YouTube

Videos & audiofiles of yoga, Tai Chi, and therapeutic exercise recommendations:

<https://www.youtube.com/playlist?list=PLRMR9d2AGUQcbReG-NQSPiF8EoSOUxQ6X>

**Awareness Through Movement (Feldenkrais)**

<http://www.unfetteredmovement.org/awarenessthroughmovement/>

<https://www.feldenkraisresources.com/Awareness-Through-Movement-Basic-Series-p/2103-mp3.htm>

<https://www.youtube.com/watch?v=v8LV9jOun3c>

<https://www.youtube.com/watch?v=IKUSZsM3Tp8>

# BODY THERAPIES: Tips

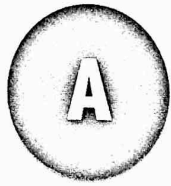
---

- Not all therapists are created equal
- Get to know the therapists in your area
- Get to know therapist subspecialties
  - Online searches: <http://www.womenshealthapta.org/pt-locator/>
- Tailor the referral to the patient's needs
- Community classes: pools (warm), yoga, Tai-Chi
- Have a list of simple exercise & on-line resources available

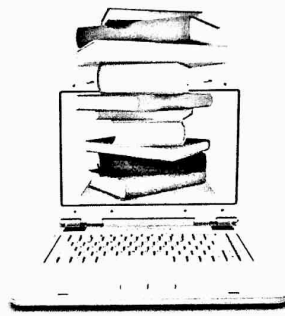
## Information about FREE or LOW COST Integrative Medicine Services in San Francisco

Name	Address	Phone	Sliding Scale?	Services Available, Website	Schedule
<b>SoMa or Tenderloin</b>					
Glide Memorial Church Health Services	330 Ellis St.	674-6140	free	Acupuncture	Mondays 9am-1pm, Tuesdays 1-4pm, Thursdays 1-3pm, Fridays 10am-3pm
Quan Yin	965 Mission St., (at 6th) Suite 405	861-4964	yes	Acupuncture, massage. <a href="http://www.quanyinhealingarts.com">www.quanyinhealingarts.com</a>	Acupuncture: Tuesdays 12:30-3pm, Wednesdays 2:45-5:15pm Fri 3:45-5:45pm, HIV+ only
<b>The Mission</b>					
Charlotte Maxwell	2601 Mission @22nd #201, SF (and 610 16th St., Suite 426 in Oakland)	(510) 601-7660 x4	free	Women with cancer only, various CAM. By appt. only: <a href="http://www.charlottemaxwell.org">www.charlottemaxwell.org</a>	SF: Friday 9:30am-1 pm and Saturday/Sunday 9:30am-5pm
San Francisco Community Acupuncture	220 Valencia St.	675-8973	yes	Acupuncture <a href="http://www.missionsfca.com">www.missionsfca.com</a>	Appointments available: Monday-Thursday: 9am-8pm Friday-Sunday: 9am-5:30pm
Immune Enhancement Project	3450 16th St. (between Church & Sanchez)	252-8711	yes	Acupuncture, massage. <a href="http://www.iepclinic.com">www.iepclinic.com</a>	Mondays 12-1pm, Thursdays 1-3pm, Fridays 1-2pm
Positive Being	1170 South Van Ness Ave., Suite 1	821-6477	no	Massage for people with HIV or other chronic illness	By appt. only
<b>Potrero Hill/Bernal Heights</b>					
San Francisco General Hospital, Community Wellness Program	1001 Potrero St., Main Hospital Building, 2nd Floor (across from cafeteria)	206-4995	free	<a href="http://sfghwellness.org/calendar/">http://sfghwellness.org/calendar/</a>	Many activities and groups
American College of Traditional Chinese Medicine	450 Connecticut St. SF (between 19th & 20th St.)	282-9603 x5	yes	Acupuncture, massage. <a href="http://www.actcm.edu">www.actcm.edu</a> Call for appointment.	Acupuncture: Monday & Tuesday 1:30-4:15pm Wednesday 9am-11:45am Massage: Monday to Thursday, 8:30am-9pm Friday & Saturday, 9am-5:30pm
Bernal Heights Neighborhood Center for Senior Citizens	515 Cortland Ave.	206-2140	free	Homeopathy clinic/service	Twice a month: 2nd & 4th Fridays, 12-2pm
<b>Haight-Ashbury, Lower Haight, or NoPa</b>					
HealthRight360	558 Clayton St. and 1735 Mission St. SF	762-3700	yes	Chiropractor and acupuncture services available based on referral. <a href="http://healthright360.org">http://healthright360.org</a>	Call for appointment.
National Holistic Institute, Student Massage Clinic	1655 Market St. SF	861-2045 x171	low cost	Student massage therapists, \$30-\$35 for 50 min. <a href="http://www.nhi.edu">http://www.nhi.edu</a>	Monday to Saturday 1:30-8:45pm as available
Osher Center for Integrative Medicine (UCSF)	1701 Divisadero St. SF	353-7700	yes	Community Care Fund: on hold, won't know status of fund until after June. (8-weeks, Mindfulness-Based Stress Reduction) <a href="http://www.osher.ucsf.edu/">http://www.osher.ucsf.edu/</a>	check back after June 2013

