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We are pleased to present our five-year strategic plan for evaluating how people recover, repair, restore and retain health and wholeness. Over the next five years, it is our goal to build scientific tools to better understand and apply a healing model in medicine. We envision a model that brings together ancient healing traditions and modern medicine through rigorous scientific research.

The Samueli Institute enters its fifth year as a robust and vigorous organization. In 2001, the Samueli family founded the Institute with a bold and long-term vision to explore some of the most innovative and far-reaching areas of healing in medicine and science.

That vision is evolving and succeeding at an unprecedented rate. The Institute is one of the largest non-profit organizations solely devoted to investigating core questions about healing. The Institute has developed public and private partnerships with prestigious universities, organizations, corporations and research institutions nationally and internationally. It has become a primary organization for conducting research on complementary and alternative medicine for the U.S. Department of Defense (DoD) and Veterans Health Administration (VHA). During the first five years, the Institute funded more than 90 scientific projects, published 140 peer-reviewed articles and nine books, and supported 14 conferences. The Institute seeks answers to the most important questions facing health care today.

We cannot do this work alone. We invite you to join us in building the science of healing. Sincerely,

Wayne B. Jonas, MD

President & Chief Executive Officer

Healing is how we recover, repair, restore and retain health and wholeness in mind, body, spirit, community and environment.

Healing may or may not result in cure.





The Samueli Institute for Information Biology, d.b.a. Samueli Institute (Institute), is a non-profit, medical research organization supporting the scientific investigation of healing processes and their application in health and disease. Healing is how we recover, repair, restore and retain health and wholeness.

The Institute's mission is to explore the scientific foundations of healing and to apply that understanding in medicine and health care. In that capacity, the Institute conducts research on all types of health care practices. The Institute is one of a small group of organizations in the world with a track record in both complementary and alternative medicine (CAM), healing relationships and military research. The Institute is operated by

national experts in both CAM and military medicine and has been conducting research on these topics for more than five years.

The Institute was created in July 2001 to conduct rigorous basic and clinical research with the goals of discovering the underlying mechanisms of complementary, alternative and traditional healing practices, determining their safety and efficacy and generating reproducible results. The Institute has funded research and collaborated with scientists in the United States and around the world through its offices in Alexandria, Virginia; Corona del Mar, California; Northampton, England and Freiburg, Germany.

Susan and Henry Samueli saw the need for an organization committed to rigorous research and evaluation of complementary and alternative medicine.

The Samueli Institute is now filling this need.



Susan and Henry Samueli saw a need for an organization committed to innovative research in the areas of complementary, alternative and integrative medicine. In 2001, they responded to this need by creating the Samueli Institute with the aim of facilitating rigorous research in these areas of medicine. With the goal of improving health care, the Samuelis' ongoing generosity has made it possible for the Institute to focus on building the science and research methods necessary to achieve the goals outlined in this strategic plan.

As co-founder of Broadcom Corporation, one of the most spectacular high-tech success stories in the country, Henry Samueli is a leading figure in his industry. Susan Samueli has made her mark as one of the country's most generous philanthropists and has been a core force within the Samueli Institute. The Samuelis' support will continue to have a tremendous impact on research in complementary, alternative and integrative medicine.

Susan Samueli has been involved with complementary, alternative and integrative medicine for many years. She began as a student and continued as a practitioner. She earned a bachelor's degree in mathematics at UC Berkeley, a Ph.D. in nutrition from the American Holistic College of Nutrition, and she holds a Diploma in Homeopathy from the British Institute of Homeopathy. Her ongoing role as the President of the Samueli Institute Board of Directors ensures that the Institute stays the course and is true to its mission of transforming health care through the science of healing.





## **Values**

### Service to the public

As a nonprofit, service organization, the Institute serves as a facilitator of research on healing — making discoveries, developing relationships, conducting research and building a rigorous science that results in shared knowledge, improved patient care and healthful living.

### Scientific exploration

The Institute supports science grounded in observation, investigation, and analysis, and has the courage to ask challenging questions within a framework of systematic, high-quality, research methods and the peer-review process.

### Integrity in all we do

The Institute acts with the highest respect for the public it serves by ensuring transparency, responsible management and ethical practices from the board room to the bench and bedside.

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# **Building the Science of Healing — Our Five-Year Plan**

### **Goals and Strategic Initiatives**

The following five-year strategic plan, *Building the Science of Healing*, details the overall Institute goals and initiatives for achieving our mission. This plan is the result of an exhaustive process, taking more than 12 months to develop, with the work of the Institute's dedicated staff and a review panel of experts from around the world.

