

Course Faculty

Sat Bir Singh Khalsa, Ph.D., Visiting / Adjunct Faculty, VaYU, Assistant Professor of Medicine, Harvard Medical School (HMS), Associate Neuroscientist, Brigham and Women's Hospital (BWH).



Sat Bir Singh Khalsa, Ph.D. is Director of Yoga Research for the Yoga Alliance and the Kundalini Research Institute, and an Assistant Professor of Medicine at Harvard Medical School. He has conducted scientific yoga research since 2001 on yoga for insomnia, stress, anxiety disorders, and workplace and school settings and is a practitioner/instructor of Kundalini Yoga since 1973. He coordinates the annual Symposium on Yoga Research, is editor-in-chief of the International Journal of Yoga Therapy, medical editor of the Harvard Medical School special report [Introduction to Yoga](#), and chief editor of the medical textbook [The Principles and Practice of Yoga in Health Care](#). He is a world-renowned yoga researcher, collaborator, author, and speaker.

Research Narrative – Faculty Statement

I am an Associate Neuroscientist in the Division of Sleep and Circadian Disorders at BWH and an Assistant Professor of Medicine at HMS. I am also a Research Associate at the Benson Henry Institute for Mind Body Medicine at MGH and a Research Affiliate at the Osher Center for Integrative Medicine at BWH. My area of excellence is investigation and my significant supporting activity is Education of Patients and Service to the Community. The current major focus of my effort at BWH and HMS is in basic and clinical research on yoga. I also devote international effort to promotion of yoga research and to public education about the biomedical science and research on yoga, with the remaining effort devoted to Harvard teaching and administration.

I previously conducted biological rhythms research resulting in important findings on the cellular and psychophysiological characteristics/mechanisms of circadian rhythms and sleep, with publications in leading journals, including PNAS, J Neurosci, and J Physiol. My clinical research on yoga has included NIH-funded clinical trials of the efficacy of yoga for sleep and insomnia, and Department of Defense-funded research on yoga for post-traumatic stress disorder. I have conducted research funded by NIH and the Kripalu Center for Yoga & Health on yoga for stress and anxiety disorders, including chronic stress, performance anxiety, and generalized anxiety disorder. This latter research has culminated in the successful completion of a NIH-funded multi-site trial showing clinically relevant improvements, the central findings of which are published in JAMA Psychiatry, with subsequent analyses and manuscripts in preparation. Overall, this research has indicated that yoga interventions have clinically relevant efficacy, and therefore provide evidence for yoga as a viable complementary therapeutic intervention. I have also been involved in research evaluating yoga for mental health in public schools with adolescents, publishing some of the first randomized controlled trials of yoga in this field, including an NIH-funded trial on yoga for prevention of substance abuse. I have established a leadership role in this field of research as a result these efforts including review papers, academic symposia on yoga in schools, and current ongoing preparation as chief editor of a medical/research textbook on yoga for children and adolescents. Another

research initiative includes ongoing studies on the evaluation of yoga practices in occupational and workplace settings to address problems and risk factors related to burnout, stress, and mood impairment, including recent research on yoga interventions applied to BWH/HMS physicians and residents. I routinely attend academic research conferences internationally relevant to yoga research with keynote lectures and/or symposia, including the International Congress on Integrative Medicine and Health, and yoga research conferences in India by leading yoga research institutes.

I devote significant effort to domestically and internationally promoting and facilitating scientific research on yoga. I have served since 2010 as the founder and key organizer of the International Association of Yoga Therapists' annual Symposium on Yoga Research, an academic research forum for improving and promoting the field. I also serve as the Editor in Chief of the association's *International Journal of Yoga Therapy*, the only academic yoga research journal in the West and I am chief editor of the first and only medical/research textbook, The Principles and Practice of Yoga in Health Care, including contributions from international leading yoga researchers. I am currently leading a steering committee of international leading researchers in the formation of a scholarly academic association, the Society for Yoga Research.

I also devote effort to educating the medical community, the general public, and yoga practitioners and instructors on the biomedical research on yoga. I travel extensively presenting yoga research at academic institutions, research conferences, and yoga festivals and centers, averaging over 60 lectures and workshops per year. A significant venue for this effort is now through the Yoga Alliance, through which I am promoting research literacy to yoga instructors and the general public as the Director of Yoga Research. I curate an extensive collection of yoga research reprint citations on the Yoga Alliance website and have contributed to multiple webinars and video interviews.

My teaching at Harvard-affiliated courses has included lectures in Harvard CME courses, including the annual HMS CME courses on mind body medicine and sleep, in courses at Harvard University, to the integrative medicine fellows program at BIDMC, and in the recently formed resiliency program for first year HMS students. My largest teaching contribution is serving as lead coordinator of the monthly BWH and HMS research seminar program Sleep Grand Rounds since I initiated it in 1996. It includes lectures by local and internationally renowned sleep and chronobiology researchers and is an integral part of an NIH-funded fellowship training program which HMS trainees are required to attend. I serve as chair of the program committee and am responsible for the overall conduct of this program.

In summary, I have established international reputations as an established yoga researcher, and as an undisputed leader advocating for scientific yoga research and its dissemination.