Please note: SFHP does not cover or pay for these services. These are not covered benefits. SFHP offers no guarantee of quality for these services. SFHP does not contract with or credential these service providers.



## Self-Study for Chronic Pain Management



For individuals interested in learning about chronic pain and chronic pain self-management, there are a number of quality resources available, both online and in your local bookstore:

### ONLINE (FREE) RESOURCES:

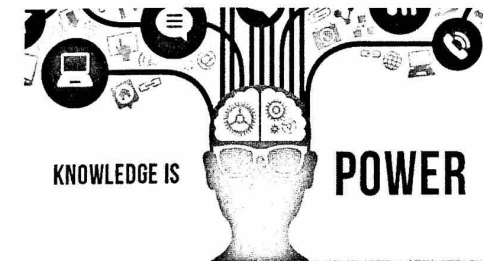
- **Retrain Pain** ([www.retrainpain.org](http://www.retrainpain.org)): Includes several free modules to complete at your own pace. Some topics include: the science of pain, sleep & pain, and pain medications.
- **American Chronic Pain Association** ([theacpa.org](http://theacpa.org)): This comprehensive website has information about specific pain conditions, clinical trials, pain management tools, resource lists, and more. Also, check out [vetsinpain.org](http://vetsinpain.org), which is their site for veteran-specific pain needs.
- **Pain Management Network** (<http://www.aci.health.nsw.gov.au/chronic-pain/chronic-pain/>): Watch videos about chronic pain and pain management. Also includes plenty of handouts for self-management and for use with medical providers.
- **PainACTION** (<http://www.painaction.com/>): Contains tools for pain self-management that can be customized to you and your specific pain needs.
- **Veteran's Health Library** (<http://www.veteranshealthlibrary.org/> and type "Pain" in the Search box at the top right corner): Contains informational handouts on a variety of pain topics.
- **Neuroplasticity and Pain Management** (<http://painhealth.csse.uwa.edu.au/neuroplasticity.html>): Information about neuroplasticity, an important concept for understanding chronic pain and its management. Also watch a brief video on [youtube.com](http://youtube.com) by searching for "Sentis Neuroplasticity."
- **Arthritis Foundation** (<http://www.arthritis.org/>): Education about various types of arthritis and its treatment, including information on the arthritis diet.
- **Fibromyalgia Network** (<http://fmnetnews.com>): Information about fibromyalgia, recent research in the field, and local resources / support services.
- **Give Back Yoga** (<http://givebackyoga.org/resources-for-veterans>): Free yoga resources for Veterans and service members.

