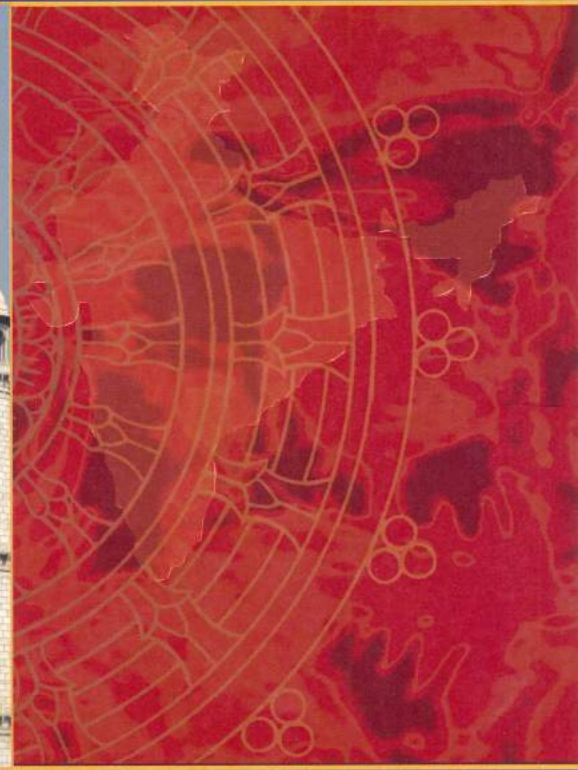
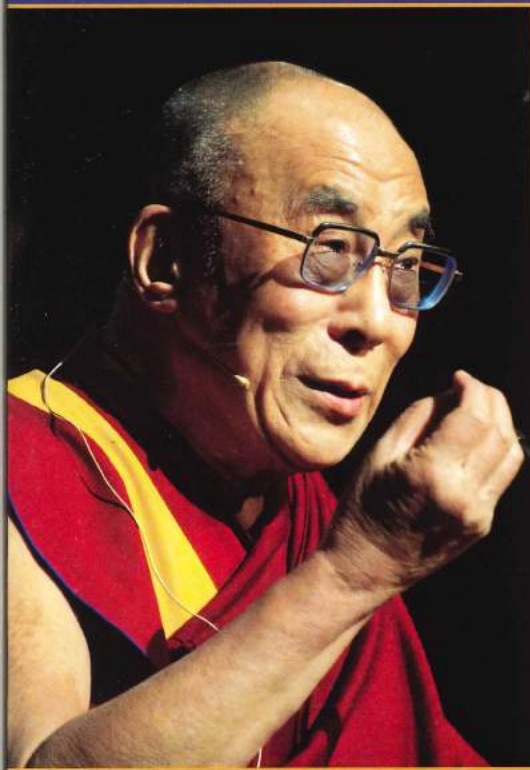




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Mind and Life XXII

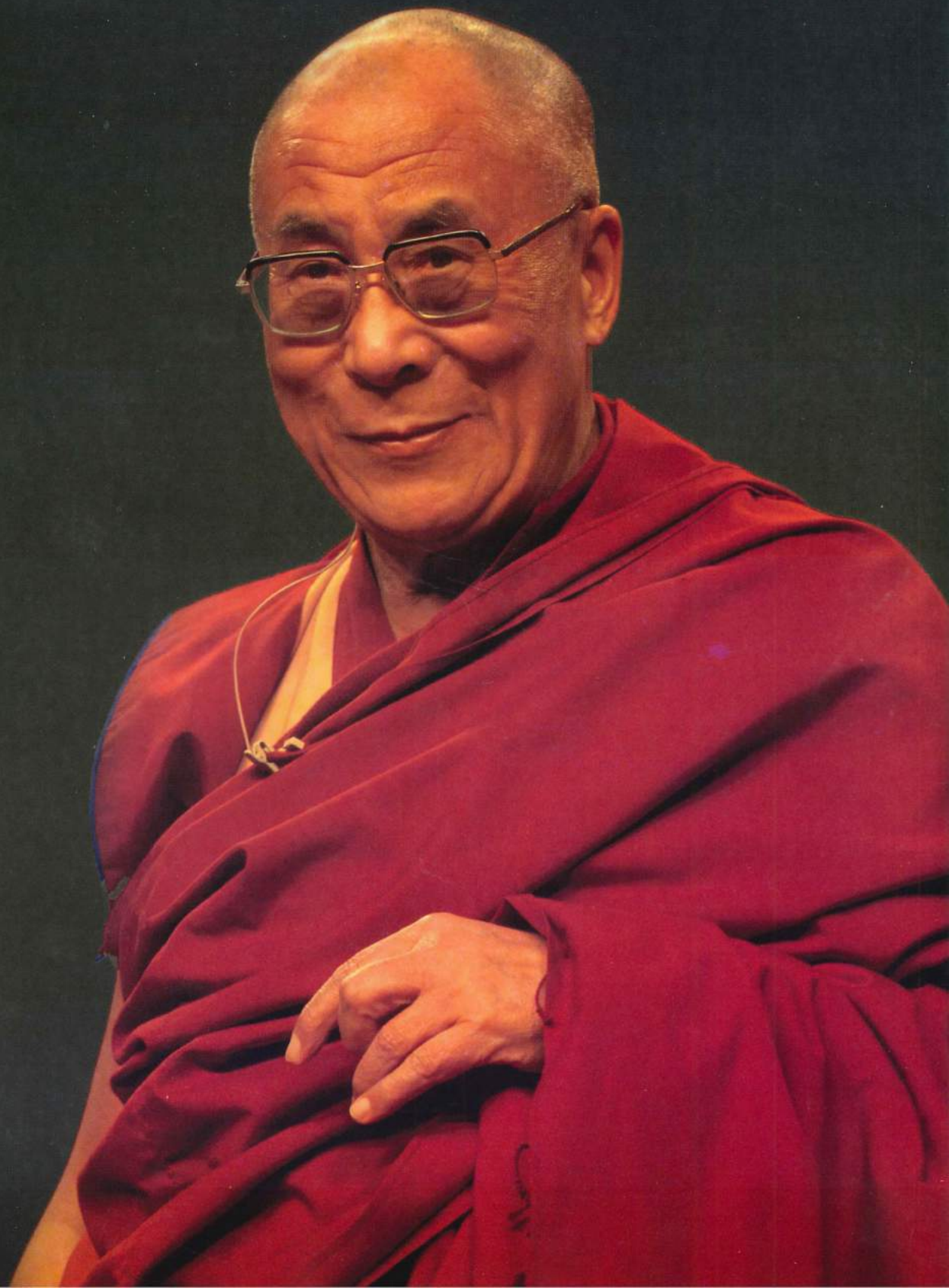
Contemplative Science:

The Scientific Study of Contemplative Practice
on Human Biology and Behaviour

Indian Habitat Centre, New Delhi, India • November 21–23, 2010

Conference Program

Co-Sponsored by
National Institute of Advanced Studies
The Foundation for Universal Responsibility of His Holiness the Dalai Lama
Central University of Higher Tibetan Studies
Bureau of His Holiness the Dalai Lama, New Delhi





Greetings and Welcome,

On behalf of His Holiness the Dalai Lama, the Mind and Life Board of Directors and our co-sponsoring institutions, we welcome you to *Mind and Life XXII: Contemplative Science, The Scientific Study of the Effect of Contemplative Practice on Human Biology and Behavior*.



The Mind and Life Dialogues began in 1987 as a joint quest between scientists, philosophers and contemplatives to investigate the mind, develop a more complete understanding of the nature of reality and promote well-being on the planet.

Over the past 23 years, these dialogues have cultivated collaboration and enriched the understanding of contemplatives and scientists by covering topics ranging from Physics and Cosmology to Neuroplasticity; from Altruism and Ethics to Destructive Emotions and Education.

Our work is not only limited to dialogue and understanding. More important is the need to translate this understanding into programs, interventions and tools that will bring tangible benefit into people's lives. Therefore, in 2000, we began the ambitious work of catalyzing new fields of scientific research to investigate the effects of contemplative-based practices on the mind, brain, behavior, the prevention and treatment of disease, and overall health and well-being.

Previous Mind and Life Dialogues have predominantly explored the benefits of Buddhist-based contemplative practices. The aim of this meeting is to showcase the emerging field of Contemplative Science, to present the existing research and to catalyze research on contemplative practices within India. The dialogue will broaden Contemplative Science research by examining practices from the Indian philosophical and cultural heritage including Vedanta, Jain, and Yoga.

Some of the questions that this conference will explore include:

- What are the philosophical foundations and perspectives of the rich Indian philosophical heritage? What practices have emerged?
- In Contemplative Science, what has been done over the last decade, and what findings have emerged from this relatively young field of research?

- How can the various practices be investigated scientifically, and what are the critical elements of each practice? What are the parameters that make these practices beneficial?
- What are the neuro-scientific findings that underline the benefits of practices, and how fruitful or even indispensable are collaborations between scientists and practitioners?

In the short time we have together, we will only begin to explore how we can cultivate the value of collaboration and encourage the skillful use of both contemplative and scientific techniques to investigate and understand the mind. It is our deepest desire that you become inspired to develop and expand this exploration in your own work.

We want to pay tribute to the memory of Francisco J. Varela, Ph.D., co-founder of the Mind & Life Institute, and express our deepest thanks to his legacy. Without his wisdom, dedication and commitment, we would not be here today.

