

COURSE CURRICULUM

Application of Yoga As Medicine – 7 hr CME

Sunday, November 4, 2018

Yoga Sukham, 7001 Village Pkwy, Dublin, CA 94568

Life in Yoga Institute is accredited by the ACCME to provide Continuing Medical Education

All the MOC credits for the organizations below will be submitted through PARS, which is the login access provided by ACCME for ACCME accredited providers

ABIM-MOC Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 7 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

ABP-MOC - Successful completion of this CME activity, which includes participation in the activity, with individual assessments of the participant and feedback to the participant, enables the participant to earn a maximum of 7 MOC points in the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABP MOC credit.

A score of 70% or better is required in the evaluation instrument to qualify for ABIM-MOC and ABP-MOC credit.

ABA-MOC This activity contributes to the CME component of the American Board of Anesthesiology's (ABA) redesigned Maintenance of Certification in Anesthesiology™ (MOCA®) program, known as MOCA 2.0®. Please consult the ABA website, www.theABA.org, for a list of all MOCA 2.0 requirements.

A. COURSE SUMMARY

1. COURSE DESCRIPTION: The course is intended for physicians and other medical professionals including yoga therapists. The intent is to examine case studies and demonstrate yoga practices for a variety of health disorders including critical mechanism of action for specific practices. The course objectives are:

- Develop an approach of holistic understanding of disorders;
- Develop an approach of examining lifestyle and possibly integrating traditional medicine concepts to treat patients;
- Review complexity of individual cases to tailor yoga therapy;
- Understand the impact of specific yoga practices;
- Prepare to apply yoga therapy with patients with simple techniques.

This course is designed as a follow-up to an intro course in yoga therapy. While in general deep relaxation techniques of yoga can provide relief in almost any abnormal condition, there is a difference

between providing relief and a lasting cure. This is demonstrated in the cases reviewed and practices demonstrated and discussed.

Cases cover a wide variety of conditions: pain conditions including headache and musculo-skeletal, cardiovascular disorders, metabolic disorders, respiratory disorders, sleep disorders, etc.

Practices include deep breathing exercises, techniques of balancing the breath, vagal stimulation, spinal alignment, chakra vibrations, etc. All practices are designed so that they can also be done sitting on a chair in a clinical environment.

The course includes:

- Presentation of concepts and case studies, Discussions, Q/A;
- Introduction to simple practices that can be applied in regular clinical practice.

This information is designed for healthcare providers to:

- Implement lifestyle assessments in patient evaluation based on understanding of yoga.
- Evaluate the complexities of yoga therapy for specific disorders for patient-centered holistic recommendations.
- Prepare for limited implementation of yoga therapy in practice;
- Consider observation of yoga therapy in one of the Life in Yoga clinics towards advancing education in yoga therapy.

2. COURSE CONTENT :

<ul style="list-style-type: none">➤ Yoga session with practices used for therapeutic purposes – <i>Practice session</i>➤ Application of Yoga As Holistic Medicine – <i>lecture and Q/A</i>➤ Yoga for Stress Reduction, Vitality and musculo-skeletal Pain Conditions – <i>case discussions with demonstration</i>➤ Impact of Vagal Stimulation in a variety of disorders like planter fasciitis, diabetes, pain conditions, and sleep disorders, etc. – <i>case discussions with demonstration</i>	<ul style="list-style-type: none">➤ Yoga Therapy for Cardiovascular Disorders – <i>case discussions with demonstration</i>➤ Yoga Therapy for Asthma – <i>case discussions with demonstration</i>➤ Yoga Therapy for Diabetes and Obesity – <i>case discussions with demonstration</i>➤ Preparing to Implement Yoga Therapy in Practice – <i>summary lecture, practice or demonstration & Q/A</i>
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3. FACULTY – C. Rajan Narayanan PhD, C-IAYT Executive Director, Life in Yoga Institute

4. COURSE ATTENDANCE LOGISTICS

COURSE DIRECTOR: Rajan Narayanan, 301-526-8308

LOCATION: Yoga Sukham, 7001 Village Pkwy, Dublin, CA 94568

Meals: Vegetarian lunch without onion or garlic will be provided. Refreshment in the morning and afternoon will also be available. If there are any specific requirements for individual participants, we can make a request to the facility at least one week before the program. However we cannot provide any guarantee on what level of customization the hotel can accommodate with food service.

Parking: Free parking is available at the facility.

B. DISCLOSURE

All the faculty/speakers, and the planning committee members have declared:

- That they have no financial relationships with any commercial interests in the past 12 months;
- They will not accept financial remuneration directly from any commercial supporter for this program;
- They will uphold academic standards to insure balance, independence, objectivity and scientific rigor in their roles in this program.