### ONLINE (FREE) INFORMATIONAL VIDEOS

- **Brainman Youtube Videos** (<http://tinyurl.com/j378s3j> or search "Brainman Chronic Pain" on [youtube.com](http://youtube.com)): Learn about chronic pain, treatment options, and pain medications in a series of short but captivating videos.
- **TEDxAdelaide - Lorimer Moseley - Why Things Hurt** (<http://tinyurl.com/z8glgkk> or search "Lorimer Moseley Pain" on [youtube.com](http://youtube.com)): Entertaining video explanation of chronic pain from one of the world's leading pain researchers.
- **VA Naloxone Kit Education** (<https://www.youtube.com/watch?v=-DQBCnrAPBY>): Video explaining how to use a Naloxone kit during accidental overdose of opioid medication.

### BOOKS (Available on Amazon.com):

- **Why Do I Hurt?** by Adrian Louw, PT, PhD, CSMT
- **How to Live Well with Chronic Pain and Illness** by Toni Bernhard
- **You Are Not Your Pain: Using Mindfulness to Relieve Pain, Reduce Stress and Restore Well-Being** by Vidyamala Burch & Danny Penman
- **Chronic Pain: Finding Hope in the Midst of Suffering** by Rob Prince
- **The Chronic Pain Solution** by James Dillard MD, DC, CAC
- **Heal Your Pain Now: The Revolutionary Program to Reset Your Brain and Body for a Pain-Free Life** by Joe Tatta, DFT, CNS
- **Living Beyond Your Pain** by JoAnne Dahl, PhD
- **Managing Pain Before It Manages You** by Margaret A. Caudill, MD, PhD, MPH
- **Explain Pain** by David Butler, MappSc, EdD and G. Lorimer Moseley, PhD, FACP





Public Transportation Services for Individuals with Disabilities				
Service	Contact Information	Location	Website	Hours of Operation
Union City, Paratransit	(510) 476-1500	34009 Alvarado-Niles Road Union City, CA 94587	<a href="http://www.unioncity.org/departments/transit-340">http://www.unioncity.org/departments/transit-340</a>	M-F, 4:30am - 10:20pm Sat, 6:45am - 7:30pm Sun, 7:45am - 6:30am
East Bay, Paratransit	(510) 287-5000	East Bay Paratransit Office 1750 Broadway Oakland, CA 94612	<a href="https://www.eastbayparatransit.org/">https://www.eastbayparatransit.org/</a>	Administration: M-F, 8:00am - 5:00pm Reservations: Daily, 8:00am - 5:00pm
East Bay, A-Para Transit Corp.	San Leandro: (510) 562-5500	1400 Doolittle Drive San Leandro, CA 94577	<a href="http://aparatransit.com/index.php">http://aparatransit.com/index.php</a>	
	Hayward: (510) 732-9700	22990 Clawiter Road Hayward, CA 94545	<a href="http://aparatransit.com/index.php">http://aparatransit.com/index.php</a>	
San Francisco Paratransit	Administration: (415) 351-7000 Reservations: (415) 285-6945	68 12th Street, 1st Floor San Francisco, CA 94103-1297	<a href="http://www.sfparatransit.com/">http://www.sfparatransit.com/</a>	Administration: M-F, 8:00am - 5:00pm Reservations: Daily, 7:00am - 6:00pm
San Jose, VTA Access Paratransit	(408) 321-2300	3331 N. First Street San Jose, CA 95134	<a href="http://www.vta.org/getting-around/Paratransit/Accessibility-Paratransit-Service">http://www.vta.org/getting-around/Paratransit/Accessibility-Paratransit-Service</a>	M-F, 8:00am - 5:00pm
San Mateo County, Redi-Wheels and RediCoast	(800) 660-4287	1250 San Carlos Avenue San Carlos, CA 94070	<a href="http://www.samtrans.com/Accessibility/Paratransit.html">http://www.samtrans.com/Accessibility/Paratransit.html</a>	Daily, 5:30am - midnight
Eastern Contra Costa County, County Connection Link	Administration: (925) 676-7500 Reservations: (925) 938-7433	2477 Arnold Industrial Way Concord, CA 94520	<a href="https://countyconnection.com/link/">https://countyconnection.com/link/</a>	M-F, 4:30am - 11:00pm Weekends, 7:00am - 10:30pm
Antioch, Tri Delta Transit	Administration: (925) 754-6622 Reservations: (925) 754-3060	801 Wilbur Avenue Antioch, CA 94509	<a href="http://trideltatransit.com/">http://trideltatransit.com/</a>	Daily, 6:00am - 6:00pm
Eastern Alameda County, Wheels	Administration: (925) 455-7500 Reservations: (925) 455-7510	2500 Railroad Avenue Livermore, CA 94551	<a href="http://www.wheelsbus.com/">http://www.wheelsbus.com/</a>	M-F, 5:00am - 6:45pm
Santa Clara County, Outreach	Administration: (408) 321-2300, (408) 684-4520, or (408) 436 - 2865	521 Valley Way Milpitas, CA 95035	<a href="http://www.outreach1.org/">http://www.outreach1.org/</a>	Daily, 8:00am - 5:00pm
San Jose, Paratransit Providers	(408) 832 - 2233	3607 Deedham Drive San Jose, CA 95148		M-F, 8:00am - 5:00pm Weekends, 10:00am - 2:00pm