We also want to offer a deep bow of gratitude to His Holiness the Dalai Lama, our planning committee, our dialogue participants and our co-sponsors: the National Institute for Advanced Studies (NIAS), Foundation for Universal Responsibility of His Holiness the Dalai Lama (FUR), Central University of Higher Tibetan Studies (CUHTS), the Bureau of His Holiness the Dalai Lama in Delhi, and the many financial sponsors, operations team members, and volunteers who have made this conference possible.

Welcome, with warmest regards,

R. Adam Engle
Chairman and Chief Executive Officer
Mind & Life Institute

Diego Hangartner
Chief Operating Officer and Director of
Mind and Life International
Mind & Life Institute



Conference Overview

Contemplative Science: The Scientific Study of the Effect of Contemplative Practice on Human Biology and Behaviour with His Holiness The Dalai Lama

The impetus for this Mind and Life meeting in New Delhi stems from His Holiness the Dalai Lama's wish to have a Mind and Life meeting in Asia, particularly India. His Holiness cares deeply about the Indian philosophical and cultural heritage. To this aim, this conference brings together scientists, philoso-

phers and contemplative scholars and practitioners to discuss the benefits of contemplative practice. In doing so, it provides a context for scientists and contemplatives in India to explore contemplative practices in the new, interdisciplinary ways that are currently emerging.

The meeting will be an opportunity for the investigation of the philosophical heritage underlying the practices. It is designed to speak to the scientific and contemplative communities in India, as well as the mainstream media, about the emerging field of Contemplative Science and its deeper implications.



Science and Contemplation: An Aerial Survey

A. Introduction

The natural sciences and contemplation are distinct disciplines: the first is devoted to the study of the external, objective world, the second to the study of the internal, subjective world.¹ Once we agree that both contemplation and science have special roles in the production of knowledge, we can start exploring the "why Contemplative Science?" question in some detail, especially when the science in question is neuroscience or cognitive science.

Two common, but faulty, strategies for approaching the dialogue between science and the contemplative traditions are:

1. **Scientific Validation.** Use scientific methods to "validate" contemplative traditions.
2. **Alternate Realities.** Assume the contemplative traditions have knowledge of different worlds or states of reality that modern science does not know about or acknowledge.

The impulse behind these attempts is valid, but it ultimately tilts the scales in favour of the dominant mode of thinking that has the most powerful tools, which at this time is the scientific mode.

This brief essay is addressed to people in both traditions who are genuinely interested in cross-cultural dialogue, who believe that we can come to a better understanding of the mind-brain-society interface by incorporating insights from the two traditions. Three possibilities for Contemplative Science come up for consideration:

1. **Contemplatives and contemplation as objects of scientific study.** Once we accept that contemplatives have discovered important aspects of human mind-brain function, it seems obvious to correlate those discoveries

using the third-person methods of modern science. In this approach, contemplatives are not only native informants, but collaborators in the scientific study of contemplation.

2. **The role of contemplation in scientific practice.** A common feature of many important scientific-technical problems, such as climate change and brain function, is complexity. It is almost a truism that the standard, reductionist mindset is inadequate for understanding these 21st century complex challenges. Conversely, it seems plausible that a contemplative bent of mind is a useful augmentation to scientific practice and can help us further understand this complexity by exploring motivation and the mental world.
3. **Contemplative theory meets scientific theory.** The philosophical traditions that underpin contemplative practice - such as the Buddhist, Hindu and Daoist traditions of Asia - are mostly free of the Cartesian dualist baggage that casts a shadow on cognitive science. Perhaps the most important impact of Contemplative Science will be in dislodging tacit assumptions and providing explicit new theoretical hypotheses that guide research.

B. The Overall View

Both traditions have a theoretical as well as a practical framework. Accordingly, a comparison of these systems needs to be vigilant and carefully differentiate theory and practice. There are two ways to approach the relationship between the contemplative traditions and science. One way is through the goals of these two disciplines; the other is through the motives of these two disciplines. We can sketch a "ladder of convergence" between science and contemplation, which says, in ascending order of convergence between the two:

- They are completely different forms of knowledge.
- They are complementary, but non-overlapping views of the same underlying reality.

¹The inner-outer division doesn't stand upon scrutiny, but it is an often used and useful division of labour between science and contemplation.



- They are two overlapping views of the same underlying reality. The results of science and the results of contemplation are interrelated.
- They are more or less the same.

As humans, not only do we disagree in our intuitions about the relation between science and contemplation, we might even disagree whether the ladder is the right ladder. It might be a better idea to look at the motives underlying these two traditions. In particular, both science and contemplation (when done right) undercut our "common sense anthropocentrism." Both stress a universe bigger than us; science does so by showing how human beings are just one species on one planet in one solar system in one galaxy and so on. Contemplation also destabilizes our obsession with a small self and selfhood in general. Arguably, what we need is a new Contemplative Science of mind, brain and human experience that borrows from the best of the two traditions.

C. Why dialogue with the mind-brain sciences?

A history of cognitive science is beyond the scope of this essay, but let us note that the abstract, computational model of the mind-brain is increasingly coming under question. Cognitive scientists in the fields of embodied cognition, situated cognition and ecological cognition have argued that the mind is not a formal, abstract system to be studied in isolation, but rather a concrete embodied structure situated within the nervous system, body and external environment of a living organism. It is this shift, from a dualistic metaphysics, where the (computational) mind is different from the (causal) body to a nondualistic metaphysics, that offers the most fertile ground for dialogue between science and the contemplative traditions. Mind-brain science is the scientific arena in which this shift is likely to revolutionise our self-understanding and perhaps the scientific domain in which contemplation has the most to offer.

There is an opportunity to develop a new language to understand the mind-brain that integrates the insights of science and contemplation. A good starting point to develop a new theoretical language for Contemplative Science is with the classical Indian *pramana* framework for understanding knowledge in terms of cognition. The *pramana* system is the common epistemological framework, in which are given the various means of attaining veridical grasp of the world. Different schools disagree on how precisely perception, reasoning, testimony, etc. function to deliver valid cognitions, and which are irreducible means of so delivering knowledge, but all agree that no claims can be made without proper use of this system. Instead of knowledge being the outcome of computation, the *pramana* theorists would argue that knowledge is a product of cognitions. From an empirical standpoint, there is the exciting possibility of correlating experiential accounts from the contemplative traditions with modern studies of brain activity and human psychology. While this empirical dialogue has progressed most in the study of Buddhist contemplative traditions, it should also expand to the study of the other Indian contemplative traditions as well.

D. Conclusions

Contemplative Science is an exciting new possibility for exploring the human world. Since ancient India and Greece, the Renaissance and the European Enlightenment, there has always been the ideal of the universal human. The recovery of this ideal is an important step towards engaging with the problems of the 21st century.

Of course, these questions are not of purely academic interest. For example, given the level of violence in the world directed toward humans and the non-human environment, there is an urgent need for understanding human nature. Considering our highly developed capacity for destroying human life and the environment, if we choose to preserve human and nonhuman life, we need to understand how the structures responsible for violence are created and sustained. It is possible that a purely scientific approach could solve these problems. However, there is increasing evidence that a prominent source of destruction flows from the faulty assumption that pure natural sciences, without profound understanding of the human mind and its workings, will provide a solution. Therefore, a better understanding of our human nature and the mental life through a contemplative view can help reduce violence. Contemplative Science will not make violence go away, but any decrease in violence — both structural as well as personal — is a goal worth striving for.

Text contributed by: Rajesh Kasturirangan, Muni Mahendra Kumar and Chakravarthi Ram-Prasad





Conference Sessions

INTRODUCTION AND WELCOME

Sunday, November 21, 2010 • 9:00–9:15 AM

SESSION ONE

OVERVIEW AND FRAMEWORK

Philosophical Perspectives from Hinduism and Buddhism

Sunday, November 21, 2010 • 9:15–11:00 AM

Presenters:

His Holiness the Dalai Lama

Scholar of Hinduism: Swami Atmapriyananda

Scholar of Buddhism: Thupten Jinpa

Scholar of Hinduism: Chakravarthi Ram-Prasad

Moderator:

Daniel Goleman

Interpreter:

Thupten Jinpa

Discussants:

Scientist: Richard Davidson

Contemplative Scholar: Geshe Ngawang Samten

Scientist: PN Tandon

Scholar of Hinduism: Chakravarthi Ram-Prasad

Numerous contemplative traditions originated in India, and they continue to be practiced through various forms of yoga, meditation and other contemplative techniques. A clear understanding of these traditions and their practices involves an inquiry into their rich philosophical heritage. HH the Dalai Lama will open this session with his reflections on the role that philosophy plays in contemplative practice. Next, two distinguished scholars—one from Hinduism and one from Buddhism—will discuss the ways that their traditions articulate the wider understanding of reality that is the context for contemplative practice. Emphasizing common roots as well as important points of divergence, they will address such questions as the nature of the mind and body, the ways that contemplative practices lead to personal transformation, the role that philosophy plays in guiding practice, and the centrality of ethics.