C. COURSE DETAILS

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1. COURSE AGENDA AND SCHEDULE

The timing for each agenda item is approximate. Depending on disorders and cases of greater interest to participants, with maximum education value in mind 5 to 10 minutes may be moved from one session to the other.

<u>Timing</u>	<u>Activity</u>	<u>Lead</u>
7:00 to 7:20 am	Check-in/Registration	
7:20 to 7:30 am	Intro to Course and requirements for CME	<u>Narayanan</u>
7:30 to 9:00 am	Practice: Yoga session with practices used for therapeutic purposes	
9:00 to 9:30 am	Refreshments/Breakfast Snack	
9:30 to 10:30 am	Lecture: Application of Yoga As Holistic Medicine	<u>Narayanan</u>
10:45 to 11:30 am	Case Discussions with Demonstration: Yoga for Stress Reduction, Vitality and musculo-skeletal Pain Conditions	<u>Narayanan</u>
11:45am to 12:30 pm	Case Discussions with Demonstration: Impact of Vagal Stimulation in a variety of disorders like planter fasciitis, diabetes, pain conditions, and sleep disorders, etc.	<u>Narayanan</u>
12:30 to 1:30 pm	Lunch	
1:30 to 2:10 pm	Case Discussions with Demonstration: Yoga Therapy for Cardiovascular Disorders.	<u>Narayanan</u>
2:20 to 3:00 pm	Case Discussions with Demonstration: Yoga Therapy for Asthma.	<u>Narayanan</u>
3:10 to 3:50 pm	Case Discussions with Demonstration: Yoga Therapy for Diabetes and Obesity.	<u>Narayanan</u>
4:00 to 5:00 pm	Lecture, Q/A, Practice or Demonstration: Preparing to Implement Yoga Therapy in Practice	<u>Narayanan</u>
5:00 to 5:30 pm	Taking Quiz for MOC and Completing CME formalities	<u>Narayanan</u>

3. DESCRIPTION OF PROGRAM SEGMENTS

7:30 to 9:00 am Yoga session with practices used for therapeutic purposes – Practice Session

The practice session is designed to cover all the simple practices that we will discuss in this course to conduct therapy with patients in any clinic, simply seated on a chair – for this course purposes mats or chair may be used.

Following are the specific practices that will be covered that are used in therapy:

- Spinal Alignment practices
- Bhastrikaa Pranayama – Slow deep breathing
- Anulom-Vilom (Naadi Shodhana) Pranayama – Alternate Nostril Breathing
- Ujjayi Pranayama – Vagal stimulation breathing
- Bhramari – Humming
- Baahya Kumbhaka – Exhaled holding with 3 locks
- Chakra Vibrations – Sound vibrations

9:30 to 10:30 am Application of Yoga As Holistic Medicine – Lecture and Q/A

This opening lecture serves to quickly recap the concepts touched on in Yoga as Medicine course, and goes into the details of reviewing patient intake form with medical history, lifestyle and bio-meridian reading and determining suitable therapy for each situation. Ayurvedic and Chinese Medicine concept of bio-meridian measurement by using three fingers is instructed while also explaining the use of Electro-Photonic Imaging for the same purpose. Efficacy of practice intervention can be tracked immediately by checking the bio-meridian. These discussions are based on Narayanan et.al. paper on Bioenergy and its Implication for Yoga Therapy. Following are brief points addressed:

- Treating the Whole Person
- Health Philosophy of Yoga and Traditional Medicine – Health is Lifestyle Management
 - Ayurvedic Concepts
 - Being true to role in cosmic flow – violation leads to stress and ill-health
 - Addressing root cause: physical versus mental issues
 - Pulse reading with three fingers and also with Electro-Photonic Imagin
- Evidence-based Medicine Approach of Yoga therapy – focus on local stimulation and global relaxation
- Life in Yoga Approach of Yoga Therapy – disease analysis; lifestyle analysis; bioenergy analysis and application model based on disease analysis in terms of area of weakness: musculo-skeletal, biochemistry, gene expression, immunity and vitality.
- Intake form Review

- Yoga should not be understood as a set of exercises, but rather stimulation of communication channels that result in therapeutic effect. Once one understands this, one can adapt exercises to situations to create the suitable stimulation.

