



MIND & LIFE
INSTITUTE

The Mind & Life Institute presents



Mind and Life XXV

Contemplative Practice and Health:

Laboratory Findings
and Real World
Challenges

with His Holiness
the Dalai Lama

Saturday, October 20, 2012
The Rockefeller University
New York, NY

INTRODUCTION



On behalf of the Mind & Life Institute, I welcome you to our 25th major event: Contemplative Practice and Health. Today we have the rare privilege of fundamentally re-examining how we think about and treat illness and suffering. We will do so with the help of leading scientists, physicians, contemplative practitioners and His Holiness Tenzin Gyatso, the XIVth Dalai Lama. The contemplative wisdom traditions have long sought out and refined ways of relieving suffering and promoting human flourishing. In particular, the use of mental training or meditation that is shared by these traditions has become an increasingly common complement to standard medical treatments seeking fully to address suffering and illness as they affect the whole person.

For 25 years, the Mind & Life Institute has sought out ways of bringing the wisdom and practices of the world's great spiritual traditions into the laboratory and into life. We are confident that only from an integration of the best science with the deepest insights and transformative practices of these traditions will we be able to accomplish true healing and promote genuine well-being. We are deeply honored to have worked together with His Holiness the Dalai Lama for 25 years, seeking always for the true nature of reality as well as the deepest understanding of ourselves, not merely out of curiosity but in order to be of greater service. If suffering is rooted ultimately in ignorance, then only insight born of compassion will suffice.

Again, welcome, and we are pleased to host you for this remarkable day which has been made possible through the generosity of Mind and Life donors and especially the Hershey Family Foundation. Thank you.

A handwritten signature in cursive script that reads "Arthur Zajonc".

Arthur Zajonc President, Mind & Life Institute

INTRODUCTION



The Rockefeller University is a world-renowned center for research and graduate education in the biomedical and physical sciences. The University was founded in 1901 as the first medical research center in the United States. Its research hospital, established in 1910, remains the nation's largest private center for clinical investigation. Rockefeller has been the site of many historic breakthroughs, including the landmark discovery that genes are made of DNA. Today, 600 scientists and 200 Ph.D. and M.D.-Ph.D. students conduct research in 73 independent laboratories. The University's unique laboratory-based structure — free of conventional academic departments — encourages innovation and collaboration. Over the years, 24 scientists associated with The Rockefeller University have been awarded the Nobel Prize.

THE ROCKEFELLER UNIVERSITY, NEW YORK, NY



PROGRAM OVERVIEW

Participants

Tenzin Gyatso

His Holiness the XIVth Dalai Lama

Richard J. Davidson, Ph.D.

Director, Laboratory for Affective Neuroscience, *University of Wisconsin-Madison*

Anne Harrington, Ph.D.

Acting Chair, Department of the History of Science, *Harvard University*

Jimmie Holland, M.D.

Wayne E. Chapman Chair in Psychiatric Oncology, *Memorial Sloan-Kettering Cancer Center*

Alfred Kaszniak, Ph.D.

Professor of Psychology, Neurology, and Psychiatry, *University of Arizona*

Bruce S. McEwen, Ph.D.

Mirsky Professor and Head, Laboratory of Neuroendocrinology, *The Rockefeller University*

Lis Nielsen, Ph.D.

Chief, Individual Behavioral Processes Branch, *National Institute on Aging*

Matthieu Ricard, Ph.D.

Buddhist Monk, *Shechen Monastery*

Clifford Saron, Ph.D.

Associate Research Scientist, Center for Mind and Brain, *University of California at Davis*

David Spiegel, M.D.

Willson Professor and Associate Chair of Psychiatry, *Stanford University School of Medicine*

Arthur Zajonc, Ph.D.

President, *Mind & Life Institute*, Professor Emeritus of Physics, *Amherst College*

HIS HOLINESS MEETS WITH VARELA AWARDEES, MIND AND LIFE XXIV, 2012, MAYO CLINIC



Contemplative Practice and Health: Laboratory Findings and Real World Challenges

Modern biomedical science and evidence-based clinical practice have made enormous contributions toward the alleviation of suffering through development of effective treatments of illness and preventative interventions. Many of the advances of biomedical science have emerged from a focus upon basic biological processes in response to pathogens and injury, and the development of pharmacological, radiological, and surgical interventions that either interrupt pathological processes or facilitate the body's healing capacities.