Stanford Neuroscience Health Center • 213 Quarry Road • Stanford, California 94304 • 650-723-6469

S:\Private\Outpatient Department\Community Resources\Public Trans Disabilities Resources.pdf



# Should Exercises be Painful ?

---

## Meta-Analysis:

Comparing the effect of exercises where pain is allowed/encouraged compared with non-painful exercises pain, function or disability in patients with chronic musculoskeletal pain.

Smith BE, Hendrick P, Smith TO, et al. Should Exercises be Painful in the Management of Chronic Musculoskeletal Pain? A Systematic Review and Meta-Analysis. *Annals of Surgery*. 2017;51(23):1679-1687.

## Results:

- Protocols using painful exercises offer a small but significant benefit over pain-free exercises in the short term, with moderate quality of evidence.
- In the medium and long term there is no clear superiority of one treatment over another.
- Pain during therapeutic exercise for chronic musculoskeletal pain need not be a barrier to successful outcomes.

# LISA : 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression, poor sleep

---

## Body Therapy

- Referral to community physical therapist, education, safe exercises.
- Problem solve barriers to activities.

## Tips:

- ✓ Goals simple, achievable.
- ✓ Encourage pacing.
- ✓ Hold patients accountable, involve them actively in their treatment plan.
- ✓ Specify instructions to Physical Therapist & request progress reports.