10:45 to 11:30 am Yoga Therapy for Stress Reduction, Vitality and Musculo-skeletal Pain Conditions – Case Discussions and Demonstration

Fives cases are discussed and associated practices are demonstrated and practiced together:

- Vitality reinforcement that eliminates pain, stiffness or fatigue – Two cases of fatigue are examined – the cases of a 49 year-old mother and school teacher and a 54 year-old male bio-medical researcher. The teacher feels tired and disoriented without a late afternoon nap daily, whereas the bio-medical researcher has general feeling of tiredness. Both are treated with slow deep breathing and in a few weeks overcome their issues. However the differences in the cases are points of instruction with regard to yoga therapy and mechanism of action.
- Psychosomatic elements of fatigue and musculo-skeletal pain are examined. Two levels of stress are recognized in yoga: general stress related to a lot of things to do or over worrying; and a deeper level of stress that may be related to trauma or some deep rooted objections or expectations that are not resolved and have the appearance of mental health concern. We take the case of a 60 year-old woman (D14) who is in the care of a pain management physician along with medications for depression, and a 50-year old (T11) who has a dissatisfied marriage situation of 27 years that is not getting resolved. Both have psychosomatic manifestation of pain in the body. This is resolved by Chakra vibrations to take care of the psychological part and a breathing exercise to deal with the somatic element for complete recovery.
- Spinal connection to stress and headache is examined with the case of a chronic idiopathic headache case – a 44 year-old male. Spinal alignment is recognized as the problem and a gentle spinal alignment exercise results in immediate impact and complete removal of the pain in 2 weeks.
- Subject to time availability osteo-arthritis case may also be presented.

11:45am to 12:30 pm Impact of Vagal Stimulation in a variety of disorders like planter fasciitis, diabetes, pain conditions, and sleep disorders, etc. – Case Discussions and Demonstration

We examine the role of vagal stimulation (Ujjayi pranayama) in a variety of cases and demonstrate the practice. Vagal stimulation, we surmise impacts the afferent nerves, and seems to be associated with a wide range of conditions affecting different organ functionalities.

- Plantar Fasciitis (C46) – 43 year-old female, veterinary surgeon, diagnosed as having plantar fasciitis. She attributed it to being on her feet for the whole day when it was mild, and the problem was particularly disturbing at night disturbing good sleep. Normally fascia is not associated with nerves, although there are nerve endings in the fascia. We identified it as a

weakness in the afferent nerves and with vagal stimulation she completely recovered in two weeks. We examine the ramifications of this understanding.

- Diabetes (H508) – 69 year-old female diagnosed with diabetes at the age of 55 and presently on two diabetes medications and medications for hypertension, hyperacidity, cholesterol and hypothyroidism. With all her medications, she was observing a certain puzzling phenomenon. After dinner and her diabetes medication around 6 pm, she would find her sugar levels below 100 mg/dL around 9 pm. Then upon waking up the fasting glucose would be between 130 and 160 mg/dL. This is a well-known phenomenon of liver storing sugar, but unable to control it in sleep, releases it into the blood supply. With vagal stimulation this was resolved.
- Eliminating Snoring (Case H512) enabled by vagal stimulation
- Eliminating Sleep Apnea (Case H500) enabled by vagal stimulation
- Rheumatoid Arthritis (A251) impact significantly reduced by vagal stimulation
- Multiple Sclerosis (H15) significantly helped to restore normalcy in living.
- Left Atrium Hypertrophy is often associated with heart failure potential with pressure increasing in the lungs given the deoxygenated blood being pumped from the right ventricle into the lungs is not flowing fast enough as oxygenated blood to the left atrium. The role of vagal stimulation is discussed.

1:30 to 2:10 pm Yoga Therapy for Cardiovascular Disorders – Case Discussions and Demonstration

Heart reversal evidence by Dean Ornish and Sanjay Manchanda is reviewed and 3 cases are discussed. The cause of CVD as a lifestyle factor is also discussed.

2:20 to 3:00 pm Yoga Therapy for Asthma – Case Discussions and Demonstration

The work of Dr. Nagaratna from 1985 published in the British Medical Journal is discussed and two cases of Asthma are analyzed. The following dimensionalities are discussed:

- Psychological or somatic stress
- Rapid changes in Pressure and Temperature
- Allergic reactions and special role of sinuses

Role of spinal and breathing exercises, sound vibrations and meditation is discussed.

3:10 to 3:50 pm Yoga Therapy for Diabetes and Obesity – Case Discussions and Demonstration

Half a dozen cases of diabetes are presented discussing the roles of stress, sleep, CNS, PNS, Thyroid, Reproductive and other Endocrine imbalances, and Pancreas are discussed. Depending on the peculiarity of each case specific yoga therapy interventions are discussed. Yogic approach to obesity is also discussed.

