# Yoga and Chronic Pain Management— Telling Our Story

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#### Abstract

Purpose: To examine the effects of an 18-month period of Yoga therapy on a single student suffering from chronic pain, specifically fibromyalgia, and to determine what measures are needed to report improvements. Improvements documented over a specific time period in a controlled setting can further the case for using Yoga as a primary means for managing fibromyalgia and chronic pain and also provide a background to establish a working dialogue with practitioners of Western medicine. Study Design: Using case-study research methods, an 18-month period of gentle Iyengar-based Yoga was implemented 1-2x/week in a woman suffering from fibromyalgia and chronic pain. Findings: The findings showed that the student steadily improved in many measures, including pain, body awareness, medications dose/type, body weight, cholesterol, hypertension, bone density, and subjective quality of life measures (increased confidence, improved body image). Conclusions: The information collected during this study provides positive evidence that can assist in the future development of chronic pain management with Yoga therapy. As Yoga therapists, we have a professional obligation to document the changes and improvements our Yoga students are experiencing in a controlled Yoga studio environment. Collecting this information is vital to establishing an open dialogue between practitioners of Western and Eastern medicine. Future case studies and research should include more diverse populations of chronic pain sufferers as well as the use of tools that quantify a student's intangible concerns and complaints (i.e., pain level, quality of life, psychological health, emotional health, ease of daily activity completion, etc.).

#### Chronic Pain and Yoga—Our Story

As a Yoga therapist, I see many students who come to Yoga seeking relief from pain. For the 50 million Americans who suffer from pain every year, relief is sought for mental, emotional, psychological, social, and spiritual hurt or pain, not simply the physical.<sup>1</sup> Treatments can include painkillers, injections, anti-inflammatories, electrical stimulation, ultrasound, massage, physical therapy, and manual therapy—all with varying degrees of success. The emotional and mental stress can be as painful and debilitating as the physical condition, exacerbating the existing chronic pain and leading to the depletion of immune and nervous system resources. Further compounding the problem, with each exacerbation the ability of the body to deal with neurological pain perception declines, leading to increased perception and decreased tolerance of pain.<sup>2</sup>

Even more confusing and frustrating, the symptoms of chronic pain vary widely, are diffuse, and change constantly.<sup>3</sup> The signs and symptoms of fibromyalgia, for example, a chronic pain condition characterized by inflammation of and tender points surrounding the joints and muscles of the body, can begin with generalized global pain, fatigue, muscle tenderness and trigger points, muscle twitching, and spasms.<sup>4</sup> Some victims of this syndrome may experience localized pain in addition to the global pain.

Starting with the head and working toward the feet, any or all of the following symptoms may present: headaches and sensitivity to light and/or sound, vision changes, numbness or burning in the face or extremities, chest and costal (rib) pain, and neuropathies in the hands and feet causing weakness and balance problems.<sup>5</sup> Fibromyalgia can also affect other systems of the body. Oftentimes, osteoarthritis, rheumatoid arthritis, irritable bowel syndrome, and/or chronic fatigue syndrome can accompany fibromyalgia. Lastly, the

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classic symptom of fibromyalgia is lack of REM sleep (as well as the deeper stages of sleep), which creates serotonin imbalance and can be responsible for depression, impaired memory, and/or anxiety.<sup>6</sup> The course of fibromyalgia ranges from mild and minimally involved to severe and completely debilitating.<sup>7</sup>

Unfortunately, our health care system does not allow for more than "acute" treatment of pain.<sup>8</sup> Once someone is deemed "chronic," the burden is on patients to "prove" they are in pain.<sup>9</sup> The woman in this case study underwent just such an experience. In addition, over a period of 23 years, she never once heard Yoga mentioned as a potential treatment method.

Yoga is one of the oldest pathways to holistic health and wellness, yet there are still few Western health care practitioners who embrace Yoga or are even familiar with its plethora of benefits. Experienced yogins and yoginîs and even less experienced Yoga practitioners are aware that Yoga can address problems throughout the human bodymind and thereby contribute to the effective management of pain. The case study that follows-providing 18 months of documented evidencestrongly indicates that Yoga therapy should be further explored for the management of chronic pain syndromes.