POST-SESSION DISCUSSION AND Q&A

Sunday, November 21, 2010 • 11:00 AM–12:00 PM





SESSION TWO

FOUNDATIONS FOR SCIENTIFIC UNDERSTANDING OF CONTEMPLATIVE PRACTICES

State of Research; Buddhism and Science

Sunday, November 21, 2010 • 2:00–4:00 PM

*Presenters:***His Holiness the Dalai Lama****Contemplative Practitioner: Matthieu Ricard****Scientist: Richard Davidson***Moderator:***Daniel Goleman***Interpreter:***Thupten Jinpa***Discussants:***Scientist: Wolf Singer****Contemplative Scholar: John Dunne****Scientist: Rajesh Kasturirangan**

Despite its youth, the emerging field of Contemplative Science has advanced considerably in the last decade, and many of these advancements are linked to progress in neuroscience as a whole. In this session, prominent scientists in various fields will present and discuss specific findings on the nature of contemplative practices, and they will likewise discuss larger issues within neuroscience that have been critical to understanding such practices. The main focus of this session will be at the intersection of Buddhist practices and science. Questions about neuroplasticity and the effects of mental training will be considered, and implications concerning the relationship between mind and body will be explored. As discussants, contemplative scholars will seek to clarify how scientific researchers can collaborate fruitfully with contemplative traditions, and the best methodological approaches for studying contemplative practices will likewise be discussed.

POST-SESSION DISCUSSION AND Q&A

Sunday, November 21, 2010 • 4:00–5:00 PM

SESSION THREE

UNDERSTANDING CONTEMPLATIVE PRACTICES: VEDANTA

Review of Vedanta Practices and the Intersection with Science

Monday, November 22, 2010 • 9:00–11:00 AM

*Presenters:***His Holiness the Dalai Lama****Vedanta Scholar and Practitioner: Swami Atmapriyananda****Vedanta Scholar: Chakravarthi Ram-Prasad***Moderator:***John Dunne***Interpreter:***Thupten Jinpa***Discussants:***Scientist: Wolf Singer****Contemplative Practitioner: Matthieu Ricard****Scientist: Aditya Murthy**

Within both Hinduism and Buddhism, numerous lineages (*parampār*) of contemplative practice employ a wide range of techniques to realize their spiritual goals. This session, focusing on the Advaita Vedānta tradition, will elucidate some of the tradition's most important practices, including especially those practices that are the best candidates for scientific research. Emphasizing contemporary styles of practice, these contemplative scholars will also discuss the basic techniques employed, the expected outcomes of specific practices, their theoretical foundations, and the issues involved in understanding those practices in scientific terms. Serving as discussants, a panel of scientists will pose questions that seek to clarify the nature of these practices and the way that they might be explored scientifically.

POST-SESSION DISCUSSION AND Q&A

Monday, November 22, 2010 • 11:00 AM–12:00 PM



Conference Sessions

SESSION FOUR

UNDERSTANDING CONTEMPLATIVE PRACTICES: YOGA AND JAIN

Review of Jain and Yoga Practices, and the Intersection with Science

Monday, November 22, 2010 • 2:00–4:00 PM

Presenters:

His Holiness the Dalai Lama

Jain practice: Muni Mahendra Kumar

Clinical Scientist/Yoga: BN Gangadhar

Yoga practice: Shirley Telles

Moderator:

Wolf Singer

Interpreter:

Thupten Jinpa

Discussants:

Clinical Scientist : HR Nagendra

Basic Scientist: Richard Davidson

In continuation of the morning session, this session will be dedicated to the exploration of the central practices in the Yoga and Jain traditions. The main features of the most prominent practices will be explored, and in terms of scientific research, panelists will be examining the question of applying such practices in clinical contexts for mental and physical health. Indeed, in recent years, clinicians have cooperated with contemplative practitioners to develop therapies that, while largely secular, still draw on the insights and techniques found in various forms of yoga, meditation, breath control and so on. It is especially with this research in mind that the panelists will inquire into the practices presented.

POST-SESSION DISCUSSION AND Q&A

Monday, November 22, 2010 • 4:00–5:00 PM

SESSION FIVE

REFLECTIONS, INTEGRATION, AND FUTURE DIRECTIONS

Tuesday, November 23, 2010 • 9:00–11:00 AM

Discussants:

His Holiness the Dalai Lama

VS Ramamurthy

Kapila Vatsyayan

Richard Davidson

Wolf Singer

Moderator:

Vijayalakshmi Ravindranath

Interpreter:

Thupten Jinpa

Previous sessions have shown the great benefit that can arise from a clear and rigorous dialogue between modern science and the contemplative traditions of India. This final session concentrates on the future avenues of research in Contemplative Science that have become evident over the preceding days. Central questions to be addressed include: How can fruitful dialogues between scientists and contemplatives be encouraged, and what are the promises and pitfalls of such a dialogue? What methods and research protocols are best employed in the scientific study of contemplative practices? How, in practical terms, can this form of research on Contemplative Science be supported and encouraged? Going forward, what are the most promising avenues of research, and what obstacles must we face? An exploration of these and other issues will lead to a lively dialogue to close the conference.

POST-SESSION DISCUSSION AND Q&A

Tuesday, November 23, 2010 • 11:00 AM–12:00 PM



Tenzin Gyatso, the 14th Dalai Lama

Tenzin Gyatso, the XIV Dalai Lama, is the leader of Tibetan Buddhism, the head of the Tibetan government-in-exile, and a spiritual leader revered worldwide. He was born on July 6, 1935 in a small village called Taktser in northeastern Tibet. Born to a peasant family, he was recognized at the age of two, in accordance with Tibetan tradition, as the reincarnation of his predecessor, the XIIIth

Dalai Lama. The Dalai Lamas are manifestations of the Buddha of Compassion, who choose to reincarnate for the purpose of serving human beings. Winner of the Nobel Prize for Peace in 1989, he is universally respected as a spokesman for the compassionate and peaceful resolution of human conflict.

He has traveled extensively, speaking on subjects including universal responsibility, love, compassion and kindness. Less well known is his intense personal interest in the sciences; he has said that if he were not a monk, he would have liked to be an engineer. As a youth in Lhasa it was he who was called on to fix broken machinery in the Potola Palace, be it a clock or a car. He has a vigorous interest in learning the newest developments in science, and brings to bear both a voice for the humanistic implications of the findings, and a high degree of intuitive methodological sophistication.



Swami Atmapriyananda

Swami Atmapriyananda is the Vice Chancellor of Ramakrishna Mission Vivekananda University, a multi-campus University trying to actualize Swami Vivekananda's educational vision and devoted to teaching and research in a variety of unique faculties. He received his Ph.D. from the University of Madras, India, in Theoretical Physics for his work in particle theory and has a number of

research publications in reputed international journals. Inspired by Ramakrishna-Vivekananda ideology, he joined the Ramakrishna Order of monks in 1978 and was posted at Ramakrishna Mission Vidyalaya, a premier college of Ramakrishna Mission at Belur Math, where he taught Physics for nearly 25 years as well as serving as the Principal for nearly 13 years.

As a monk and an educationist, his present interests are: (i) Swami Vivekananda's educational vision, (ii) Yoga-Vedanta vis-à-vis modern science, (iii) Ramakrishna-Vivekananda thought in the context of present day challenges, (iv) Consciousness Studies as taught in the Upanishads, (v) Synthesis of the four yogas as taught by Swami Vivekananda and the Bhagavad-Gita, (vi) Harmony of religions as lived and taught by Sri Ramakrishna, etc.

He toured Europe twice in 2008-2009, on invitation as a Resource Person at international and national yoga conferences in Italy. As a member of the Elijah Board of World Religious Leaders, an arm of the Elijah Interfaith Institute, a global organization working for interreligious understanding and peace, he attended on invitation a conference in Israel in 2009. In December 2009, he was invited to the Parliament of World's Religions organized in Melbourne, Australia.



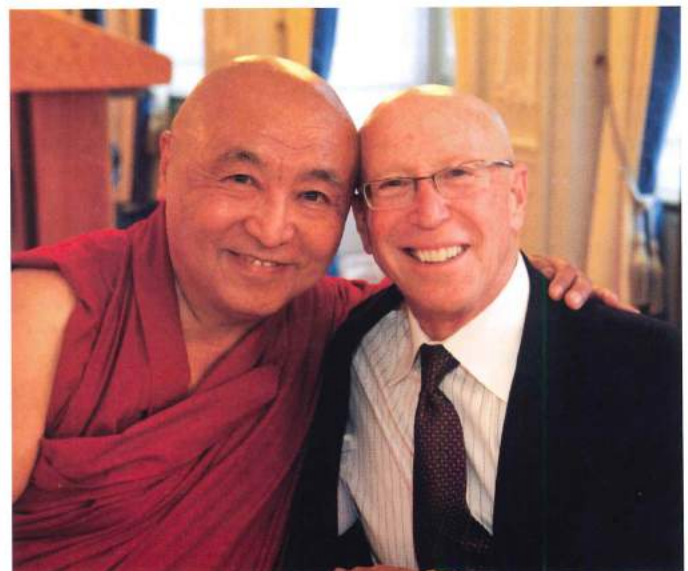
Richard Davidson, Ph.D.

Richard J. Davidson is the William James and Vilas Research Professor of Psychology and Psychiatry, Director of the W.M. Keck Laboratory for Functional Brain Imaging and Behavior, the Laboratory for Affective Neuroscience and the Center for Investigating Healthy Minds, Waisman Center at the University of Wisconsin-Madison. He received his Ph.D. from Harvard University in Psychol-

ogy and has been at Wisconsin since 1984. He has published more than 250 articles, many chapters and reviews and edited 13 books. He has been a member of the Mind & Life Institute's Board of Directors since 1991. In 1992, as a follow-up from previous Mind & Life meetings, he became a member of a scientific team doing neuroscientific investigations of exceptional mental abilities in advanced Tibetan monks.

