



Mind & Life XXI

# **Mental Training**

Impact on Neuronal,

Cognitive and

Emotional Plasticity

Madison, Wisconsin • May 16, 2010

## LETTER FROM MIND & LIFE INSTITUTE CO-FOUNDER, CHAIR AND CEO

## **Greetings and Welcome**



On behalf of His Holiness the Dalai Lama, the Mind & Life Board of Directors and the Center for Investigating Healthy Minds, welcome to Mind & Life XXI: Mental Training: Impact on Neuronal, Cognitive and Emotional Plasticity.

The Mind & Life Dialogues among the Dalai Lama, scientists, philosophers and other contemplatives began in 1987 as a joint quest for a more complete understanding of the nature of the mind and to promote well-being on the planet. Over the past 23 years these dialogues have covered many topics ranging from

Physics and Cosmology to Neuroplasticity; from Altruism and Compassion in Economic Systems to Destructive Emotions and Education. A complete summary of our Dialogues can be found on the back cover of this brochure.

Our work, however, is not limited to dialogue and understanding. We also seek to translate what we learn into programs, interventions and tools that will bring tangible benefit to people's lives. Over the past two decades we have developed initiatives that have catalyzed the development of scientific research in the emerging areas of Contemplative Neuroscience and Contemplative Clinical Science. These efforts focus on the investigation of the effects of contemplative-based practices on mind, brain, behavior, the prevention and treatment of disease and general health and well-being.

A critical characteristic of the Contemplative Sciences is that contemplative scholars and practitioners are true collaborators in the research studies, seeking to understand the human mind through an integrated mode of knowing that rigorously combines first-person knowledge from the world's contemplative traditions with third-person methods and findings from contemporary scientific inquiry. Within this approach is an appeal to scholars in the humanities, including philosophy, religion, anthropology, and the history of science, so that cultural assumptions and conceptual vulnerabilities are understood and acknowledged.

Dr. Richard Davidson, Director of the Center for Investigation of Healthy Minds, joined our Mind & Life family in 1990 when he was invited to participate in Mind & Life III in Dharamsala, India. At the last moment, when family matters prevented him from attending, he asked his colleague, Clifford Saron to participate in his place. Following Mind & Life III, Richie, Cliff and others developed MLI's first field research project, Training The Mind: A neuroscientific evaluation of exceptional mental abilities among Tibetan monks. Richie met the Dalai Lama in Dharamsala in 1992 as part of that study. Richie has remained an integral part of MLI's leadership ever since, coordinating Mind & Life V: Altruism, Ethics and Compassion in 1995 and Mind & Life IX: Transformations of Mind, Brain and Emotion at the Waisman Center in 2001. When MLI co-founder Francisco Varela passed away in 2001, Richie took his place as MLI's scientific visionary and his leadership has guided MLI to become a world leader in developing the Contemplative Sciences.

Today MLI is honored to return to the University of Wisconsin with Mind & Life XXI as part of the Grand Opening Celebration of CIHM, and to congratulate Richie on this giant leap forward.

With warmest regards,

R. Adam Engle

Chairman and CEO, Mind & Life Institute

## **MEETING OVERVIEW**

In the spirit of true collaboration, Mind & Life XXI: Mental Training: Impact on Neuronal, Cognitive and Emotional Plasticity will be in the format of a working lab meeting, where scientists and their collaborative collaborators from three prominent laboratories currently investigating contemplative practices will present recent research findings and outline obstacles and challenges they have encountered and invite His Holiness to participate in a dialogue aimed at overcoming the obstacles, meeting the challenges and delineating future research directions. The meeting participants are:

His Holiness the Dalai Lama

Geshe Thupten Jinpa, Ph.D.

Richard Davidson, Ph.D.

John Dunne, Ph.D.

Barbara Fredrickson, Ph.D.

Antoine Lutz, Ph.D.

Matthieu Ricard, Ph.D.

Sharon Salzberg

Clifford Saron, Ph.D.