I believe that as Yoga therapists and professionals we have an obligation to establish a successful dialogue with other health care professionals. This may seem like a daunting task, but by recording and sharing the kinds of basic information I detail below, we can all work to make Yoga more accessible. I also encourage you to begin collaboration with a health care professional to determine what would be helpful for his or her patient population. The possibilities are numerous, as there are many different types of health care practitioners whose patients would benefit from Yoga: physical therapists, primary care physicians, neurologists, chronic pain treatment centers, obstetricians/ gynecologists, psychologists/psychiatrists—even the athletic trainers at your local high schools and universities.

#### Her Story

Sixty-one-year-old ST (fictitious initials) has suffered from fibromyalgia since 1980, when at 38 she learned she had "fibrositis" (fibrositis was the early name given to fibromyalgia). At the time, she had no idea what "fibrositis" was, other than it was to blame for her daily pain and fatigue.

ST slowly retreated from the activities she once enjoyed as her pain worsened. Her weight ballooned, as she tried to avoid pain and slowly found herself avoiding all activity. Her medical history became increasingly more complicated as her daily activities decreased to a bare minimum.

ST and her family painfully acknowledged the toll taken by the physical and emotional separation that occurs to most chronic pain sufferers as the pain and overwhelming fatigue consumed ST. Her previous life was a very healthy and active one. She could only watch in horror as a nightmarish, Twilight-Zone-like medical history unfolded before her. In addition to fibromyalgia, ST suffered from type II diabetes, polycystic ovarian disease, hyperlipidemia, hypertension, a right rotator cuff tear and impingement syndrome, osteoarthritis of the hands, atherosclerosis of the right hand posing as carpel tunnel syndrome, costochondritis, and finally in 1990 a radical mastectomy from breast cancer.

ST's pain impacted her life in every way imaginable. Some days, she said, "I could not even get out of bed. I was scared to move, because I was scared of hurting. Even when I didn't move, the pain would increase anyway, which pushed me further into a life of fear and confusion."

ST came into my office for Yoga following 23 years of pain. She had a laundry list of medications and repeated unsuccessful attempts at "pain management." Fortunately, her motivation level was high. Unfortunately, ST was angry, addicted to her pain, and dependent on her ever growing list of medications. She decided to try Yoga because she had finally gotten "mad" enough to do something about her debilitating pain and fatigue. ST's doctors had never offered any detailed advice beyond "Get out and exercise, eat less, and relax." Furthermore, Yoga had never been offered as a treatment option. This is one reason for establishing rapport with other professionals and for documenting the effects of Yoga practice. The purpose of the present case study is to increase awareness of the importance of case documentation, to provide a possible framework for case study documentation, and to encourage the Yoga community to become involved in this necessary work.

ST dedicated herself fully to Yoga study with determination to break out of the cycle of pain and her shell of separation from her family and her old life. For the next 18 months, 1–2 times a week, ST participated in 60minute individual Yoga sessions. She states, "Yoga is the only exercise or treatment that has ever worked— I no longer fear movement, I lost weight, and I have maintained my ideal weight; my doctors are amazed that my medical condition is continuing to improve despite my age."

#### Methods

A 61-year-old white female was started in a 1–2 times/week, 60minute, Iyengar-based Yoga program. When she began the program, she had fibromyalgia, chronic neck and low back pain, and type II diabetes, and she was a complete novice to Yoga.

# Data Collection and Analysis

An ongoing evaluation was initiated on June 28, 2002, with documentation recorded for each visit, noting specific *âsanas*, *prânâyâma*,

Condition	Before	After
Weight	181	145
Height	5'4''	5'4"
Body Mass Index	31.1	24.9 Less than 18.5: underweight 18.5–24.9: healthy range 24.9–30: overweight >30: obesity
Medication	Blood pressure (Avapro)Antidepressive for serotoninbalance (Imiprimine)Fibromyalgia (Trazadone)Reflux (Ranitidine)Cholesterol (Lipitor)Depression (Prozac)Diabetes (Metformin)Anxiety (Clonipin)Arthritis/Pain (NSAIDs)	<ul> <li>"M.D.'s report: Diabetes now under excellent control, and her fibromyalgia is basically gone."</li> <li>Blood Pressure (Avapro) Antidepressive for serotonin balance (Imiprimine, 25 mg) Diabetes (Metformin)</li> </ul>
Cholesterol	226 HDL 39 LDL 154	170 HDL 48 (Normal 45–100) LDL 99 (Normal 0–130)
Triglycerides	289.9	116 (Normal <150)
Bone Density Scan	2000/11: 1.087 gm/cm <sup>2</sup> (borderline osteopenia lumbar spine)	2002/12 (after 6 months of Yoga): 1.137 gm/cm <sup>2</sup> (within normal range; 4.6% change)
*Physical Pain		
Manifestation:	Measured worst/least	Current measures
Cervical spine	6/10 constant	0/10

