

*The doors of wisdom  
are never shut.*

BENJAMIN FRANKLIN

## NEW NIH GRANT TO

In a newly funded National Institute of Health (NIH) project at the Institute of Noetic Sciences (IONS), researchers will examine the relationship of placebo to distant healing. Focusing on wound healing for women undergoing reconstructive surgery, the work is being directed by Marilyn Schlitz, PhD, and Harriett Hopf, MD. The collaboration between IONS, California Pacific Medical School, the Wound-Healing Laboratory at the University of California, San Francisco, and Plastic Surgery Associates in San Francisco will explore the role of belief and intention in the placebo effect.

For nearly three decades, IONS' researchers have been involved in research aimed at understanding the role of mind in healing. More recently, we have looked at ways in which consciousness may have nonlocal properties that connect the mind of a healer with the body of a patient, even at a distance. This phenomenon is called distant healing, or DH for short.

The fundamental assumption in DH is that the thoughts and intentions of one person can somehow affect the health of another person distant from the healer. Many terms have been used to describe interventions that may fall into this category—including intercessory prayer, spiritual healing, nondirected prayer, intentionality, energy healing, shamanic healing, nonlocal healing, noncontact Therapeutic Touch, and level III Reiki. Each of these describes a particular theoretical, cultural, and pragmatic approach toward mediating a healing or biological change through the mental intention of one person toward another.

It is very difficult to determine the exact prevalence of the use of DH as a complementary and alternative medicine (CAM) therapy because it is so widely available and practiced within religious and spiritual life. A national survey in 1996 found that 82 percent of adults in the United States believed in the healing power of prayer; 64 percent felt that physicians should pray with patients who request it. Another study found that 19 percent of cancer patients report they have augmented their conventional medical care with prayer or spiritual healing. A survey of women in the American Cancer Society support groups for women with

## STUDY DISTANT HEALING AND PLACEBO

breast cancer showed that 88 percent found spiritual or religious practice important in coping with their illness, although the extent to which specific prayers or intentions of healing may have been part of their activities was not clear. In acute illnesses, such as cardiac events, these numbers rise even further. One recent study, for example, found that 96 percent of patients stated that they prayed for their health before going in for surgery. In certain cultural or ethnic groups, seeking healing prayers or spiritual healing from an identified practitioner is also commonplace. Spiritual healing, energy healing, and prayer are gaining acceptance among medical professionals as well. In a 1996 survey of Northern California physicians, 13 percent reported using or recommending prayer or religious healing as an intervention. Therapeutic Touch, which may also be performed at a distance, is used formally by nurses in at least 80 hospitals within the US, and has been taught to more than 43,000 health-care professionals. Among the lay public, Reiki International, the largest training organization for so-called “subtle-energy healing,” reports having certified more than 500,000 practitioners worldwide.

Evidence suggests there may be, at least under some well-controlled circumstances, a modest DH effect under conditions that controlled for placebo effects. In addition to the abundant anecdotal claims for the benefits of DH, a relatively small but compelling amount of experimental literature supports the DH effect in various types of simple organisms, laboratory animals, and randomized clinical trials of human patients. As of 1992, at least 131 controlled DH studies had been published, of which 56 found a statistically significant effect. Several randomized, double-blind investigations support the clinical efficacy of DH. Based on a systematic review recently published in the *Annals of Internal Medicine*, John Astin and his colleagues reported that approximately 57 percent (13 of 23) of the randomized, controlled trials (RCTs) reviewed showed a positive treatment effect in a wide range of human populations, including both genders and a wide range of ages and ethnicities. Interpretation of these clinical studies, however, has been complicated by lack of homogeneity in patient populations, lack of control and documentation of current medications,

lack of consistency in healer background and intervention, and uncertainty as to the role of patient expectancies and belief in DH outcomes.

Until now, all the empirical research has been focused on determining whether there is or is not a DH effect. These experiments, while small in number and needing further replication, provide a basis for the hypothesis that DH may be able to modify a variety of biological processes. If we are willing to accept that there is a DH effect, at least under some conditions, then we are challenged with exploring the circumstances or factors that increase or diminish its efficacy. Much of the mystery of DH is due to the fact that there has been no research to manipulate expectancy and belief while assessing efficacy outcomes. This is despite the fact that DH provides an excellent opportunity to study placebo effects related specifically to patient knowledge, belief, and expectancy about the treatment they are receiving, while eliminating nonspecific effects.

Since most participation in DH is not done under RCTs, but involves the patient's knowledge that they are being treated, it is difficult to sort out what proportion of the reported benefits result directly from DH, and what proportion can be attributed to placebo effects. In addition, unless objective means for measuring healing responses are utilized, subjective self-reports of healing can represent misattribution of accelerated healing to the ordinary course of healing in the illness. An experimental model of DH is particularly useful for studying placebo effects, in that nonspecific effects related to the face-to-face and/or verbal interaction between healer and patient are removed.

