

Science & Spirituality: East & West

26 June 2004, 10am - 5pm
Center for Indic Studies
University of Massachusetts Dartmouth
North Dartmouth, MA

- 9:00 - 10:00 Registration. Coffee, Tea, & Refreshments
- 10:00 - 10:05 Welcome (Bal Ram Singh)
- 10:05 - 10:30 Introduction to the Program (Jerry Solfvin)
- 10:30 - 11:15 Ashok Chabda, Meditation and Mental Health
- 11:15 - 12:00 Sukalyan Sengupta, Science & Spirituality: Twin Supports for Harmonious Understanding of Self and the World
- 12:00 - 12:30 LUNCH
- 12:30 - 1:15 Glen Rein, The Energetic Nature of Prana
- 1:15 - 2:00 Gowri Anandarajah, Spirituality in the Clinic
- 2:00 - 2:15 TEA BREAK
- 2:15 - 3:00 Jeffrey Rediger, Studies w/Indigenous Healers
- 3:00 - 3:45 Swami Yogatmananda, Life and Consciousness
- 3:45 - 3:50 STRETCH BREAK
- 3:50 - 4:10 Bal Ram Singh
- 4:10 - 5:00 Summing Up: Where do we go from here?

Invited discussants for Sci&Spir Conference 26, Jun 04 Listed alphabetically

- MICHAEL COHEN, JD
- Director of Legal Programs, Harvard Medical School Osher Institute
- SHOBHA DAS, Ph.D., Head of Zoology Department, G.S. P.G. College, Sultanpur , India
- VIJAI KRISHNA DAS, Ph.D., Reader, Kamla Nehru Institute of Physical & Social Science, Sultanpur, India
- KUMUDINI GUPTA, MA (kumudini-gupta@excite.com)
- Rev. RICHARD KELLAWAY, MA, STB (ishmael@empire.net)
North American coordinator, International Assoc. of Religious Freedom
- ERIK (RICK) LESKOWITZ, MD (Rleskowitz@pol.net)
Psychiatrist, Spaulding Rehabilitation Hospital, Harvard Med. School
- SHANTHI MUTHI
Yoga, Dance Therapy Instructor
- RABINDRA NATH PANDA (edu@indiacgny.org)
Consul for Education & Culture, Consulate General of India, New York
- ISHVAR PATEL
Private Business, Center for Indic Studies Advisory Board
- BAL RAM SINGH, PhD (bsingh@umassd.edu)
Biochemistry, UMass Dartmouth

- JERRY SOLFVIN, PhD (jsolfvin@umassd.edu)
Center for Indic Studies, UMass Dartmouth
- SUKALYAN SENGUPTA, PhD (ssengupta@umassd.edu)
Environmental Engineering, UMass Dartmouth
- MK SRIDHAR, PhD (drmkisridhar@yahoo.com)
Hindu Philosophy, Sanskrit, Hindu University of America
- K. SRINIGESH, PhD (ksrinagesh@umassd.edu)
Mechanical Engineering, UMass Dartmouth
- K.B. SUBBARAYUDU, PhD (subbarayudukb@rediffmail.com)

Science & Spirituality: East and West, a conference
Saturday, June 26, 10am - 5pm
Center for Indic Studies, UMass Dartmouth

Gowri Anandarajah (Brown Med. School, Spirituality in The Clinic)
Ashok Chabda (Arsha Vidya Institute, Meditation and Mental Health)
V.S. Misra (Lucknow University, Science & Spirituality in the East)
Jeffrey Rediger (McClain Institute, Studies of South American Healers)
Glen Rein (Quantum Biology Research Laboratory, Energetic Nature of Prana)
Swami Yogatmananda (Providence Vedanta Center, Life and Consciousness)

GOWRI ANANDARAJAH

Spirituality and Medical Practice: Incorporating Eastern and Western Concepts

ABSTRACT: In recent history, western medicine has been focusing all its energy on fully understanding and applying the science of medicine. Although this has resulted in tremendous advances regarding the treatment of many diseases, it has also resulted in a practice of medicine that is becoming more and more technologic, impersonal and economically driven. The suffering whole human being is at risk of being lost in the zeal for the latest advanced treatment of his parts. In response to this trend, patients are increasingly seeking alternative and complementary medical treatments in a search for a more holistic approach to their medical care. The last 10 years has seen an increased awareness in the mainstream medical literature of the important role of spirituality in medical care. Many physicians and scientists are attempting to clarify this relationship from a scientific perspective. Others are exploring ways in which to integrate spirituality into daily medical practice in order to better care for their suffering patients.

This presentation will focus on integrating spirituality into medical practice in the United States. It will start with a brief overview of the history of modern western medicine and a summary of the current status of the scientific research regarding spirituality and medicine. The remaining time will focus on the practical challenges and approaches to incorporating spirituality into daily medical practice. Given the multicultural nature of American society and the historic emphasis on the separation of church and state that exist here, an approach to medical care that draws from both eastern and western religious traditions and is sensitive to the needs of a wide range of people will be discussed. The presenter will draw from her lifelong interest in spirituality and her experience teaching medical students and residents about this subject. Participants will be

encouraged to add their knowledge and wisdom to the discussion. The presentation will end with a look to future directions and areas for study.

ASHOK CHABDA
Meditation & Mental Health

ABSTRACT: This study examined the effect of self-aware meditation on anxiety and anger in Indian immigrants living in the United States, and compared it with the effect of understanding of the self without meditation. Both treatments were based on the self as defined in the Vedas, the Hindu scriptures. One hundred and thirty-three subjects participated in this study. The subjects were divided randomly into two groups, a Self-aware Meditation group (SM) and a Self-knowledge Theory group (ST). This study was conducted over a long weekend at Arsha Vidya Gurukulam, a residential Hindu retreat in Saylorsburg, Pennsylvania.