Institute of Tibetan Classics

University of Wisconsin

Emory University

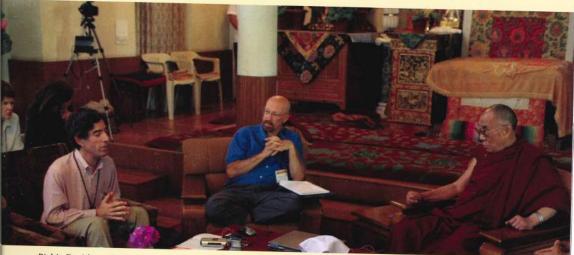
University of North Carolina

University of Wisconsin

Shechen Monastery

Insight Meditation Society

University of California, Davis



Richie Davidson, Adam Engle and His Holiness the Dalai Lama at Mind & Life XII (2004) on Neuroplasticity

### LABORATORY OVERVIEWS

The Mind & Life Institute holds three different types of meetings: Public Talks open to everyone, Private Meetings with His Holiness the Dalai Lama at Dharmasala, and Scientific Data Update Meetings for smaller audiences. This meeting, Mind & Life XXI: Mental training: Impact on Neuronal, Cognitive and Emotional Plasticity, is a Scientific Data Update Meeting. We are pleased and proud to bring together some of the foremost scientific minds with some of the most revered and respected contemplatives and contemplative scholars. The scientific contingent is represented by three outstanding University Laboratories:

## The Center for Investigating Healthy Minds (CIHM)

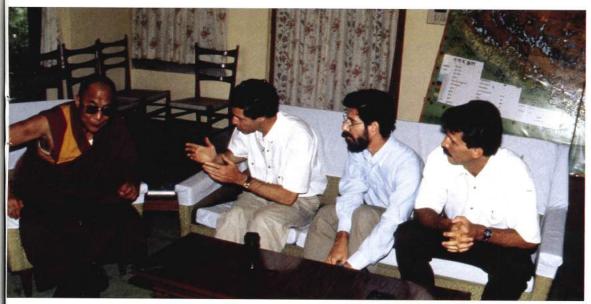
Directed by Dr. Richard Davidson, CIHM conducts rigorous interdisciplinary research on healthy qualities of mind such as kindness, compassion, forgiveness and mindfulness. Scientists at CIHM represent an integrated team with a broad array of research methodologies from behavioral to neuroscientific. CIHM engages in translational research and outreach with the goal of cultivating healthy qualities of the mind at the individual, community and global levels.

Located within the Waisman Center at the University of Wisconsin-Madison, CIHM is a research Center dedicated to creating a world in which healthy qualities of mind flourish. Through hard-nosed basic and translational scientific research, CIHM will help to pave the way toward more widespread incorporation of methods and practices to nourish positive qualities of mind throughout society. The work and research of CIHM are at the forefront of the scientific and scholarly communities, and have led to the development of a new hybrid discipline – contemplative neuroscience. In a global era where individuals, communities and the world are reconnecting with the pursuit of happiness, well-being and contentment, and seeking innovative and mindful solutions to achieve it, CIHM offers facts about interventions and methods grounded both in research and the wisdom of contemplative traditions.





#### LABORATORY OVERVIEWS



His Holiness the Dalai Lama, Alan Wallace, Richie Davidson and Greg Simpson discussing MLI field research (1992)

#### The Center for Mind and Brain

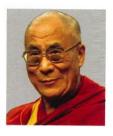
Clifford Saron, Ph.D., is an Associate Research Scientist at the Center for Mind and Brain, a UC Davis research initiative bringing together world-class scientists with the latest technology to learn how the human mind works and to teach the techniques and tools to the next generation of researchers. The Center for Mind and Brain is part of a rich set of interconnected centers and institutes at UC Davis focusing on mind and brain.

The Center for Mind and Brain core research areas include attention and visual cognition, audio-visual integration, music, language and neurolinguistics, cognitive and neurocognitive development, disorders of mind and brain, short-term and long-term memory. Current research applications include the effects of meditation on the brain, interplay between music and memory, how children with autism and Fragile X process information, development of morality in children, neurobiology of sign languages, what optical illusions say about vision, and effects of aging on the brain, including Alzheimer's disease.