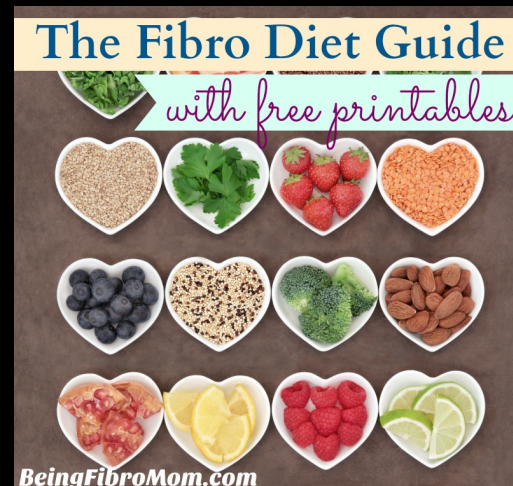
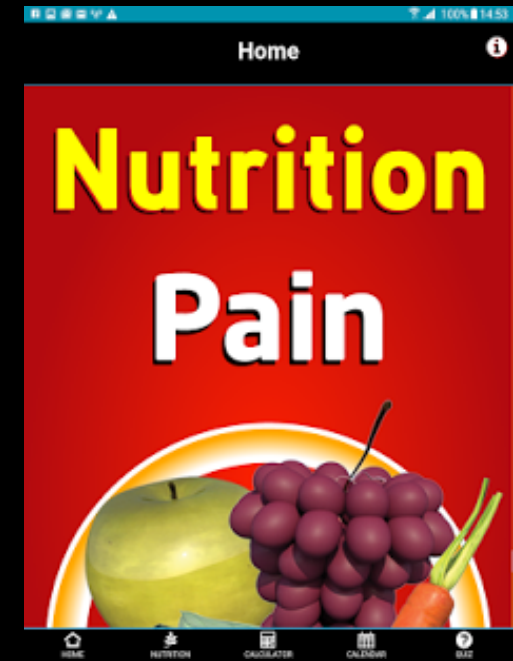
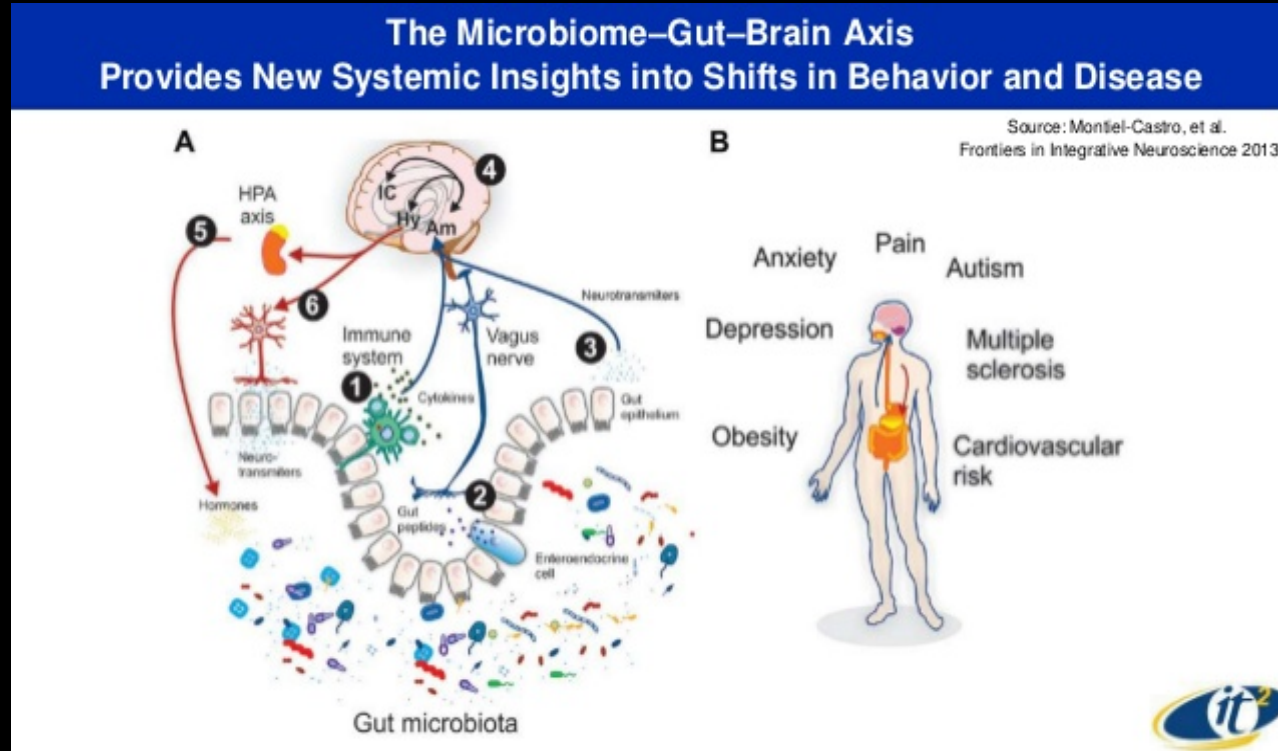
# NUTRITION & PAIN