The focus and systematic empirical methods of biomedical science have enabled these advances. However, an implicit aspect of the worldview of biomedical science has often included a divide between the mind and the body. One consequence of this artificial divide is the frequent experience of patients in our healthcare settings that their bodies are well-attended, but with a relative neglect of their experience of distress and the impact of illness and limitation upon their lives in social and other real-world contexts. As recent research has demonstrated, the experience of distress itself changes the brain with consequences throughout the body, further testifying to the artificiality of any mind-body division.

Our vision for this meeting is one that endeavors to expand the scope of how we think about illness, distress, suffering, and healing. The presentations and dialogues today will incorporate perspectives that integrate basic and clinical research with new discoveries concerning the critical role of the social environment and human capacities for resilience, healing, and even flourishing, revealed by research on neuroplasticity. An important part of this conversation concerns contributions from contemplative wisdom traditions, long concerned with the lived experience of human suffering, the importance of ethical behavior, and the development of mental training practices that have the potential to alleviate distress and suffering. We recognize that these kinds of conversations can often be difficult. Scientists and medical practitioners are understandably skeptical of claims regarding the role of mind in medicine and healthcare. We therefore also wish to examine how psychosocial variables and contemplative mental training practices, particularly meditation, are now being rigorously explored within neuroscience laboratories and real-world research settings. These scientific investigations both encourage the continuing integration and scientific assessment of contemplative perspectives and mental training practices in healthcare, and underscore how there are no easy answers or panaceas.

PROGRAM SCHEDULE

Morning

9:00 Welcome on behalf of the Mind & Life Institute –
- 9:15 Why Are We Here?
Al Kaszniak, Ph.D., University of Arizona

9:15 Welcome on behalf of The Rockefeller University –
- 9:30 Why Am I Here?
Bruce S. McEwen, Ph.D., The Rockefeller University

9:30 His Holiness the Dalai Lama is welcomed to the meeting
- 9:45 Anne Harrington describes the vision for the day

9:45 SESSION ONE: THE REAL WORLD
- 11:30 Moderator: Anne Harrington, Ph.D., Harvard University

Distress as the Sixth Vital Sign: Bridging the Gap Between
Clinic and Laboratory
Jimmie Holland, M.D., Memorial Sloan-Kettering Cancer Center

Tranceformation: Hypnosis, Compassion, and Health
David Spiegel, M.D., Stanford University

Beyond the Clinic: Strategies for Promoting Lifelong Health
and Well-Being
Lis Nielsen, Ph.D., National Institute on Aging

Dialogue with His Holiness
Q&A from the audience

11:30 LUNCH
- 1:30

PROGRAM SCHEDULE

Afternoon

1:30 SESSION TWO: LABORATORY RESEARCH
- 3:30 Moderator: Al Kaszniak, Ph.D., University of Arizona

From Life to Lab: Early Adversity, Brain Circuitry, and the Emergence of Well-Being
Richard J. Davidson, Ph.D., University of Wisconsin-Madison

Life in the Lab: The Shamatha Project as a Model For Bridging the Lab-Life Gap
Clifford Saron, Ph.D., University of California at Davis

The Brain on Stress: Importance of the Social Environment for Brain and Body Health
Bruce S. McEwen, Ph.D., The Rockefeller University

Dialogue with His Holiness and Matthieu Ricard
Q&A from the audience

3:30
- 4:00 BREAK: His Holiness departs

4:00 SESSION THREE: NEXT STEPS
- 5:30 Moderator: Arthur Zajonc, Ph.D., President of the Mind & Life Institute

Panel conversation with the audience

Brief closing remarks
Arthur Zajonc, Ph.D., President of the Mind & Life Institute

MIND AND LIFE SUMMER RESEARCH INSTITUTE



Distress as the Sixth Vital Sign: Bridging the Gap Between Clinic and Laboratory

Jimmie Holland, M.D., Memorial Sloan-Kettering Cancer Center

Traditional medicine has focused over the centuries on the treatment of disease, not the treatment of the patient. This was noted in 1927 by Peabody in the JAMA who wrote that medical students were taught the newest science but they were not taught "the care of the patient". The same could be written today. In 2012, however, we now have evidence-based interventions, treatment guidelines and a science of psychosocial care which addresses treatment of the whole patient with cancer. The Institute of Medicine in 2008 reported a new standard for quality cancer care: the psychosocial domain must be integrated into routine care.