#### Our Five-Year Goal

### Establish the Samueli Institute as the leading facilitator in the world for the scientific exploration of healing practices

We will do this by supporting scientific exploration with partners, collaborators and with our own scientists, and cultivating research on healing and its evaluation in mainstream health care. In developing these initiatives, the Institute seeks opportunities that will:

- Build the scientific tools and capacity for the evaluation of healing practices
- Use multi-disciplinary evaluation models of science
- Develop effective research services on healing practices for use by the public and private sectors
- Increase our grants, contracts and joint ventures in research
- Transfer knowledge and technologies that facilitate healing to the public sector

#### **Our Commitment**

The Institute provides the highest quality research and evaluation of healing practices in the world, including those in conventional, complementary, alternative and traditional medicine. Our commitment is to research that results in integrated, patient-centered care.

#### **Our Seven Strategic Initiatives**

- Establish the concept of Optimal Healing Environments (OHE<sup>SM</sup>) in health care systems
- Evaluate and document integrative medicine practices that contribute to healing
- Establish the Institute as a leader in mind, spirituality, and healing research
- Develop a state-of-the-art laboratory and biological science program
- Create a center for research in military medicine within the Institute
- Develop a reliable and continually evolving informatics, data management and analysis center
- Establish the Samueli Institute as a trusted and reliable investment for those interested in advancing healing research



# Optimal Healing Environments (OHE<sup>SM</sup>)

Establish the concept of optimal healing environments (OHEsm) for health care delivery systems

OHE<sup>SM</sup> is a concept that puts the patient first and in the center of the care paradigm. While optimal healing environments may provide a high return on investment, the area warrants much more study. The Institute is focused on determining which components, either alone or in combination, optimize healing, initially in hospital settings and ultimately in outpatient clinic settings, worksites and long-term care facilities. Additionally, the Institute will use this research to build the business case for optimal healing environments and facilitate widespread uptake in mainstream health care settings.

- Understand the prevalence and nature of "healing initiatives" currently being implemented in U.S. hospitals
- Validate a business case for evidence-based OHE<sup>sM</sup> in three to five health care systems, including military and Veterans Administration medical facilities
- Achieve OHE<sup>SM</sup> certification in 10 percent of acute care hospitals



## **Integrative Medicine**

#### Evaluate and document integrative medicine practices that contribute to healing

Medical knowledge is not a seamless whole, but a patchwork of techniques and approaches. The Institute studies the integration of practices from a variety of medical traditions and systems. Healing practices from conventional, unconventional, complementary, alternative, traditional and integrative medicine are investigated for their potential contribution to healing. The Institute's work is to evaluate and document effective integrative medical systems for their potential impact and contribution in health care delivery.

- Establish a comprehensive definitional and descriptive base and a research agenda for the creation of effective integrative medicine (IM) systems
- Develop an Integrative Model for the Evaluation of Healing (IMEH) and apply it to the investigation of integrative medicine
- Investigate selected healing practices in the U.S. from conventional, unconventional, complementary, alternative and integrative medicine for their potential contribution to the research agenda
- Build the Institute's and partners' resources for conducting research and program evaluation of integrative medicine, complementary and alternative medicine and traditional medicine practices
- Lead a rigorous international research program that seeks to determine the value and effects of traditional and indigenous healing practices on conditions of global significance



# Brain, Mind and Healing

#### Establish the Institute as a leader in mind, spirituality and healing research

There is a longstanding history of healing practices that compel the detailed study of the roles of the brain, mind and consciousness in health and illness. The growing body of basic and clinical scientific evidence supports the premise that a number of mind-body effects may be evoked by various spiritual and religious practices, experiences within the clinical encounter of medicine and interactions with the environment. Such studies are fortified by the increasing numbers of scholars from a variety of disciplines that are developing strategies and tools for the investigation of how mental processes affect healing.

- Advance research consciousness and mindfulness on illness, healing processes and human flourishing
- Develop a research program to study complexity, emergence, non-locality and causality within the brain and mind
- Develop a research program to study the effects, mechanisms and utilization of placebo and meaning effect(s) in healing paradigms

- Develop research programs to study the role of spirituality in healthcare
- Develop research paradigms that study and affect public perception of spirituality in health care
- Further clinical research on selected mind-body approaches (e.g., yoga, meditation, hypnosis, tai-chi) to enhance healing



## **Basic Science**

#### Develop a state-of-the-art biological science program involving research, training and education

The Samueli Institute is committed to employing state-of-the art developments in the biosciences, coupled with innovative and translational research strategies to understand health and healing. Through worldwide collaborations with major universities and scientific research centers, the Institute is investigating the fundamental biology of approaches such as mind-body medicine and natural products.