He is the recipient of numerous awards for his research including a National Institute of Mental Health Research Scientist Award, a MERIT Award from NIMH, an Established Investigator Award from the National Alliance for Research in Schizophrenia and Affective Disorders (NARSAD), a Distinguished Investigator Award from NARSAD, the William James Fellow Award from the American Psychological Society, and the Hilldale Award from the University of Wisconsin-Madison. He was the Founding Co-Editor of the new American Psychological Association journal EMOTION and is Past-President of the Society for Research in Psychopathology and of the Society for Psychophysiological Research. He was the year 2000 recipient of the most distinguished award for science given by the American Psychological Association – the Distinguished Scientific Contribution Award. In 2003 he was elected to the American Academy of Arts and Sciences and in 2004 he was elected to the Wisconsin Academy of Sciences, Arts and Letters. He was named one of the 100 most influential people in the world by Time Magazine in 2006. In 2006 he was also awarded the first Mani Bhaumik Award by UCLA for advancing the understanding of the brain and conscious mind in healing. Madison Magazine named him Person of the Year in 2007.

Speakers and Panelists cont'd on page 8





Speakers



John Dunne, Ph.D.

John Dunne is an assistant professor in the Department of Religion at Emory University, where he is Co-Director of the Encyclopedia of Contemplative Practices and the Emory Collaborative for Contemplative Studies. He was educated at Amherst College and Harvard University, where he received his Ph.D. from the Committee on the Study of Religion in 1999. Before joining Emory's faculty in

2005, he taught at the University of Wisconsin-Madison and held a research position at the University of Lausanne, Switzerland. Support from the American Institute of Indian Studies sustained two years of his doctoral research at the Central Institute for Higher Tibetan Studies in Sarnath, India.

His work focuses on various aspects of Buddhist philosophy and contemplative practice. In *Foundations of Dharmakirti's Philosophy* (2004), he examines the most prominent Buddhist theories of perception, language, inference and justification. His current research includes an inquiry into the notion of "mindfulness" in both classical Buddhist and contemporary contexts, and he is also engaged in a study of Candrakirti's "Prasannapada", a major Buddhist philosophical work on the metaphysics of "Emptiness." His recently published works include essays on neuroscience and meditation, the nature of perception in meditation, and the metaphysics of Madhyamaka philosophy. He is a Mind and Life Fellow, a member of the Mind and Life Program and Research Council and an advisor to the Center for Investigating Healthy Minds. He frequently serves as a translator for Tibetan scholars, and as a consultant, he is involved in various scientific studies of contemplative practices.



R. Adam Engle, J.D., M.B.A.

R. Adam Engle is the Chairman and co-founder of the Mind & Life Institute. He was educated at the University of Colorado, Harvard University, and Stanford University, where he received his B.A., J.D., and M.B.A. degrees respectively. Over the past 40 years, he has divided his professional life as a lawyer and entrepreneur between the for-profit and non-profit sectors.

In the for-profit sector, Mr. Engle began his career as a lawyer, practicing for 10 years in Beverly Hills, Albuquerque, Santa Barbara, and Teheran. After leaving the practice of law, he formed an investment management firm, focusing on global portfolio management on behalf of individual clients. He also started several business ventures in the United States and Australia.

Mr. Engle began working with various groups in the non-profit sector in 1965. In addition to the Mind & Life Institute, he also co-founded the Colorado Friends of Tibet, a statewide Tibetan support group based in Boulder, Colorado; was a founding member of the Social Venture Network; and has advised numerous other non-profit organizations.



B.N. Gangadhar, M.D.

Dr B.N.Gangadhar is Professor of Psychiatry at the National Institute of Mental Health and NeuroSciences (NIMHANS). He has served in NIMHANS since 1981, after completing his M.D. He has interests in Somatic therapies, Yoga, schizophrenia and community mental health. He heads the Advanced Center for Yoga at NIMHANS. He has published over 200 scientific articles in national and

international, peer-reviewed journals. He is a coeditor on the *Acta Psychiatrica Scandinavica* as well as the *Asian Journal of Psychiatry*. He is also a Fellow of National Academy of Medical Sciences India. He has received the CV Raman award as well as the BC Roy award from the government of Karnataka.



Daniel Goleman, Ph.D.

Daniel Goleman is a psychologist and science writer best-known for his worldwide best-seller *Emotional Intelligence*, published in 40 languages. He taught at Harvard University before becoming an editor and journalist, covering the brain and behavioral science for the *New York Times*. He is a co-founder of the Collaborative for Academic, Social, and Emotional Intelligence at the

University of Illinois, and co-director of the Consortium for Research on Emotional Intelligence in Organizations at Rutgers University. He received his Ph.D. in psychology from Harvard University. For two years he traveled in India studying Buddhist and other spiritual systems of psychology, the first year as a Harvard Traveling Fellow, the second as a Research Fellow of the Social Science Research Council. He is a Fellow of the American Association for the Advancement of Science, and has received many awards for his writing. He is the author of numerous books, including *The Meditative Mind*, *Destructive Emotions*, *Social Intelligence*, and, most recently, *Ecological Intelligence*. He is also a member of the Mind and Life Board of Directors.



Diego Hangartner, Pharm.D.

Diego Hangartner completed his studies in pharmacology at the Swiss Federal Institute of Technology, specializing in psychotherapeutic and psychoactive substances. Having worked with drug addiction, he became interested in understanding the workings of mind and consciousness. After encountering Buddhism, he then spent 11 years in Dharamsala, India, where he first learned

Tibetan and then studied for 7 years at the Institute of Buddhist Dialectics. During those years, he did several retreats and worked as a translator and interpreter, translating Tibetan into English, German, French and Spanish. After returning to Europe in 2003, he taught widely, was General Secretary and project manager of His Holiness the Dalai Lama's visits in Switzerland 2005 and in Hamburg 2007. He has been associated with Mind and Life since the late 1990's. Presently, he is the Director of Mind and Life International, based in Zurich, Switzerland, and is Chief Operating Officer of Mind and Life.



Thupten Jinpa, Ph.D.

Thupten Jinpa was educated at the Shartse College of Ganden Monastic University, South India, where he received the Geshe Lharam degree. In addition, Jinpa holds a B.A. Honors in philosophy and a Ph.D. in religious studies, both from Cambridge University. He taught at Ganden monastery and worked as a research fellow in Eastern religions at Girton College, Cambridge University.

Jinpa has been the principal English translator to H.H. the Dalai Lama for over 25 years and has translated and edited numerous books by the Dalai Lama, including *Ethics for the New Millennium*; *Transforming the Mind*; *The Universe in a Single Atom: Convergence of Science and Spirituality*; and the recently published *Toward a True Kinship of Faiths: How the World's Religions can Come Together*. His own publications include works in both Tibetan and English, including *Songs of Spiritual Experience* (co-authored); *Self, Reality and Reason in Tibetan Philosophy*; *Mind Training: The Great Collection*; and *The Book of Kadam: The Core Texts*. The last two being part of The Library of Tibetan Classics series.

Jinpa is an adjunct professor at the Faculty of Religious Studies at McGill University, Montreal and a visiting scholar and an executive committee member at the Center for Compassion and Altruism Research and Education (CCARE), the School of Medicine, Stanford University. In addition, Jinpa is a member of the Mind and Life Board of Directors, dedicated to promoting dialogues between the sciences and contemplative knowledge, especially Buddhism. He is the president of the Institute of Tibetan Classics, Montreal, and, as the general series editor, heads its project of critical editing, translation and publication of key classical Tibetan texts as part of a definitive reference series entitled The Library of Tibetan Classics.



Rajesh Kasturirangan, Ph.D.

Rajesh Kasturirangan is an Associate Professor at the National Institute of Advanced Studies in Bangalore where he heads the cognition programme. His initial training was in mathematics followed by a Ph.D. in cognitive science from MIT. His research is a combination of mathematical modeling, philosophy—both Indian and western—and cognitive science. He works on a variety of

questions including the interface of language, culture and cognition, the cognitive foundations of mathematics, and sociocognition. One of his goals is to bring Indian philosophical traditions to bear upon research on the mind. Apart from his scientific interests, Rajesh wants to use an interdisciplinary mix of science, philosophy and contemplation to understand the relation between the aesthetic, cognitive and religious aspects of human nature.



One of Mind & Life's small steps toward a greener earth is ensuring the use of eco-conscious inks and papers for the printing of this brochure.



Muni Mahendra Kumar

Muni Mahendra Kumar is a versatile scholar of diverse disciplines like Physics, Mathematics, Bioscience, Philosophy (Indian as well as Western), Psychology, Parapsychology, Ancient History and Meditation as well as being conversant with modern languages including English, German, Hindi, Gujarati, Rajasthani, and ancient languages such as Sanskrit, Prakrit and Pali. He is a prolific

writer, a competent translator and critical editor of more than sixty books. He has been awarded the honor of epithets—"Agama Mamshi" and "Preksha Pradhyapka". He is the honorary professor at Jain Vishva Bharti University and under his guidance several students have completed their research thesis for Ph.D. He is a "Shatavadham" and his demonstration of Avadhan Vidya (ancient science of memory and mathematics) at various universities and International Conferences has earned him an epithet of "Human Computer."