## Fundamentals:

- Health weight
- Low-inflammatory
- Low-allergenic
- Plant based

## What's New?

Microbiome



# Heather Tick, MD

---

Gunn-Loke Professor of Integrative Pain Medicine, Clinical Associate Professor of  
Family Medicine, Anesthesiology & Pain Medicine  
University of Washington

Integrative Pain Management and the Role of Nutrition  
<http://heathertickmd.com/>

Twitter: @HeatherTickMD

Facebook: <https://www.facebook.com/heathertickmd>

LinkedIn: <https://www.linkedin.com/in/heather-tick-3059655/>

Doximity: <https://www.doximity.com/cv/heather-tick-md-1>

# OTHER THERAPIES/CONSIDERATIONS/RESOURCES

---

## COMPLEMENTARY THERAPY (Acupuncture, massage, biofeedback)

- **PIP** – a wireless biofeedback device which detects electrodermal activity (EDA). It works together with apps on your smartphone or tablet to help you manage, understand and with regular use, learn to manage stress. Download one of four companion apps. <https://thepip.com/en-us/>
- **Heart Math** - a wireless biofeedback device which uses HRV coherence training, which has been shown to reduce and prevent the negative effects of stress including fatigue, exhaustion sleep disruption, and anxiety. Download the Inner Balance app. <https://www.heartmath.com/>

# OTHER THERAPIES/CONSIDERATIONS/RESOURCES

---

## COMPLEMENTARY THERAPY (Acupuncture, massage, biofeedback)

- Biofeedback Provider Search: [www.bcia.org](http://www.bcia.org)
- [Pain Education - Self Care Strategies – YouTube](#)

Videos & audio files of guided body scanning, awareness of breathing meditations

<https://www.youtube.com/playlist?list=PLRMR9d2AGUQeaJdJCLaAKBZE81mmeUI52>

- **Guided Imagery and Meditation** <http://www.healthjourneys.com>

# OTHER THERAPIES/CONSIDERATIONS/RESOURCES

---

## PAIN RESEARCH & Clinical Trials

- National Pain Institute: <https://www.natpain.com/research/>
- NIH Pain Consortium: <https://painconsortium.nih.gov/>
- U.S. Department of Veterans Affairs: <https://www.research.va.gov/topics/pain.cfm>
- Stanford Systems Neuroscience and Pain Lab:  
<http://med.stanford.edu/pain/snapl.html>
- U.C. San Diego Department Anesthesiology – Pain Research:  
<https://medschool.ucsd.edu/som/anesthesia/research/clinical-science/pain-research/Pages/default.aspx>
- Mayo Clinic – Pain Research  
<https://www.mayoclinic.org/departments-centers/pain-medicine/minnesota/research>

# **LISA : 52 year old female w/fibromyalgia, chronic migraine, irritable bowel, mild depression, poor sleep**

---

## **Nutrition & Complementary Therapies:**

- Start with a food diary, identify symptoms with certain foods (IB, migraine, fatigue)
- Provide resources for low cost acupuncture, massage
- Provide recommendations self-help books

## **Tips:**

- ✓ Education is key
- ✓ Easy, reasonable changes
- ✓ List of schools (acupuncture/integrative medicine)



# Summary

---

- Importance & challenges of incorporating multidisciplinary/multimodal care in community pain management.
- Evidenced based rational for recommended therapies (online)
- Tips for improving treatment outcomes.
- Resources for free, low-cost treatments.