#### Table 1: Findings

	10/10 monst	
	10/10 worst	
	4/10 least	0/10
Costochondritis	10/10 worst	0/10
	8/10 least	
Lumbar spine	10/10 worst	0/10 ("The only time I have
	5/10 least	pain is when I fail to
		practice good body
		mechanics or posture.")
Glenohumeral (shoulder)	10/10 constant, had an MRI	0/10 ("The only time I have
joint	that diagnosed a right	shoulder pain is when the
	rotator cuff tear. "I was a	weather gets very cold,
	surgical candidate for	which flares up my arthritis,
	rotator cuff repair."	or when I use poor lifting
		mechanics.")
Thenar (thumb) imminence,	8/10 constant, unable to	4/10, persisting secondary
wrist	bear any weight on the	to the severe nature of her
WIISt	wrists, especially the right	condition resulting from
	side; she had a rare	remaining weakness and
	discovery of atherosclerosis	hypomobility; still showing
	in the arteries supplying the	improvement on a weekly
		basis
	right hand, which required	Dasis
	microsurgery; the	
	symptoms masked	
	themselves as carpal tunnel	
	syndrome for so long that	
	the thenar and hypothenar	
	imminences (pad of the	
	palm at the thumb and 5th	
	digit) had completely	
	flattened from severe	
	atrophy; she could not write	
	with her right hand on some	
	days and spent 2 years in	
	intermittent casts and/or	
	splints prior to her Yoga	
	work	
Treadmill Stress Test	Could not complete test	Completed test, and her
	Could not complete	M.D. reported she was in
	shopping errands or Yoga	much better cardiovascular
	session without fatigue and	condition than 12/01 and
	exhaustion	stated, "Whatever you have
		been doing, keep doing it."
		No difficulty completing
		activities of daily living,
		recreational activities, or
		Yoga program

and any other techniques used. Medical records, including quantitative analysis, also were obtained, covering a period of 18 months. The following measures were taken prior to, during, and at the conclusion of the program: weight, height, cholesterol, pain reports from every affected area, medications and dosage, triglyceride levels, bone density, and glucose levels.

#### Findings

As the data were reviewed (see Table 1), the measure of ST's success was directly proportional to her involvement in Yoga. ST underwent no other type of exercise during the 18-month period.

### Progression of Yoga Therapy

#### Months 1–4 Âsana

ST started with extremely gentle restorative *âsanas* and breath awareness practices. At the start of treatment, the subject was unable to tolerate any weight-bearing through the upper extremities without 10/10 pain through the right shoulder and bilateral wrists and hands.

Supine, prone, four-point, and chair-modified âsanas were introduced first, such as apânâsana (knees to chest pose), supta-pâdângushthâsana (hand to big toe pose) with strap, dvipâda-pîtham (twofooted pose), setu-bandhâsana (bridge pose), baby bhujângâsana (cobra pose), shalabhâsana (locust pose) with palms upturned secondary to severe forearm restriction, ardha-dhanurâsana (half bow pose) with tactile assistance and strap (full dhanurâsana without strap was accomplished by the end of month four), balâsana (child's pose) with head on blanket and arms at side,

cat (cakravâkâsana)/cow pose with blocks under hands, adho-mukhashvanâsana (downward facing dog pose) at the wall or with a chair, and shavâsana (corpse pose) with bolster under knees. ST continued to practice supine and prone *âsanas* prior to warm-up vinyasas for four months before her flexibility increased enough to progress to traditional sûrya-namaskâra (sun salutation). Shoulder openers also were introduced and included garudâsana (eagle pose, arms only) and gomukhâsana (cow pose, arms only) as well as two variations of openers I created.<sup>10-16</sup>