Born in 1937 in Bombay as a son of Shri J.S.Zaveri, he graduated from the University of Bombay in 1957, was initiated as a Jain Monk by Acharya Shri Tulsi in 1957; he has traveled over 10,000 miles on foot in several states of India and has remained a close associate of Acharya Shri Tulsi and Acharya Shri Mahaprajna, making a significant contribution to researches in Jain Canonical Literature.



Rajiv Mehrotra

Rajiv Mehrotra was educated at St Stephen's College, Delhi and the Universities of Oxford and Columbia. He manages, as Secretary/Trustee, The Foundation for Universal Responsibility of HH the Dalai Lama that was established with the Nobel Peace Prize. He has been a personal 'chela' of His Holiness for more than 30 years.

His books include *The Mind of The Guru*; *Understanding The Dalai Lama*; *The Essential Dalai Lama*; *Thakur: A biography of Sri Ramakrishna and Conversations with The Dalai Lama on Life, Living and Happiness*. Awaiting publication is *The Spirit of The Muse*. He is working on a spiritual biography of His Holiness and a feature length documentary film on Swami Vivekananda. He also works as an independent film maker, managing trustee and commissioning editor of The Public Service Broadcasting Trust that has produced more than 400 independent documentary films. His films have won approximately a hundred international and eighteen national awards from the President of India. He was Chairman of the Jury for the awards during their 50th anniversary.

Mr. Mehrotra has twice addressed plenary sessions at The World Economic Forum at Davos and was nominated a Global Leader for Tomorrow by them. He was a Judge of the Templeton Prize for Spirituality and serves on the Boards of several institutions including the Norbulinka Institute of Tibetan Culture, the Core Group of The Press Council of India, etc. Until recently he hosted one of the country's longest running, and most widely viewed talk shows on public television: In Conversations. It was rated the most watched programme in its genre across all television channels in India. He has been a familiar face on Indian television for more than 40 years.

Speakers and Panelists cont'd on page 10



Speakers



Aditya Murthy, Ph.D.

Dr. Murthy is an associate professor at the Centre for Neuroscience, Indian Institute of Science in Bangalore. Dr. Murthy's research addresses the question of how information processed by the visual system guides the motor systems to produce overt behavior. His research interests span across the fields of visual perception, decision-making, and the generation of motor behavior and involve

the application of cognitive/psychophysical, neuropsychological and physiological techniques in human and non-human primates. The main question that motivates research in his laboratory is to understand how our brains control actions. This entails an understanding of how actions are planned and initiated, how partially prepared actions are canceled and how the consequences of actions are registered. Understanding how the normal brain controls action is necessary to understand the causes underlying various psychopathologies and motor abnormalities where there is a failure of control, such as observed in Parkinson's disease.

Prior to joining the Centre for Neuroscience, Dr. Murthy was at the National Brain Research Centre at Manesar for about 8 years. His undergraduate training was at St. Xavier's college, Mumbai and Bombay University where he obtained his Masters degree. His doctoral training was with Dr. Allen Humphrey in the Department of Neurobiology at the University of Pittsburgh where he examined the neural mechanisms involved in the processing of motion in the visual system. For his postdoctoral training he worked with Dr. Jeffrey Schall at Vanderbilt University studying the primate visuomotor system to more directly relate neural activity to psychological functions and behavior.



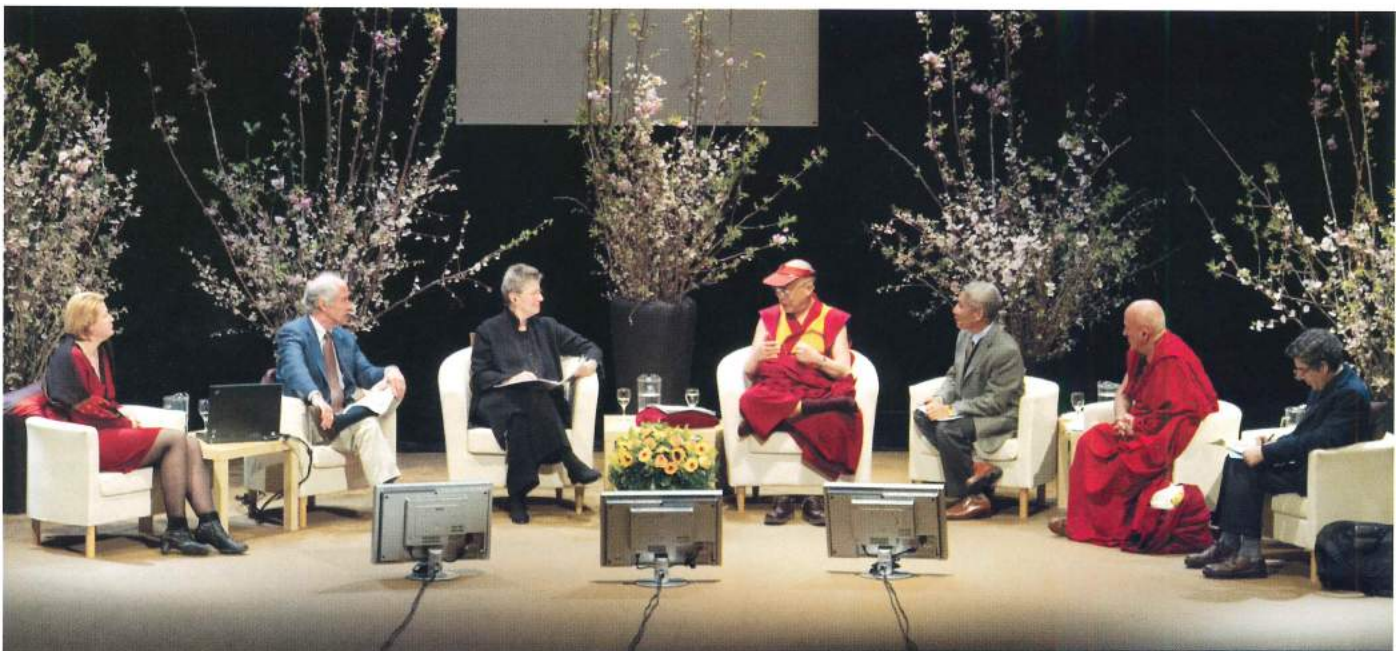
Hongasandra Rama Rao Nagendra, Ph.D.

H.R. Nagendra is at present the President of VYASA, Bangalore, VYASA, International, VYERTI, Melbourne, and Vice Chancellor of SVYASA Deemed University. He has authored and co-authored about 35 books on yoga, nearly 35 research papers in engineering and 60 in yoga. He has awards from the Ministry of Health, a Yoga Sri award from BKS Iyengar and a senior Citizens award

from New Delhi. He is consultant in Yoga to many Universities in Australia and the USA, and member of several bodies of Government of India.

He joined Vivekananda Kendra, Kanyakumari, a service mission, as an honorary director of training in 1975. He spent nearly a decade developing yoga and yoga therapy programs for the modern youth and ailing sick with Dr. Nagarathna. He shifted his headquarters to Bangalore, Prashanti Kutiram, to translate the vision of Swami Vivekananda to combine the best of the East with the best of the West by combining modern scientific research to examine the efficacy of yoga in solving the challenges of the modern era.

As the team developed, the campus Prashanti Kutiram took shape. VYASA started gaining greater momentum with nearly 70 research publications on yoga, 200 dissertations by students of Certificate and Diploma Courses, acquiring accreditation from DST, Ministry of Health and FW, Dept of AYUSH, UGC recognizing it as one of the premier yoga institutes of the country, recognized by Bangalore, Mysore, Mangalore and Rajiv Gandhi Universities from 1991 to 2001, Hindu University of America in 2002 and finally acquiring the status of a Deemed University named Swami Vivekananda Yoga Anusandhana Samsthana (Research Foundation) SVYASA for short, offering courses from Certificate to Doctoral programs in Yogic Sciences. So far about 60 M.Sc. students and one Ph.D. have graduated from this unique Yoga University, five Ph.D.s from Bangalore University and one from HUA. At present we have about 100 M.Sc. and 50 Ph.D. students working with VYASA and SVYASA.





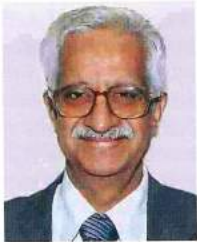
Geshe Ngawang Samten

Geshe Samten came to India with his parents after the Chinese occupation of Tibet in 1959. He studied at the Central School for Tibetans in Chandragiri, Orissa, and thereafter at the Central Institute of Higher Tibetan Studies at Sarnath, where he earned the titles of Shastri and Acharya. Thereafter studying in the Tibetan traditional monastic system, he obtained the degree of Geshe

Lharampa from Gaden Shartse Monastery in South India.

Professor Samten's work focuses on the restoration of lost Buddhist texts into Sanskrit, based on the classical Tibetan translations made in ancient times jointly by the Indian and Tibetan Pundits. He is also actively engaged in Hindi translations of Buddhist texts in Sanskrit and Tibetan. With special interest in the philosophy of Nagarjuna, Professor Samten published the definitive critical edition of the *Ratnavali* with its commentary. He is credited with important publications, such as a critical edition of *Abhidhammattha Samgaho*, a critical edition of Sanskrit and Tibetan versions of the *Pindidrita* and the *Pancakrama of Nagarjuna*, and recently, *The Ocean of Reasoning*, an annotated English translation of the commentary on Nagarjuna's *Mulamadhyamaka Karika* by the Tibetan master thinker Tson-Kha-Pa, published by Oxford University Press.