#### Positive Emotions and Psychophysiology Laboratory (PEPLab)

Dr. Barbara Fredrickson is the Kenan Distinguished Professor of Psychology and Principal Investigator of the PEPLab at the University of North Carolina. PEPLab studies people's emotions, particularly their positive emotions. They are interested in how positive emotions affect people's thinking patterns, social behavior, and physiological reactions. PEPLab's ultimate goal is to understand how positive emotions might accumulate and compound to transform people's lives for the better.

Techniques include analyzing reactivity in people's autonomic nervous systems (using a wide range of measures) and facial muscles (using facial EMG). They also assess the breadth of attention and cognition using various computerized reaction time tests. PEPLab is an expert in asking people to report on their subjective experiences of emotions and emotion-related experiences using both on-line and retrospective techniques.



Tenzin Gyatso, the 14th 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 13th 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 compas-

sionate 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.



Thupten Jinpa, Ph.D. was educated in the classical Tibetan monastic academia and received the highest academic degree of Geshe Lharam (equivalent to a doctorate in divinity). Jinpa also holds a BA in philosophy and a Ph.D. in religious studies, both from the University of Cambridge, U.K, where he also worked as a research fellow for three years. Since 1985, he has been the principal translator to the Dalai Lama, accompanying him to the United States, Canada, and Europe. He has translated and edited many books by the Dalai Lama, including the recent New York Time's bestseller Ethics for the New Millennium.

His published works include also scholarly articles on various aspects of Tibetan culture, Buddhism and philosophy, including the entries on Tibetan philosophy for Encyclopedia of Asian Philosophy recently released by Routledge, UK. His two latest works are Songs of Spiritual Experience: Tibetan Poems of Awakening and Insight (co-authored) and Self, Reality and Reason in Tibetan Thought. He is on the advisory board of various educational and cultural organizations in North America, Europe and India, and is also the book review editor for Contemporary Buddhism, an interdisciplinary journal exploring the interface between Buddhism and modern society. He is currently the president and the editor-in-chief of the Institute of Tibetan Classics, a non-profit educational organization dedicated to translating key Tibetan classics into contemporary languages.



His Holiness the Dalai Lama, Thupten Jinpa, John Dunne and His Holiness the Karmapa at Mind & Life XIV (2007)



Richard J. Davidson, Ph.D. is the Director of the Center for Investigating Healthy Minds at the Waisman Center, University of Wisconsin-Madison. He was educated at New York University and Harvard University, where he received his B.A. and Ph.D., respectively, in psychology. Over the course of his research career he has focused on the relationship between brain and emotion. In 1992, as a follow-up from previous Mind & Life meetings, he was a member of a scientific team doing neuroscientific investigations of exceptional mental abilities in advanced Tibetan monks.

He is currently the William James Professor and Vilas Research Professor of Psychology and Psychiatry at the University of Wisconsin. He is co-author or editor of thirteen books, including Visions of Compassion: Western Scientists and Tibetan Buddhists Examine Human Nature and The Handbook of Affective Science.

Professor Davidson has also written more than 250 chapters and journal articles. He is the recipient of numerous awards for his work, including the Research Scientist Award from the National Institute of Mental Health, the Distinguished Scientific Contribution Award from the American Psychological Association and election to the American Academy of Arts and Sciences. He was a member of the Board of Scientific Counselors of the National Institute of Mental Health. He was named one of the 100 most influential people in the world by Time Magazine in May, 2006 and in November, 2006 he received the first Mani Bhaumik Award from UCLA for advances in the understanding of the brain and the conscious mind in healing.



John Dunne, Ph.D. 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 the 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 work includes an essay on neuroscience and meditation co-authored with Richard Davidson and Antoine Lutz. He frequently serves as a translator for Tibetan scholars, and as a consultant, he has assisted Drs. Davidson and Lutz in their neuropsychological studies of Tibetan contemplative practices.