- Establish the basic science unit as a premier biological research program that is recognized and respected by the general scientific community
- Develop biological markers that can be utilized to identify and evaluate healing processes and mind body practices
- Integrate biological measures into Institute supported clinical research on healing

- Develop innovative approaches to the study of synergistic and dose-response effects of natural products
- Evaluate the mechanisms, safety and efficacy of natural products on viral and emerging infectious diseases
- Develop and sustain an academic training program that educates students in these areas of research so as to enhance professional development



# **Military Medicine**

#### Create a center for research in military medicine within the Institute

The military and veterans health care systems are important venues for the investigation of healing systems, optimal function, wellness and integrative and complementary medicine practices. The Department of Defense (DoD) and Veterans Health Administration (VHA) operate the largest health care organizations in the United States. They serve a cross-section of populations, have a pragmatic focus on improving effective clinical delivery and outcomes, and provide resources and "living laboratories" to leverage research dollars. By providing research development, data management capabilities, research support and personnel, the Institute, military and veterans sites can become partners in research on integrative medicine. This initiative will foster those partnerships and develop joint research projects at military and veterans health care sites.

- Build a world-class clinical and basic research infrastructure to support research in the military and satellite programs at military and Veterans Health Administration centers across the nation
- Expand the Institute's military research program to include new and emerging areas of mutual interest to the DoD and VHA
- Identify and evaluate the effectiveness of several CAM practices and whole systems approaches that are essential to force health protection and optimal human performance

- Initiate the assessment of Integrative Medicine and OHE<sup>SM</sup> at military and veterans medical treatment facilities
- Translate research findings from military programs to the public and private sectors



# Informatics, Data Management and Analysis Center (IDMAC)

Develop a reliable and continually evolving Informatics, Data Management and Analysis Center

The Informatics, Data Management and Analysis Center (IDMAC) will ensure the quality, integrity and security of all research data generated by the Samueli Institute. The IDMAC will continually assess and incorporate advances in computing, informatics and research methods to enhance the translational research initiatives. With these capabilities, the IDMAC will stimulate the analysis and translation of an ever-expanding body of clinical and bioinformatics data allowing the Institute to identify patterns and make new inferences in healing research. In an increasingly connected world, the IDMAC will support the work of researchers and accelerate the process of making new discoveries.

- Establish and validate IDMAC electronic data capture capability in Institute research projects supporting integrative medicine, OHE<sup>SM</sup> and military research program investigations
- Develop a bioinformatics and systems biology data plan for capturing, storing and analyzing data from basic laboratory research projects and clinical research
- Develop an integrated data management system to conduct Institute research investigations under the Integrative Model for the Evaluation of Healing



## Advancement

Establish the Samueli Institute as a trusted and reliable investment for those interested in advancing healing research

The Samueli Institute is a service organization that seeks to facilitate innovation, scientific rigor and resources for the exploration of healing practices. To be an effective facilitator, the Institute engages with partners who share a common vision of establishing healing and integrative medicine approaches as a part of health care delivery. This initiative seeks to sustain and expand the services of the Institute by joining with partners and building resources consistent with the Institute's long-term vision.

- Put in place a strong advancement strategy and program to further the Samuel Institute's mission
- Become the "top-of-mind" science organization for philanthropists, government partners, corporations and like-minded foundations and individuals in the field of CAM, integrative medicine, traditional medicine and healing practices
- Build an internal capability to systematically evaluate and translate high potential research into revenue opportunities for the Institute

### Acknowledgement

We sought advice from respected researchers, practitioners, leaders and executives, working in our area of science. This group of esteemed colleagues gave of their own time to review and critique our strategic plan. With their help and insight, we developed the plan presented in this document. We wish to express our appreciation for their contribution.

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Executive Director, Samueli Foundation

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Neurovisceral Sciences and Women's Health

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National Foundation for Alternative Medicine

Lynn Woods, PhD Assistant Professor

University of California, Los Angeles

School of Nursing

#### **Our Staff**

Samueli Institute is blessed to have a motivated, intelligent, innovative and committed staff working for the achievement of our mission.

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