#### Months 5–8 Âsana

Âsana practice progressed after four months to include standing and seated postures. Added to the postures cited above were tâdâsana (mountain pose), uttanâsana (standing forward bend), ardha-candrâsana (standing half moon pose), utkatâsana (chair pose), modified sûrya-namaskâra (which followed a modified vinvasa warm-up: cakravâkâsana/cow, adho-mukhashvanâsana, ashtânga-pranam [caterpillar pose], bhujângâsana, balâsana), but they preceded the above *âsanas*. Also included were vîrabhadrâsana I and II (warrior pose I and II), trikonâsana (triangle pose), utthitapârshvakonâsana (extended side angle pose), and vrikshâsana (tree pose). Seated *âsanas* included sukhâsana (easy seated pose), dandâsana (staff pose), pascimottânâsana (seated forward bend), catushpadâ-pîtham (tabletop pose), jânu-shîrshâsana (head to knee pose), marîcyâsana (seated twist), ardha-matsvendrâsana (half lord of the fishes pose), and nâvâsana (boat pose). After 12 months, the practice of all postures was much improved, and ST no longer required blankets.<sup>17-22</sup>

#### Months 9–12 Âsana

All postures progressed, and ST needed only a single blanket as a prop for seated postures. No props were needed for shoulder openers. Hamstring length had normalized at 90 degrees of straight leg raise. Hip flexors were of normal length as well.

*Âsanas* added included *pasâsana* (noose pose), *parivritta-utthita-pâr-shvakonâsana* (prayer twist, or revolved triangle pose), extended leg stretch, static plank, *caturanga-dandâsana* (four limbed staff pose) from knees, *ardha-padmâs-ana* (half lotus pose), *adho-mukha-shvanâsana* (downward facing dog pose) honoring normal spinal curves, and forward bending *âsanas* without props.<sup>23–25</sup>

#### Months 13–18 Âsana

Ten *sûrya-namaskâra* (sun salutations) were completed, and added poses included *setu-bandhâsana* (bridge pose) balancing unilaterally, *matsyâsana* (fish pose), and *halâsana* (plow pose).<sup>26-28</sup>

### Prânâyâma, Mudrâs, and Bandhas

Initial breath awareness work was practiced for six months and included abdomino-diaphragmatic breathing.29 Jâlandhara-bandha was immediately introduced, as was uddîvâna-bandha. After six months, ST was able to demonstrate thoracodiaphragmatic breathing without anxiety; she was, however, unable to maintain this form of breathing during âsana and prânâyâma practice. After four months, nâdî-shodhana (alternate nostril breathing) was introduced, but a deviated septum made practice very difficult and in the early stages elicited panic symptoms. Ujjayî prânâyâma was introduced most recently when valsalva was no longer observed in *âsana* practice. *Mûla-bandha* was the last *bandha* introduced. *Mudrâs* introduced throughout were *anjali* and *jnâna*.<sup>30-38</sup>

#### Discussion

In a post-program interview with ST, she made the following statements about her 18-month journey doing Yoga practice.

#### General

"I know what I'm doing and what it's done for me—friends and family ask me [about it] all the time. They say, 'I can't believe what a turnaround you have experienced, and with having diabetes, fibromyalgia ... I can't believe it doesn't bother you.' I tell them, 'No, as long as I stick with Yoga.' It makes me feel so good when people notice how good I feel on the inside. My outer appearance has come in second compared to how I feel."

# Quality of Life and Shifts in Personality

"I am a lot happier, because I can get out and do something. I didn't go out before, because everything affected my pain—it was either too cold or too hot, too damp, too early or too late for my body. Now I know I can go out and do anything I want because I have overcome paying attention only to the physical aspects of my body—now I look at myself as a whole person. In fact, I can honestly say Yoga has taught me to look at the whole world differently now."

#### **Body Awareness**

"After I had breast cancer, I wouldn't stand up straight, I would

kind of lean over to the side of the mastectomy. I would avoid mirrors [due to] feeling vulnerable and disfigured. After these 18 months of Yoga, I actually watch myself and my posture constantly. I wear fitted clothing year round with confidence and I no longer lean over and hide. Before, I wasn't even aware of where I was in space; now I walk tall and with positive self-worth."