In 2008, he was awarded *Padma Shri* by the President of India for his distinguished services in the fields of education and literature. He is currently the Vice-Chancellor of Central University of Tibetan Studies, Sarnath, Varanasi.



V.S. Ramamurthy, Ph.D.

Prof. V. S. Ramamurthy is a well known Indian nuclear scientist with a broad range of contributions from basic research to science administration. Prof. Ramamurthy started his career in Bhabha Atomic Research Centre, Mumbai in 1963. He has made important research contributions, both experimental and theoretical, in many areas of nuclear fission and heavy ion reaction mechanisms,

statistical and thermodynamic properties of nuclei, physics of atomic and molecular clusters and low energy accelerator applications. During the period 1995-2006, Prof. Ramamurthy was fully involved in science promotion in India as Secretary to the Government of India, Department of Science & Technology (DST), New Delhi. He was also the Chairman of the IAEA Standing Advisory Group on Nuclear Applications for nearly a decade, Chairman, Board of Governors, Indian Institute of Technology, Delhi, and also Chairman, Recruitment & Assessment Board, Council of Scientific and Industrial Research. After retirement from government service, Prof. Ramamurthy, in addition to continuing research in Nuclear Physics in the Inter-University Accelerator Centre, New Delhi, has also been actively involved in human resource development in all aspects of nuclear research and applications. He is currently the Director, National Institute of Advanced Studies in Bangalore, and Member, National Security Advisory Board. In recognition of his services to the growth of Science and Technology in the country, Prof. Ramamurthy was awarded one of the top civilian awards of the country, the Padma Bhushan, by the Government of India in 2005.

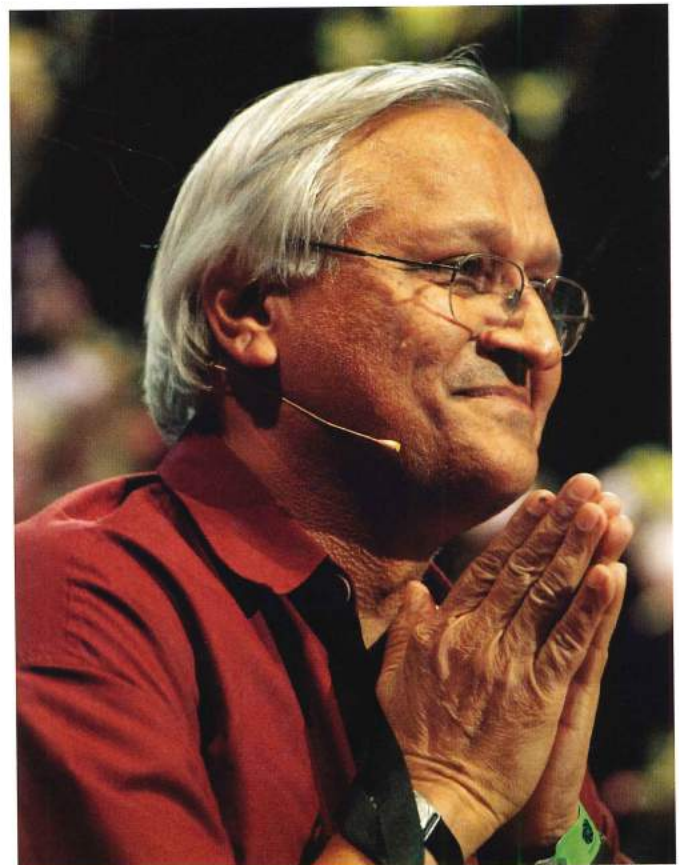


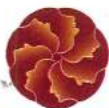
Chakravarthi Ram-Prasad, D.Phil.

Chakravarthi Ram-Prasad studied history, politics and sociology in India before taking his doctorate in Philosophy at Oxford. He taught at the National University of Singapore and held research fellowships at Oxford and Cambridge before joining Lancaster University, where he is Professor of Comparative Religion and Philosophy, and currently Associate Dean for Research in the Faculty

of Arts and Social Sciences. He has held visiting fellowships in various universities in India and the US, and delivered over thirty plenary and established lectures across the world. His books are *Knowledge and Liberation in Classical Indian Thought*; *Advaita Epistemology and Metaphysics*; *Eastern Philosophy*; *India: Life, Myth and Art* and *Indian Philosophy and the Consequences of Knowledge*. He has published nearly fifty papers in the areas of Indian and comparative epistemology, metaphysics and consciousness studies; religion and politics; comparative theology; and classical Indian religion. He has also written for leading magazines such as *Prospect* and spoken regularly on the BBC. He is currently the PI on the UK Arts and Humanities Research Council-funded major research project, 'Self: Hindu Responses to Buddhist Critiques', and has held research grants from the Templeton Foundation to study Indian theories of consciousness, and from the British Home Office to study religion and immigrant integration into British society.

Speakers and Panelists cont'd on page 12

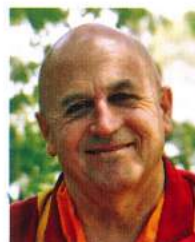




Vijayalakshmi Ravindranath, Ph.D.
Dr. Vijayalakshmi Ravindranath obtained her Ph.D. from the University of Mysore in 1981. In 1986, after completing her Post-Doctoral training at the NCI, NIH, USA, she joined the National Institute of Mental Health and Neurosciences, (NIMHANS) Bangalore. In 1999, the Government of India sought her help in establishing the National Brain Research Centre (NBRC), an autonomous institution of

the Ministry of Science and Technology as a centre of excellence and to co-ordinate and network neuroscience research groups in the country. She continued as Director, NBRC, till April 2009, when she returned to Bangalore at the Indian Institute of Science as Professor and Chairman of the newly created Centre for Neuroscience. During her tenure as Director she provided visionary leadership at NBRC, which in a very short period attained a position of being an internationally acclaimed centre of excellence. In a short span of 3 years she established a state-of-the-art institute in a remote location and initiated a unified approach to understanding the human brain, integrating mathematical and computational science. NBRC was granted Deemed University status in May 2002 to help promote human resource development in an inter-disciplinary manner. She networked 45 institutions around the country with NBRC with a goal to share resources and promote neuroscience research.

The unifying goal of her laboratory is to understand pathogenic mechanisms underlying neurodegenerative disorders with a goal to discover disease-modifying therapies. To this effect, she adopts a combinatorial approach to elucidate important cellular pathways involved in the disease pathways in animal models of Parkinson's and Alzheimer's disease. She is an elected Fellow of all the 3 science academies in the country, namely Indian National Science Academy, Indian Academy of Sciences, National Academy of Sciences, India. She is also a Fellow of the National Academy of Medical Sciences, India, Indian Academy of Neurosciences and Third World Academy of Sciences. She is a recipient of the prestigious S.S. Bhatnagar award (1996), Omprakash Bhasin Award (2001) and the J.C. Bose Fellowship (2006) and Padma Shri (2010).



Matthieu Ricard, Ph.D.
Matthieu Ricard is a Buddhist monk at Shechen Monastery in Kathmandu, Nepal. Born in France in 1946, he received a Ph.D. in Cellular Genetics at the Institut Pasteur under Nobel Laureate Francois Jacob. As a hobby, he wrote *Animal Migrations* (Hill and Wang, 1969). He first traveled to the Himalayas in 1967 and has lived there since 1972, studying with Kanguy Rinpoche and

Dilgo Khyentse Rinpoche, two of the most eminent Tibetan teachers of our times. Since 1989, he served as French interpreter for His Holiness the Dalai Lama.

He is the author of *The Monk and the Philosopher* (with his father, the French thinker Jean-Francois Revel), of *The Quantum and the Lotus* (with the astrophysicist Trinh Xuan Thuan), and of *Happiness, A Guide to Developing Life's Most Important Skill and Why Meditate?* He has translated several books from Tibetan into English and French, including *The Life of Shabkar* and *The Heart of Compassion*. As a photographer, he has published several albums, including *The Spirit of Tibet*, *Buddhist Himalayas*, *Tibet*, *Motionless Journey* and *Bhutan* (www.matthieuricard.org). He devotes all the of proceeds from his books and much of his time to forty humanitarian projects (schools, clinics, orphanages, elderly people's home and bridges) in Tibet, Nepal and India, through his charitable association Karuna-shechen (www.karuna-shechen.org) and to the preservation of the Tibetan cultural heritage (www.shechen.org). He is also a member of the Mind and Life Program and Research Council.



Wolf Singer, M.D., Ph.D.
Wolf Singer is Director at the Max Planck Institute for Brain Research in Frankfurt and Founding Director of the Frankfurt Institute for Advanced Studies (FIAS) and the Ernst Strüngmann Institute (ESI) for Brain Research. He studied medicine at the Universities of Munich and Paris, received his M.D. from the Ludwig Maximilian University and his Ph.D. from the Technical University

in Munich. Until the mid-eighties his research interests were focused on the experience-dependent development of the cerebral cortex and on mechanisms of use-dependent synaptic plasticity. Subsequently, his research concentrated on the binding problem that arises from the distributed organization of the cerebral cortex. The hypothesis forwarded by Professor Singer is that the numerous and widely distributed subprocesses which constitute the basis of cognitive and executive functions are coordinated and bound together by the precise temporal synchronization of oscillatory neuronal activity.