This presentation will review the major barrier and approaches to integrating the psychosocial into routine care. The barrier was the discomfort of both oncologists and patients with the words "psychiatric," "psychological" and "psychosocial," related to the stigma attached to all mental issues. The word "distress" was chosen, which sounds normal and is non stigmatizing. The evolution of the Distress Thermometer and its designation as the Sixth Vital Sign will be traced along with its use at an international level in cancer and potentially other chronic diseases.

Tranceformation: Hypnosis, Compassion, and Health

David Spiegel, M.D., Stanford University

The observation of His Holiness the Dalai Lama that compassion for others involves taking on suffering, but with a voluntary dimension that changes it, is examined in the context of our research on Supportive-Expressive Group Therapy for women with advanced breast cancer. The existential philosophical tradition has long argued a similar perspective, that authentic living comes with facing our limitations, including those imposed by illness. We incorporated this direct approach to dying and death along with the use of hypnosis to alter consciousness and enhance control over pain and anxiety in a group psychotherapy program to help women with advanced cancer. This involves building a community of support with those facing similar challenges. We expected and found that this intervention reduced depression, anxiety, and pain, but were surprised to find an enhancement in survival time in this and other similar studies. Mind-body mechanisms linking better management of the stresses related to cancer to changes in brain, hormonal, and immune function, will be discussed. A new paradigm linking biomedicine with traditions involving contemplation, compassion, and community will be identified as a means of transforming health care by teaching tranceformative skills to people facing life-threatening illness.

RICHARD J. DAVIDSON WITH MATTHIEU RICARD



Beyond the Clinic: Strategies for Promoting Lifelong Health and Well-Being

Lis Nielsen, Ph.D., National Institute on Aging

We are standing on the precipice of two major social challenges: For the first time in history, the number of individuals in the world population over the age of 65 will exceed the number of individuals under the age of 5, with no indication of this trend reversing in the foreseeable future. Simultaneously, the costs of treating chronic diseases in mid-late life that are attributable to modifiable aspects of behavior and the social environment are threatening to overwhelm the economies of individuals and nations. Embracing a broader life course and person-centered public health agenda may hold promise for confronting these new realities. This requires two shifts in our approach to health. First, that we appreciate the many opportunities to influence health outside the clinic, in the everyday lives of individuals. Second, that we embrace a definition of health that goes beyond the absence of disease, to encompass the promotion of adaptive development and aging, the cultivation of individual and societal well-being, and the reduction of suffering and distress. This talk will touch on several target areas - social engagement, stress reduction, behavioral self-regulation, and opportunities for personal growth - where new research is suggesting that interventions in individuals' daily lives may hold potential to support the lifelong maintenance of health and well-being. It will review how harnessing what we already know about successful aging offers initial clues for how to design interventions that will enable individuals to live productively into their later years. It asks us to consider the shape of the world that we would like to inhabit as we age and what steps are needed to get us from here to there.

From Life to Lab: Early Adversity, Brain Circuitry, and the Emergence of Well-Being

Richard J. Davidson, Ph.D., University of Wisconsin-Madison

Newborns enter the world enveloped in profoundly varied environments. The first few years of life constitute a particularly sensitive period during which adversity and advantage shape the developing brain and body, with potentially long lasting residue. This talk will begin with a vignette about two individual neonates who are part of a longitudinal study in which we are engaged. These neonates came into the world in very different circumstances and the social environment in their first year of life serves to illustrate the range of early life circumstances that can profoundly shape the developing brain and body. These circumstances will be described and their effects on early stress hormones and later brain function and structure when these individuals emergence into adolescence will be explained. The findings strongly support the view that early life adversity is a more powerful driver of later brain and social development than challenges that emerge in adolescence. The fact of neuroplasticity invites the consideration that we might use behavioral and mental training procedures to impact and in certain cases, reverse the effects of early adversity, particularly when these interventions are deployed early in life. Illustrations from both contemplative and Western methods to foster greater emotional balance and to promote well-being will be featured and the impact of these early interventions on brain function and structure and on peripheral biology will be described. Collectively, these findings underscore the powerful role that early experience has on shaping the brain and body and highlight the role that behavioral and mental training might have in the promotion of well-being and suggest that emotion regulation, well-being and flourishing are best regarded as the product of skills that can be enhanced through training.