Bio's cont'd from page 7



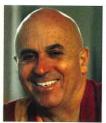
**Dr. Barbara L. Fredrickson, Ph.D.** is the Kenan Distinguished Professor of Psychology and Principal Investigator of the Positive Emotions and Psychophysiology Lab at the University of North Carolina. She is a leading scholar within social psychology, affective science, and positive psychology. Her research centers on positive emotions and human flourishing and is supported by grants from the National Institute of Mental Health. Her research and her teaching have been recognized with numerous, honors, including, the 2000 American Psychological Association's Templeton Prize in Positive Psychology. Her work is cited

widely and she is regularly invited to give keynotes nationally and internationally. She lives in Chapel Hill with her husband and two sons.



Antoine Lutz, Ph.D. is an Associate Scientist at the Laboratory For Functional Brain Imaging and Behavior at the Waisman Center in the University of Wisconsin-Madison. His research interests focus on the role of large-scale neuronal integration (neural synchrony mechanisms) during various mental states (voluntary attention, emotion generation) and on the impact of standard meditation techniques on basic affective, cognitive and social functions and on the brain mechanisms that subserve these processes. His research has been largely supported by grants from the National Institute of Health. He is associated with the Center for

Investigating Healthy Minds in Madison. He received his Ph.D. in cognitive neuroscience at Paris University under the supervision of Dr. Francisco Varela. He did his post-doctoral work at the University of Wisconsin-Madison under the supervision of Dr. Richard Davidson.



Matthieu Ricard, Ph.D. is a Buddhist monk at Shechen Monastery in Kathmandu and French interpreter since 1989 for His Holiness the Dalai Lama. 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. He first traveled to the Himalayas in 1967 and has lived there since 1972, studying with Kangyur Rinpoche and Dilgo Khyentse Rinpoche, two of the most eminent Tibetan teachers of our times.

With his father, the French thinker Jean-François Revel, he is the author of The Monk and the Philosopher, of The Quantum and the Lotus with the astrophysicist Trinh Xuan Thuan, and of Happiness, A guide to Developing Life's Most Important Skill. He has translated several books from Tibetan into English and French, including The Life of Shabkar. As a photographer, he has published several albums, including The Spirit of Tibet, Buddhist Himalayas, Tibet, an Inner Journey and Motionless Journey. He devotes all the of proceeds from his books and much of his time to thirty humanitarian projects such as clinics, schools, orphanages, elderly people's home and bridges in Tibet, India, Nepal and Bhutan, and to the preservation of the Tibetan cultural heritage.



Sharon Salzberg is cofounder of the Insight Meditation Society (IMS) in Barre, Massachusetts. She has been a student of Buddhism since 1971, guiding meditation retreats worldwide since 1974. Sharon's latest book is The Kindness Handbook. She is also the author of The Force of Kindness, Faith: Trusting Your Own Deepest Experience, and Lovingkindness: The Revolutionary Art of Happiness. Her most recent audio recordings are: Guided Meditations For Love & Wisdom: 14 Essential Practices, and Unplug: An Interactive Audio Kit published. For more information about Sharon, please visit: www.SharonSalzberg.com.



Clifford Saron, Ph.D., is an Associate Research Scientist at the Center for Mind and Brain and M.I.N.D. Institute at the University of California at Davis. He received his Ph.D. in Neuroscience from the Albert Einstein College of Medicine in 1999 studying the electrophysiology of interhemispheric visuomotor integration under the direction of Herbert Vaughan, Jr. Dr. Saron has had a long-standing interest in brain and behavioral effects of meditation practice and has been faculty at the Mind & Life Summer Research Institute and is currently a member of the Program and Research Council of the Mind & Life Institute. In the early

1990's he was centrally involved in a field research project investigating Tibetan Buddhist mind training in collaboration with Jose Cabezón, Richard Davidson, Francisco Varela, Alan Wallace and others under the auspices of the Private Office of H.H. the Dalai Lama and the Mind & Life Institute.