Professor Singer has published more than 300 articles in peer-reviewed journals, contributed more than 200 chapters to books, written numerous essays on the ethical and philosophical implications of neuroscientific discoveries, and published 3 books. He is the recipient of numerous awards including the IPSEN Prize for Neuronal Plasticity, the Ernst Jung Prize for Medicine, the Zülch Prize for Brain Research, the Communicator Prize of the German Research Foundation and the INNS Hebb Award. Prof. Singer was awarded a Dr. h.c. from Oldenburg University and Rutgers University, N.J. He is member of numerous national and international academies, including the Pontifical Academy of Sciences. He served as President of the European Neuroscience Association, as Chairman of the Board of Directors of the Max Planck Society, and is member of numerous advisory boards of scientific organizations and editorial boards of scientific journals.



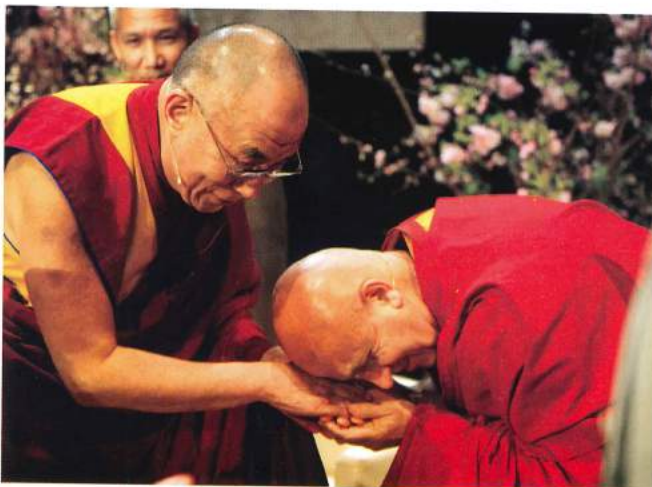
P.N. Tandon, Ph.D.
President, National Brain Research Centre,
Haryana, India

Born on August 13, 1928 at Shimla, Prof. Tandon received his medical education at K.G. Medical College (now University), Lucknow. Standing first in the University in the MBBS examination (1950), he was awarded the prestigious Hewitt Gold Medal and five

other Gold Medals along with a number of prizes. Obtaining the M.S. Degree in 1952 (Lucknow University), he was awarded FRCS England in 1956. He then received speciality training in Neurosurgery and allied Neurosciences at the Ullevål Hospital, Oslo University, Norway (1957-58) and the Montreal Neurological Institute, McGill University, Canada (1959-60).

In 1965, he was appointed Professor and founded the Department of Neurosurgery at the All India Institute of Medical Sciences, New Delhi. Under his leadership, this department grew to be the country's premier Neurosciences Centre. He catalysed the establishment of the National Brain Research Centre (NBRC) at Manesar under the aegis of Department of Biotechnology, GOI, and has been the founder President of NBRC. Prof. Tandon's major research efforts deal primarily with neurological disorders of the nervous system of national relevance, these included developmental defects, head injury, subarachnoid hemorrhage, and experimental foetal neural transplant. These have resulted in 250 scientific papers, over a dozen monographs and a number of chapters in national and international text books. He trained more than fifty neurosurgeons, several of whom initiated and/or headed the departments of Neurosurgery in all corners of the country.

Prof. Tandon was the President of Neurology Society of India, National Academy of Sciences, India, Indian National Science Academy, Indian Academy of Neurosciences. He has served as a member of the Governing Body of the Council of Scientific and Industrial Research (CSIR), Indian Council of Medical Research (ICMR), Indian Council of Social Science Research (ICSSR) and nominated Member of the University Grants Commission. He has won numerous awards including the Padma Sri (1973); Hon. Surgeon to the President of India (1977-80); Prof. Bachhawat Lifetime Achievement Award; Indian Academy of Neuroscience: 2003, NASI President's Gold Medal (2006), Padma Vibhushan (2006).



Shirley Telles, M.B.B.S., M.Phil., Ph.D.
Shirley Telles completed M.B.B.S. from Goa Medical College (Goa) and subsequently M.Phil. in Neurophysiology and Ph.D. in Neurophysiology from the National Institute of Mental Health & Neurosciences [NIMHANS], Bangalore, India. She is the Director of research at Patanjali Yogpeeth, Haridwar, India, and Head of the Indian Council of Medical Research Center for

Advanced Research in Yoga and Neurophysiology at Bangalore.

She has 104 research publications related to yoga research in journals indexed in international bibliographic databases [e.g., Medline], 12 chapters in books and 3 published books. She received an award from The Indian Council of Medical Research (for excellence in biomedical research), from the John Templeton Foundation (www.templeton.org), U.S.A. (January, 2002), for an essay on 'Creative research ideas in neurobiology' and a Fulbright Fellowship (J. William Fulbright Foundation, U.S.A) to study "Functional magnetic resonance imaging in meditators" at the Dept. of Radiology, University of Florida, Gainesville, FL., U.S.A.



Dr. Kapila Vatsyayan
Formerly: Secretary, Department of Arts, Ministry of HRD, Academic Director, Indira Gandhi National Centre for the Arts; President, India International Centre and Member, UNESCO Executive Board. Presently Member of Parliament (Rajya Sabha) and Chairperson, IIC-Asia Project, India International Centre.

The range of Dr. Kapila Vatsyayan's interests and accomplishments is astonishingly wide. Scholar, author, linguist, dancer, ethnographer, educationist, art historian and cultural policy maker, she has been responsible for the establishment of many educational and cultural institutions in the country. She has been associated with the establishment and development of many libraries, museums and archival repositories, among which mention might be made of the Nehru Memorial Museum and Library, the Institute of Tibetan Studies at Sarnath and the Centre for Cultural Resources and Training. The work she did as Academic Director of the Indira Gandhi National Centre for the Arts (IGNCA) in collecting and consolidating our cultural resources and in organising international seminars on the basic concepts of Indian philosophy has elicited wide recognition.

Author of over 15 books and many research papers. Her seminal work is on Gita Govinda and the Indian artistic traditions. Amongst her publications, Classical Indian Dance in Literature and the Arts; the Square and the Circle of the Indian Arts and Bharata: The Natyasastra are internationally acknowledged as pioneering path-breaking works of critical scholarship. Editor of many volumes on primary texts Dr. Vatsyayan initiated a very serious and sustained dialogue between and amongst different disciplines, especially of science, philosophy and the arts. In the seminars and exhibitions on Space, Time and Primal Elements, the most distinguished scientists and philosophers participated, including His Holiness the Dalai Lama.

Widely travelled in India and abroad, she has received several recognition/honours, nationally and internationally: recipient of Sankaradeva Award for National Integration, the Rajiv Gandhi Sadbhavana Award 2000 and the Lifetime Achievement Award from the Sahitya Kala Parishad of the Government of NCT of Delhi.



The Mind and Life Summer Research Institute and Francisco J. Varela Research Awards

The Mind and Life Summer Research Institute (MLSRI) has been held annually since June, 2004, with the aim of advancing collaborative research among behavioral and clinical scientists, neuroscientists, and biomedical researchers based on a process of inquiry, dialogue and collaboration with Buddhist contemplative practitioners and scholars and those in other contemplative traditions. The long-term objective is to advance the training of a new generation of behavioral scientists, cognitive/affective neuroscientists, clinical researchers, and contemplative scholar/practitioners interested in exploring the potential influences of meditation and other contemplative practices on mind, behavior, brain function and health. This includes examining the potential role of contemplative methods for characterizing human experience and consciousness from a neuroscientific and clinical intervention perspective.

This vibrant, week-long residential program includes daily sessions of meditation instruction and practice; presentations of science, philosophy and contemplative theory and research; discussion and dialogue; small group meetings; faculty office hours; and a day-long silent retreat for all participants and faculty.

The Francisco J. Varela Research Awards are competitively-awarded grants of up to \$15,000 available to support studies proposed by research fellows attending the MLSRI on topics related to the themes of that year's Institute. The application process begins in the Fall following each MLSRI with award decisions made by the end of the year. Varela awardees return to the MLSRI in order to present their findings.

Upcoming Program

2012 International Symposia for Contemplative Studies

The time is ripe for a new, periodic meeting that will be open to all. The Mind & Life Institute is launching the International Symposia for Contemplative Studies, scheduled for April, 2012, in Denver, Colorado. This ground-breaking Symposia will explore four major program threads: Neuroscience, Clinical Science, Education and Humanities offered in a mix of plenary sessions, specialized concurrent sessions, roundtable dialogues and social events. The Symposia will review the latest research and methodological developments in the field and provide opportunities for collaboration among the disciplines becoming involved in contemplative research.

Check our web site regularly as more details are released:
www.mindandlife.org.