#### **Motivators**

"After 18 months of Yoga practice, I know the word 'boredom' does not exist in Yoga, because Yoga isn't a simple exercise program. There is no repetition and mindless movement. Yoga is never work for me; it is totally relaxing and energizing and always enlightening. I never know what we will be addressing in a Yoga session, and I always look forward to the challenge. I reached a turning point in my life when I realized that saying Yoga was just exercise was like saying a short-term diet is the answer to proper lifelong nutrition. Just [as] you don't 'just diet,' [but rather] change your eating habits, you don't 'just exercise' in Yoga, [but rather] you change your movement habits throughout every system of your body."

#### **Deepening Relationships**

In ST's words, with which many Yoga practitioners can agree, "This is the *only* type of exercise I've ever stuck with (or enjoyed) in my life, because it doesn't hurt me. Most importantly, the practice gives me peace. I can focus more clearly, and my friends and family clearly feel (and not just see) the difference when they are around me. Yoga teaches me the difference between pain and soreness, between injury and conditioning of the body. I sometimes used to think I was having a heart attack because of the severe chest, neck, and arm pain, and the anxiety and sheer panic that

# "This is the *only* type of exercise I've ever stuck with (or enjoyed) in my life, because it doesn't hurt me."

[accompanies] the pain. Now I know the difference between pain, disuse soreness, and the occasional arthritic ache because of the keen body awareness Yoga has given me. I'm in tune with my body now, and what's most important-I listen to it. Mentally, physically, emotionally, socially, and spiritually, Yoga has transformed me, and now I am a whole person. Yoga nourishes my body and mind and teaches me to honor my limits and at the same time challenge them. Coming from someone who suffered for 23 years and is now pain free, I want you to have hope, because Yoga can work for you too. I used to have pain of no less than 5/10 on the pain scale every day of my life, and most days it was 8/10. Some days I couldn't even get out of bed."

ST's exact concluding words ring very true, "Yoga worked for me, and it can work for you if you are studying under the direct guidance of an experienced instructor."

The sheer numbers of Americans suffering chronic pain (one out of every three suffer from a chronic joint problem or arthritis according to the Centers for Disease Control) underscores the importance of spreading the word about Yoga therapy. Geeta Iyengar, in her book *Yoga: A Gem for Women*, states, "Yoga can be done by all at any age. It is particularly beneficial to those over 40 when the recuperative power of the body is declining and resistance to illness is weakened."<sup>39</sup> Leon Chaitow, in his book *Conquer Pain the Natural Way*, states, "Yoga is more than simply an exercise system; it benefits the whole body in so many ways . . . the regular practice of Yoga brings about improvements in every system of the body."<sup>40</sup> The documented improvements seen in ST correlate with the benefits of Yoga found in other studies as well.<sup>41-43</sup>

### Conclusions

Findings from this study indicate a need for further research on the potential positive impact of using Yoga in the management of chronic pain and fibromyalgia. The question remains, however: How do we establish a more successful dialogue with Western health care practitioners?

First, consider the language that is used in Yoga. It is very poetically powerful and all encompassing, but from the Western practitioner's frame of reference, yogic language is not understood and can therefore be shunned. Speaking on behalf of the East, I prefer yogic language, as it enables me to learn more about myself. Speaking on behalf of the West, there is great power of persuasion in being able to objectively measure improvement in a student's progress. Yogins and yoginîs can "feel" the difference Yoga practice makes, but unless they can explain how the difference comes about their knowledge will have minimal benefit for certain sectors of the community.

There is one possible idea for helping to solve this Western conundrum—journaling. Documentation, as it is done in Western medicine, details a path from point A to point B. The Yoga therapist's journal can do likewise. Consider these guidelines:

- 1. Note the date, duration, and intensity of practice. Also note any subjective feelings your student may have—joy, sorrow, pain, fear, frustration, etc.
- 2. Note the *âsanas* or *vinyasas*, as well as *prânâyâmas* or breath awareness, you teach.
- 3. Note your focus or intent for the session. You may not start out with a goal, but the student's mental and physical condition will reveal themselves to you during the course of practice, and this should guide your approach.
- 4. Note any *cakras, bandhas, drishtis*, or *koshas* you may be including as part of your therapy.
- Note your student's reaction to and tolerance of the practice. Did any pain arise or resolve? Were some *âsanas* modified or discontinued? Was a *cakra* noted to be more in balance after practice?
- 6. Note what direction future sessions might take. Include your goals and/or your student's wishes. What specific limb of Yoga should be addressed next time?