The meditation group (SM) received 7 hours of guided meditation sessions and the theory group (ST) attended 7 hours of sessions on understanding the self without meditation. The instruments used to measure anxiety and anger were state and trait anxiety from the State and Trait Anxiety Inventory (STAI) and the State and Trait Anger Expression Inventory-2 (STAIX-2). All subjects in both groups were pretested on all these measures before the treatments, as well as after the treatments.

Meditation as well as theory classes, were equally effective in reducing state and trait anxiety as well as in reducing trait anger and trait anger-reaction, but not in reducing trait anger-temperament. The self-understanding classes without meditation were more effective in reducing trait anger-temperament. This paper is based on the research I conducted for my doctoral dissertation.

Sukalyan Sengupta, PhD
Science & Spirituality: Twin Supports for Harmonious Understanding of Self and the World

Abstract:

1. Science in Spirituality: Spirituality needs precepts and principles of science to rise from mere beliefs and dogmas to be a verifiable experiment.
2. Spirituality in Science: Science cannot be divorced from spirituality because increasingly it has to deal with situations where the subject/object separation is dissolving. For example, quantum physics, evolution, cosmology, etc.
3. Attribute needed to excel in science and spirituality: faith
4. The role of consciousness in science and spirituality, the concept of universal consciousness
5. The limitation of science if it dwells only at the sensate level. Many experiences are supra sensory, e.g., beauty, unity of existence, etc.
6. Two types of vidya: para and apara

GLEN REIN, PhD
The Energetic Nature of Prana

ABSTRACT: Eastern traditions, including Vedanta and Kashmir Shaivism, have sophisticated models of manifestation (involution) where matter (including the body) is created from Supreme Consciousness or the Self. The process involves transformations of Supreme Consciousness into "tattvas" or principles of (among other things) increasing density of energy. These traditions also describe the evolutionary process (and methods of its achievement), whereby involuted consciousness transforms back to Supreme Consciousness (Self-Realization).

In these models, prana, shakti and chiti are terms used to describe the aspects of consciousness which exists in all tattvas. Prana is considered the bridge between the mind and the body. Prana also exists in the body where it functions to regulate and control all physiological processes depending on which of its five sub-types are involved. Since prana originates from the Self, it is a higher aspect of consciousness and therefore controls the mind. Conversely, the mind can also control the flow of prana. The mind plays an essential role in this process being positioned between the Self and the body. Self-realization processes involving prana can effect the activation and movement of kundalini.

Parallels between the profound understandings of the East and contemporary Western physics can readily be drawn. Prana, shakti, chiti and kundalini can thereby be considered different forms of energy. Electromagnetic and acoustic energy can be considered dense forms of energy, since the physical sciences have now described other forms of energy which are more subtle in nature and have non-classical properties. Physicists describe how one form of energy can be transformed into another form of energy. Experimental evidence now exists that these subtle energies do in fact have a functional role in biological systems. According to David Bohm's model, the (subtle, energetic) implicate order is embedded within the (dense, physical) explicate order and the implicate order is composed of layers of increasing subtlety. Thus subtle energy can be embedded within electromagnetic energy. Experimental evidence also exists that electrical energy in the body, measured as DC potentials on acupuncture points, is under mental control. New nonlinear analytical methods have shown that electrical energy of the body contains subtle information within. Taken together, it becomes clear that Western sciences have finally evolved to the point where they can explain the wisdom from the Eastern traditions.

JEFFREY REDIGER, MD

Studies of South American Healers

SWAMI YOGATMANANDA

Life and Consciousness

ABSTRACT:

Introduction - The subject of Life and Consciousness has been studied by the physical and spiritual scientists since the earliest ages. In recent years it has become more and more evident that the deepest problems of science have their solution in the understanding of consciousness.

Studies of Pavlov - relationship between matter and emotions. The impression given by the results of these experiments is: what appear to be functions of life can be generated by inanimate matter and so there is nothing special about life.

Experiments of Sir J. C. Bose - examining the responses of plants, metals and minerals to various stimuli - they were similar to the responses of living beings; thus showing that

everything is living. His conclusion appears to be contradictory to that of Pavlov; but in essence they are same.

Max Delbrück's studies on virus - his Riddle of Life.

Schrödinger's "What is Life?" - Thermo-dynamic study of life and non-duality of consciousness. He quotes from Upanisads to substantiate the view that consciousness is life and is all-pervading.

Machine and Life. Growth of computer science and artificial intelligence. Turing's thinking machine.

Cloning - is it creating life? What constitutes individuality? Unity and variety; Problem of one and many. Rupert Sheldrake's experiments.

Ideas in Kena Upanisad - Instruments and the user. ONENESS of the existence; Consciousness is its nature.

Bhagavad-Gita - Ch. VII and XIII - lower (apara) nature and higher (para) nature. Emotions, intellect, ego are also classified as matter.

Manu-smriti - "The inanimate also are conscious and feel pleasure and pain."

Criteria of life; meaning of death. What remains when body dies? And what happens to that then? Ch. XV of Bhagavad-Gita. Experiencing the Pure Infinite Consciousness.

Conclusion: Our Goal and the means.

Directions

Visit the [UMass Dartmouth directions site](#) for information on how to get to the main campus. When you arrive, bear left and follow the road through a light to Parking Lot 6. Bear left at the dock and park behind the Admin Building, which will look like loading dock from that point of view. Enter the building through the loading dock and go to the third floor. There will be signs to guide you to the right room.