Currently, in collaboration with Buddhist scholar Alan Wallace and a consortium of over 30 scientists and researchers at UC Davis and elsewhere, he is Principal Investigator of The Shamatha Project, a unique longitudinal study of intensive meditation training based on the practice of meditative quiescence (shamatha) and cultivation of the four immeasureables (loving kindness, compassion, empathetic joy, and equanimity). The project, focused on changes in attention-related skills and emotion regulation, is the most comprehensive multimethod study to date regarding the potential effects of long-term intensive meditation practice on basic mental and physical processes related to cognition, emotion, health physiology, and motivation. His other primary research interest focuses on investigating brain and behavioral correlates of sensory processing and multisensory integration in children on the autistic spectrum.





#### **ABOUT THE CO-SPONSORS**

#### About The Mind & Life Institute

The Mind & Life Institute (MLI) is a non-profit organization whose primary purpose is to relieve suffering and advance human well-being. Using collaborative, multi-disciplinary dialogue and research, we seek to understand the human mind through an integrated mode of knowing that rigorously combines first person knowledge from the world's contemplative traditions with methods and findings from contemporary scientific inquiry. Within this approach is an appeal to scholars in the humanities, including philosophy, religion, anthropology, and the history of science, so that cultural assumptions and conceptual vulnerabilities are understood and acknowledged.

MLI pursues its mission through an integrated set of six initiatives:

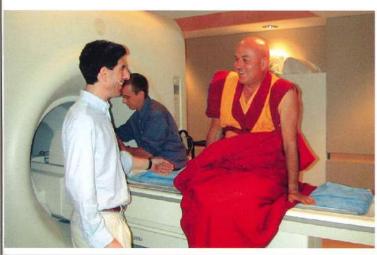
- 1. Mind & Life Dialogues with His Holiness the Dalai Lama and publications reporting on the Dialogues
- 2. Mind & Life Summer Research Institute [MLSRI] and Mind & Life Francisco J. Varela Research Awards
- 3. Mind & Life Research Grant Programs
- 4. Mind & Life Developmental Science Research Network [MLDSRN]
- 5. Mind & Life Humanities and Social Sciences Initiative
- Mind & Life Institute as Collaborative Coordinator of Research Centers in Contemplative Sciences

#### **About The Center for Investigating Healthy Minds**

The Center for Investigating Healthy Minds at the Waisman Center, University of Wisconsin-Madison, includes a diverse mix of scientists from several different disciplines as well as scholars in the humanities. Their mutual focus on the study of healthy qualities of mind will be aided by the major instrumentation housed in the Waisman Laboratory for Brain Imaging and Behavior.

The Center uses the plural "healthy minds" to convey that there are many ways in which to have a healthy mind, and it is dedicated to studying this diversity. The word "investigating" is used since we do not yet know exactly what constitutes healthy qualities of mind. Part of the Center's mission is to conduct research explicitly examining this question.

The Center is one of the world's leading scientific groups dedicated to the study of how contemplative practices might play a useful role in changing the mind in a positive manner.



Richie Davidson and Matthieu Ricard at the Waisman Center

### **ACKNOWLEDGEMENTS**

We would like to thank the following people and organizations for their help in producing this event:

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Susan Jensen, MS,
Assistant to the Director
Mel Charbonneau, Director of
Communications and Marketing
Donna Cole, Assistant Director
Sherry Hutchison, Events Coordinator
Teresa Palumbo,
Waisman Center External Relations

#### Mind & Life Institute

R. Adam Engle, Chairman and CEO
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Diego Hangartner, COO
Chris O'Brien, Development and
Communications Officer
Angela Teng, Program Manager
Heather Locke, Program Manager
Dave Womack, Program & Facilities
Coordinator

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Mind & Life XII participants with His Holiness the Dalai Lama in Dharamsala (2004)



## A TWENTY-THREE YEAR HISTORY OF ACCOMPLISHMENT



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 the Effect of the Contemplative Practice on Human Biology and Behavior, 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, cosponsored 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 School of Education, the American Psychological Association and the Collaborative for Academic, Social and Emotional Learning
- 2009: Attention, Memory, and the Mind
- 2009: 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 & 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.

- 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 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 & Life Research Initiatives

- Mind & 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 & 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 & Life Education Research Network exploring how to bring the benefits of mental training in clarity, calmness and kindness to children.
- Mind & 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 mindfulnessbased programs designed for children, adolescents, and their teachers.



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