The specific goals of the Summer Research Institute and Francisco J. Varela Research Awards are:

- 1) to cultivate strategic dialogue between experimental psychologists, neuroscientists, cognitive scientists on the one hand, and contemplative scholars/practitioners and philosophers on the other, in order to develop research protocols to enhance investigation of human mental activity;
- 2) to foster a cadre of nascent scientists (graduate students and post-docs) and contemplative scholars and philosophers to participate in the development of the next generation of scientists, clinicians, and scholars interested in innovation and collaboration at the mind-brain-behavior interface;
- 3) to advance a collaborative research program to study the influence of contemplative practices on the mind, behavior and brain function, by informed use of highly trained subjects in human neuroscience protocols;
- 4) to explore ways in which the first-person examination of mental phenomena, by means of refining attention and related skills, may be raised to a level of rigor comparable to the third-person methodologies of the cognitive sciences; and
- 5) to catalyze the creation of three new scientific and academic disciplines: Contemplative Neuroscience; Contemplative Clinical Science and Contemplative Studies.

The 2011 MLSRI will be held in June, 2011.
For more information please see our web site:
www.mindandlife.org





Mind & Life Institute

The Mind & Life Institute operates through four divisions, all working together to promote scientific understanding of the effects of contemplative based practices:

- *Mind and Life Dialogues* set the scientific agenda by exploring which areas of science are most ripe for collaboration and how that collaboration can be implemented most effectively.
- *Mind and Life Publications* report to the greater scientific community and interested public what has occurred at our dialogues.
- *Mind and Life Summer Research Institute and Francisco J. Varela Research Awards* is an annual weeklong residential symposium and accompanying research grant program for researchers and practitioners in science, contemplation and philosophy to explore how to advance this new field of scientific research on meditation and other forms of contemplative mental training.
- *Mind and Life Education Research Network* explores issues at the intersection of mind, brain, education and contemplative practice.

The National Institute of Advanced Studies (NIAS) was conceived and established by the vision and initiative of the late Mr. J.R.D. Tata, who sought to create an institution which would conduct advanced research in multidisciplinary areas, and also serve as a forum that will bring together administrators and managers from industry and government, leaders in public affairs, eminent individuals in different walks of life, and the academic community in the natural and social sciences.

The objective of the Institute has been to nurture a broad base of scholars, managers and leaders who may contribute effectively to tackling the complex problems facing contemporary India with intelligence, sensitivity, confidence and dedication.

The Foundation for Universal Responsibility of His Holiness The Dalai Lama is a not for profit, non-sectarian, non-denominational organization established with the Nobel Peace Prize awarded to His Holiness in 1989 that brings together men and women of different faiths, professions and nationalities, through a range of initiatives and mutually sustaining collaborations in order to:

- promote universal responsibility in a manner that respects difference and encourages a diversity of beliefs and practices;
- build a global ethic of nonviolence, coexistence, gender equity, and peace by facilitating processes of personal and social change; and
- enrich educational paradigms that tap the transformative potential of the human mind.

The Central University of Tibetan Studies (CUTS) was envisioned by Pt. Jawahar Lal Nehru in consultation with His Holiness the 14th Dalai Lama with a view to educate the youths of Tibet and the Himalayan border region. Its main objectives are to:

- preserve the Tibetan culture and tradition;
- restore ancient Indian sciences and literature preserved in the Tibetan Language, but lost in the original;
- offer an alternative educational facility to students of Indian border areas who formerly availed the opportunity of receiving higher education in Tibet; and
- accomplish gains of teaching and scope of research in traditional subjects in a framework of the modern university system of education with the provision for award of degrees in Tibetan studies.

Bureau of His Holiness the Dalai Lama, New Delhi

Established in 1960 in New Delhi, the Bureau of His Holiness the Dalai Lama functions as the nodal agent of His Holiness the Dalai Lama and the Central Tibetan Administration.

The Bureau maintains Liaison relations with the Government of India, foreign embassies, consulates, NGOs, civil society groups and other important national and international bodies on behalf of the Central Tibetan Administration.

The Bureau also facilitates all foreign and domestic travels of His Holiness the Dalai Lama in addition to organizing and attending public events, seminars, and conferences aimed at informing and educating the general public on the issue of Tibet.

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Acknowledgements

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The Mind & Life Institute's Board of Directors and the Program and Research Council are comprised of His Holiness the Dalai Lama, world-renowned scientists and philosophers from multiple disciplines and Buddhist scholars. The Board and Program and Research Council provide guidance and direction for Mind & Life Institute operations, conferences, events, research programs, initiatives and publications.

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Mind and Life Dialogues

The titles of these dialogues between the His Holiness the Dalai Lama and leading scientists show the range of topics that the Mind & Life Institute has explored. For more details on these conferences, please go to www.mindandlife.org.

- 2010: *Contemplative Science: The Scientific Study of Contemplative Practice on Human Biology and Behaviour*, co-sponsored by National Institute of Advanced Studies, Indian Institute of Science Campus
- 2010: *Latest Findings in Contemplative Neuroscience*, co-sponsored by the University of Wisconsin-Madison's Center for Investigating Healthy Minds
- 2010: *Altruism and Compassion in Economic Systems: A Dialogue at the Interface of Economics, Neuroscience and Contemplative Sciences*, co-sponsored by the University of Zurich
- 2009: *Educating World Citizens for the 21st Century: Educators, Scientists and Contemplatives Dialogue on Cultivating a Healthy Mind, Brain and Heart*, co-sponsored by Harvard University Graduate School of Education, Stanford University School of Education, Pennsylvania State University College of Education, University of Virginia Curry School of Education, University of Wisconsin-Madison
- 2009: *Attention, Memory, and the Mind*
- 2008: *Latest Findings in Contemplative Neuroscience*
- 2008: *Investigating the Mind-Body Connection: The Science and Clinical Applications of Meditation*, hosted by Mayo Clinic
- 2007: *Mindfulness, Compassion and the Treatment of Depression*, co-sponsored by Emory University
- 2007: *The Universe in a Single Atom*
- 2005: *Investigating the Mind: The Science and Clinical Applications of Meditation*, co-sponsored by Johns Hopkins Medical University and Georgetown Medical Center
- 2004: *Neuroplasticity: The Neuronal Substrates of Learning and Transformation*
- 2003: *Investigating the Mind: Exchanges between Buddhism and Biobehavioral Science on How the Mind Works*, co-sponsored by the McGovern Institute at Massachusetts Institute of Technology
- 2002: *The Nature of Matter, The Nature of Life*
- 2001: *Transformations of Mind, Brain and Emotion at the University of Wisconsin*
- 2000: *Destructive Emotions*
- 1998: *Epistemological Questions in Quantum Physics and Eastern Contemplative Sciences* at Innsbruck University
- 1997: *The New Physics and Cosmology*
- 1995: *Altruism, Ethics, and Compassion*
- 1992: *Sleeping, Dreaming, and Dying*
- 1990: *Emotions and Health*
- 1989: *Dialogues between Buddhism and the Neurosciences*
- 1987: *Dialogues between Buddhism and the Cognitive Sciences*

Mind and Life Books and DVD Sets

The following books and DVD sets describe discussions between His Holiness the Dalai Lama and Western scientists. Books in print can be obtained from major booksellers; DVD sets are available directly from the Mind & Life Institute. For more information about each title, please go to www.mindandlife.org.

- Forthcoming, *Altruism and Compassion in Economic Systems*, DVD from Mind & Life XX in 2010
- *Educating World Citizens for the 21st Century*, DVD from Mind & Life XIX, in 2009
- *The Science of a Compassionate Life*, DVD from the His Holiness the Dalai Lama's Denver Public Talk in 2006
- *The Science and Clinical Applications of Meditation*, DVD from Mind & Life XIII in 2005
- *Train your Mind; Change your Brain*, from Mind & Life XII in 2004
- *Investigating the Mind*, DVD from Mind & Life XI in 2003
- *The Dalai Lama at MIT*, from Mind & Life XI in 2003
- *Mind & Life: Discussions with the Dalai Lama on the Nature of Reality*, from Mind & Life X in 2002
- *Destructive Emotions: A Scientific Dialogue with the Dalai Lama*, from Mind & Life VIII in 2000
- *The New Physics and Cosmology: Dialogues with the Dalai Lama*, from Mind & Life VI in 1997
- *Visions of Compassion: Western Scientists and Tibetan Buddhists*, from Mind & Life V in 1995
- *Sleeping, Dreaming, and Dying: An Exploration of Consciousness with the Dalai Lama*, from Mind & Life IV in 1992
- *Healing Emotions: Conversations with the Dalai Lama on Mindfulness, Emotions, and Health*, from Mind & Life III in 1990
- *Consciousness at the Crossroads: Conversations with the Dalai Lama on Brain Science and Buddhism*, from Mind & Life II in 1989
- *Gentle Bridges: Conversations with the Dalai Lama on the Sciences of Mind*, from Mind & Life I in 1987

Mind and Life Research Initiatives

- **Mind and Life Summer Research Institute** — A week-long residential science retreat for 200 scientists, clinicians, contemplative scholar/practitioners and philosophers from around the world, working together to develop new fields of science and studies that examine the effects of contemplative practice and mental training on brain, behavior, philosophy, religious studies and the humanities. This is an annual program of the Mind & Life Institute which began in June, 2004, and has continued yearly since then.
- **Mind and Life Francisco J. Varela Research Grant Program** — providing small research grants to investigate hypotheses developed at the Mind & Life Summer Research Institute. Ten to 15 Varela Awards are given yearly.
- **Mind and Life Education Research Network** — exploring how to bring the benefits of mental training in clarity, calmness and kindness to children.
- **Mind and Life Education Research Network Grant Program** — providing research grants for pilot studies designed to address fundamental issues related to the measurement, feasibility, and effects of mindfulness-based programs designed for children, adolescents, and their teachers.



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