# Resources

---

## Pain support groups:

- American Fibromyalgia Association: <http://www.afsafund.org/>
- Complex Regional Pain Syndrome foundation: <https://rsds.org/>
- American Chronic Pain Association: [www.theacpa.org](http://www.theacpa.org)
- American Pain Society: [www.americanpainsociety.org](http://www.americanpainsociety.org)
- Arthritis Foundation: [www.arthritis.org](http://www.arthritis.org)
- Arthritis Society: [www.arthritis.ca](http://www.arthritis.ca)
- Biofeedback Provider Search: [www.bcia.org](http://www.bcia.org)
- Mount Sinai Beth Israel Hospital: [www.stoppain.org](http://www.stoppain.org)
- National Center for Complementary and Alternative Medicine: <https://nccih.nih.gov/health>
- National Pain Foundation: <http://www.thenationalpainfoundation.org>
- Veterans Administration: <https://www.va.gov/painmanagement/>





# The Village

**Pain**Week®



# Thank You

---

[Tmallick@stanfordhealthcare.org](mailto:Tmallick@stanfordhealthcare.org)

 @tmallic

 <https://www.linkedin.com/in/theresa-mallick-searle>



# Selected References

---

1. Dear BF, Gandy M, Karin E, et al. The pain course: A randomized controlled trial examining an internet-delivered pain management program when provided with different levels of clinician support. *Pain*. 2015;156:1920-1935. *Australia Online Courses*
2. Friesen LN, Hadjistavropoulos HD, Schneider LH, et al. Examination of an Internet-Delivered Cognitive Behavioural Pain Management Course for Adults with Fibromyalgia: A Randomized Controlled Trial. *Pain*. 2017 Apr;158(4):593-604.
3. Gauthier K, Dulong C, Arg  ez C. Multidisciplinary Treatment Programs for Patients with Chronic Non-Malignant Pain: A Review of Clinical Effectiveness, Cost-Effectiveness, and Guidelines – An Update. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2019 May 10.
4. Mann EG, et al. What Are the Barriers and Facilitators for the Self-Management of Chronic Pain With and Without Neuropathic Characteristics? *Pain Manag Nurs*. 2017;18(5):295-308.
5. Perry J, VanDenKerkhof EG, Wilson R, Tripp DA. Guided Internet-based Psycho-educational Intervention Using Cognitive Behavioral Therapy and Self-management for Individuals with Chronic Pain: A Feasibility Study. *Pain Management Nursing*. 2017;18(3):179-189.
6. Rod K. Finding Ways to Lift Barriers to Care for Chronic Pain Patients: Outcomes of Using Internet-Based Self-Management Activities to Reduce Pain and Improve Quality of Life. *Pain Res Manag*. 2016; 2016: 8714785.

## Selected References

---

7. Schultz R, Smith J, Newby JM, et al. Pilot Trial of the Reboot Online Program: An Internet-Delivered, Multidisciplinary Pain Management Program for Chronic Pain. *Pain Res Manag.* 2018 Sep 5;2018:9634727.
8. Smith BE, Hendrick P, Smith TO, et al. Should Exercises be Painful in the Management of Chronic Musculoskeletal Pain? A Systematic Review and Meta-Analysis. *Annals of Surgery.* 2017;51(23):1679-1687.
9. Spijkerman MPJ, Pots WTM, Bohlmeijer ET. Effectiveness of online mindfulness-based interventions in improving mental health: A review and meta-analysis of randomised controlled trials. *Clin Psychol Rev.* 2016 Apr;45:102-14.
10. Stein KF & Miclescu A. Effectiveness of multidisciplinary rehabilitation treatment for patients with chronic pain in a primary health care unit. *Scandinavian Journal of Pain.* 2013;4(4):190–197.
11. Vasudevan S. Multidisciplinary Management of Chronic Pain—A Practical Guide for Clinicians. Cham, Switzerland: Springer; 2015.
12. Zale EL & Ditre JW. Pain-Related Fear, Disability, and the Fear-Avoidance Model of Chronic Pain. *Curr Opin Psychol.* 2015;5:24–30.