Following is an example from ST's chart that you may use as a guide:

#### 11/13/02

*Prior to session:* not sore at all, feels great, mentally strong and positive

During session: started with 2 warm-up vinyasas (cat/cow/ adho-mukha-shvanâsana/ ashtânga-pranam/bhujângâsana/balâsana), progressed to shoulder openers (shoulder opener of my own creation using strap/ gomukhâsana arms/ garudâsana arms) emphasizing prevention of elbow hyperextension, then hip openers in kneeling lunge; 2 sûrya-namaskâra A's modified using 4-point stance to transition in/out of adho-mukhashvanâsana and uttanâsana; flow vîrabhadrâsana I & II. prasârita-pâdottânâsana seated and standing, nâvâsana 3 times, dhanurâsana, ardhaûrdhva-dhanurâsana, dolphin prep (only dropping to one forearm and pressing back up), ardha-padmâsana

*Post session:* tolerated very well without complaints; client is almost ready for *sûrya-namaskâra* with full step back to *adho-mukhashvanâsana*; focus on breath remaining calm and normal during all poses; no valsalva observed during 60 minute session

*Future sessions:* emphasize breath awareness

All of these considerations were part of my Yoga therapy with ST. I carefully monitored all of her bony landmarks and soft tissue responses during pose/repose in order to prescribe *âsanas*, *prânâyâma*, and meditation. ST now lives her life free of pain and with daily determination not to return to her previous life of chronic pain. She is a motivator for all those who currently suffer from a chronic pain condition, and she offers hope for renewal. Every chronic pain sufferer is an individual, and Yoga programs must always address an individual's deficits and pain manifestations, but common threads do emerge. This study helps to identify some of the common threads that may contribute to the tapestry of current chronic pain management.

For those who suffer pain, body awareness and control of the breath are paramount. Only by nurturing this awareness can a person learn to understand and care for his or her body. The study and practice of Yoga cultivates the necessary appreciation for the body in both its "broken" and whole forms and teaches students to embrace the entire experience.

Finally, a single case study such as this would be in vain if it did not lay any groundwork for further dialogue and inquiry. I therefore encourage you to sacrifice a small portion of your time weekly or monthly to speak with physicians, their assistants, physical therapists, psychologists, and so on. Invite Western medical practitioners to your studio, offer free classes for them and/or their employees, offer an open house, and/or send out a quarterly newsletter to inform them about Yoga's broad range of psychophysical benefits and include information about any group therapies or specialty classes you offer. Because health care in our country has become incredibly cost prohibitive, group therapy can offer an inexpensive, safe, and extremely beneficial method for long-term exercise programming. Lastly, you may want to look into the possibility of writing a monthly column in your local newspaper as I have done for several years now, outlining the many benefits of Yoga and Yoga therapy.

Most importantly, you must be prepared to speak the language of Western medical practitioners, to intelligently state the benefits of Yoga, and to answer questions that will require you to "navigate the sometimes hazardous waters between therapy and religion," as Georg Feuerstein puts it in his 1998 article "Yoga and Yoga Therapy."<sup>44</sup>

# For those who suffer pain, body awareness and control of the breath are paramount.

You may be ready to answer these difficult questions now, but what questions will you ask of Western health care professionals? I suggest the following: What kind of patients do you see? Are any of them considered chronic pain patients (if so, how many)? How many low back and neck pain, shoulder pain, and arthritis patients do you see (this being an opportune time to review Yoga's benefits)? May I offer a free session to you or a free group session for your staff to show you some of the therapeutic applications of Yoga I use to manage these conditions? More often than not, it is the staff who will send potential students your way, not the physicians themselves. I offer these simple questions to gently nudge you to think outside of your own studio or facility. We must engage the world of Western medicine professionally, intelligently, and with only the purest of intentions. It is my hope that we will all be spurred to take a definitive course of action and thereby serve to shine the healing light of Yoga the world over.

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# Foundations of Yoga Course

This sixteen-hour course explores the vast Yoga tradition, focusing on the birth, development, and teachings of Hatha-Yoga. The course instructor Liisa O'Maley shares the fruits of her many years of study and practice in a comprehensive and exciting format, based on The Yoga Tradition by Georg Feuerstein.

For information contact Liisa at 415-456-9944 or by email at liisa@foundationsofyoga.com.



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