4:00 to 5:00 pm Preparing to Implement Yoga Therapy in Practice

This is intended as a final summary of the course with a focus on answering questions of the participants towards addressing considerations for participants to implement yoga therapy in their patient practice. These may include

- Applications of different types of protocols. For clarifications additional demonstration or practice may be included if required.
- Applications for different diseases/disorders are discussed and clarified and conditions not discussed earlier can be addressed. This can include use of yoga in palliative care and hospice.
- Additional discussions beyond the previous course discussions to bring yoga therapy into practice are discussed – including Legal, Economic, Logistical, Patient Capacity and Patient Behavioral Considerations.
- Planning further education

Time permitting, some of the key practices may also be done together.

Following this session, the quiz to meet the MOC requirement is administering. It requires 70% or more of correct answers to get MOC credits.

3. REFERENCES

A. GENERAL TEXTS & REFERENCES

TEXT FOR UNDERSTANDING LEVEL OF YOGA THERAPY RESEARCH: “Principles and Practice of Yoga in Healthcare” by Sat Bir Khalsa, Lorenzo Cohen, Timothy McCall and Shirley Telles, Handspring Publication 2016

TEXT FOR UNDERSTANDING PERSONAL APPLICATION OF YOGA THERAPY: “Yoga Therapy, Ayurveda and Western Medicine – A Healthy Convergence” by Dilip Sarkar

Additional Reference Book:

“Yoga Therapy and Integrative Medicine: Where Ancient Science Meets Modern Medicine” – March 16, 2015 by Larry Payne Ph.D. (Author), Terra Gold M.A.LAc. (Author), Eden Goldman D.C.

Journal References:

Bioenergy and its Implication for Yoga Therapy.

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Dr. Dean Ornish's Program for Reversing Heart Disease

Dean Ornish

Ballantine Books, New York

Retardation of Coronary Atherosclerosis with Yoga Lifestyle Intervention

Manchanda SC, Narang R, Reddy KS, Sachdeva U, Prabhakaran D, Dharmanand S, Rajani M, Bijiani R
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2. FACULTY PROFILE

C. Rajan Narayanan, Ph.D., Executive Director, Life in Yoga Foundation and Life in Yoga Institute

Dr. Narayanan serves as a yoga therapy clinician and researcher treating patients in clinics in Maryland, Texas and Arizona, while also serving as the administrator for Life in Yoga Institute, including the role of CME Director. He is a founder and inspiration behind Life in Yoga Foundation and Institutes, non-profits formed and active in the Washington metro area. He also serves as the Secretary and a Board member of the Council for Yoga Accreditation International, an international body with membership consisting of the leading yoga institutions of the world, that serves to establish accreditation standards for yoga education.

His most recent publication is: [Bioenergy and its Implication for Yoga Therapy](#). Narayanan CR, Korotkov K, Srinivasan TM. Int J Yoga. 2018 May-Aug;11(2):157-165. doi: 10.4103/ijoy.IJOY_54_17. PMID: 29755226 reflects his research of several years.

He has developed many approaches and applications of yoga:

- Measured Yoga Therapy (and Unified System Medicine approach) that measures root cause of health issues through electro-photonic imaging based on Chinese Medicine and Ayurveda, and validates immediately the efficacy of various treatments by the same measurement;
- the 5 by 3 by 1 approach of the Life in Yoga Foundation based on the principles of Asthaaga Yoga and the teachings of the Yoga Sutras of Patanjali. Based on these principles he has developed Gentle Yoga as a powerful practice accessible to all, CRE Breath and Dance Yoga that would appeal more to younger and more energetic people.
- He has actively researched different aspects of yoga and has developed many more techniques over the last many years. [Spinal alignment techniques, Meditation techniques, Psychological cleansing techniques; Mudras]

He began teaching Yoga in Washington area temples in January 1998, after Swami Bua of New York City completed a two week course in Hatha Yoga and Praanayaama. He started his practice with TM from Maharishi Mahesh Yogi's Institute in 1981. Thereafter between 1993 and 1995 he completed coursework on Hatha Yoga, Praanaayaama, and other Raaja Yoga practices at the Satchidananda Ashram in Yogaville, Virginia. Since 1990 he has been a student of Vedas and other Hindu scriptures, and in stages has also studied all the major religions of the world. In 1998 he became a Reiki Master and subsequently learned Kriya Yoga techniques of the Lahiri Mahashay lineage.

Outside the field of Yoga, Dr. Narayanan has worked as a marketing consultant and has served as an adjunct faculty in the business school of Georgetown University and other local Universities. Prior to that, in New York he has worked for American Express and BBDO Worldwide in roles of marketing analysis and strategic marketing. He was a full time faculty at the State University of New York at Cortland from 1985-87. He has Ph.D. in Economics from the State University of New York at Stony Brook.