The newly funded NIH project will study the effects of patient knowledge and expectancies of DH interventions by professional DH practitioners on wound healing for elective breast-reconstructive surgery patients. Using a three-arm randomized controlled clinical trial design, researchers will compare surgical outcomes for 120 women randomized equally to three groups. The first two groups will use a randomized triple-blind design, with Group A receiving no treatment and Group B receiving ➤

a one-hour DH session every day for 14 days. Group C will replicate Group B, except they will be told directly that healing efforts from a distance are being made on their behalf. The objective results will measure the rate of

subcutaneous collagen deposition. Subjective measures will include psychosocial functioning, clinical assessment of surgical recovery, surgical complications, and subjective symptom reports.

## INTEGRATING NOETIC SCIENCES INTO MEDICAL EDUCATION

Less than a decade ago, a deep split existed between those who studied alternative or complementary healing and those who practiced mainstream medicine. Those who studied “healing” generally accorded primacy to the mind, while mainstream medicine virtually ignored any role the mind or spirit might play. Claims for alternative medicine tended to be exaggerated, and usually were unaccompanied by the “gold standard” of scientific evidence: results from randomized, controlled, double-blind experiments.

Today we find an almost overwhelming flood of data on healing—including popular books from scientists, “healers,” and patients alike—yet clear answers remain hard to come by. How do we decide what choices to take when faced with a serious medical problem? Which paths will lead to healing, and which are blind alleys that only distract us from the path to total health? Is there a model for medicine that can provide a map through the quagmire of options—from various experimental drug therapies to esoteric practices that incorporate the Chinese concept of *ch'i*, the Japanese concept of *ki*, or the Indian concept of *prana*?


Armed with a new set of questions, health-care professionals throughout the United States are mending the split between body, mind, and spirit in medicine, and between modern medical practice and alternative forms of healing. Approximately two-thirds of the 125 US medical schools have introduced courses that integrate some form of complementary and alternative medicine, and many include spirituality in the curriculum.

Meanwhile, healing professionals of all types are coming together with a new sense of purpose, seeking to build an integral model of medicine. A recent conference on “Transforming Medicine” at the University of Minnesota’s Center for Spirituality and Healing, for

example, brought together health professionals and researchers, including Marilyn Schlitz and Dean Radin from IONS, to discuss new findings from consciousness studies and their implications for education and practice. The power of intention, the role of assumptions and beliefs, and the challenges of defining healing all raised lively debate.

That same month, doctors and other health professionals at the University of Florida in Gainesville came together with Schlitz to consider the role that prayer, expectations, and subtle energies play in a more meaning-filled medicine. At a technical conference sponsored by the Samueli Institute for Information Biology in Irvine, California, forty scientists, including Radin and Schlitz, assembled to develop standards and guidelines for conducting rigorous research in the areas of distant intentionality, subtle energies, and relationship-centered care. Further north, the Institute for Health and Healing at California Pacific Medical Center, in partnership with IONS, announced a new program to train and certify health professionals in distant healing, complementing an already established curriculum on integrative medicine that includes 500 hours of training. In April, 26 fourth-year medical students, sponsored by the American Medical Student Association, assembled at IONS’ Retreat Center with practitioners from many of the world’s healing traditions for the final rotation of their medical school training, receiving academic credits through the University of Florida School of Medicine.

While a dramatic tension continues between those who believe that the healing system can be reduced to biological processes and those who seek to involve a more holistic and far-reaching view of the healing system, it is clear that a new dialogue on health and healing is emerging.

Marilyn Schlitz, PhD, is vice president for Research and Education at IONS 

# MARILYN SCHLITZ

## FRONTIERS PROFILE



When Marilyn Schlitz was an undergraduate at Wayne State University, she became interested in Thomas Kuhn's work on paradigm shifts. Schlitz was especially intrigued by the idea that perceptions of reality are arbitrary, and have dramatically changed throughout history. While pondering this one day, she chanced upon *Psychic Exploration*, a book by IONS' founder Edgar Mitchell.

Mitchell's book was a triple revelation for Schlitz. It revealed that serious scientists around the world were exploring topics with paradigm-shattering implications; that they were doing this in rigorous, disciplined, and scientific ways; but that they were also encountering massive resistance to their efforts. This juxtaposition piqued her imagination, so in 1977 she started doing remote-viewing experiments to see if she could successfully repeat some of the psychic experiments she had read about. Today, one of those studies is considered a classic for its meticulous design and outstanding results. Those early studies convinced Schlitz that this line of research was important, and with persistence it would be possible to play a key role in paradigmatic transitions of historic proportions.

Through two decades of research experience—first at the Institute for Parapsychology in Durham, North Carolina, and later at the Mind Science Foundation in San Antonio, Texas—Schlitz built a reputation both as a methodology expert and as an experimenter with “golden hands.” In 1993, while conducting post-doctoral research at Stanford University, the impulse that originally led her to explore the far reaches of the mind returned in a synchronistic way, and she accepted an offer she couldn't refuse—to become the director of research at IONS.

At IONS, Schlitz has provided seed grants for some of the most significant contemporary studies on consciousness, intention, healing, and love. She has nurtured the careers of promising young researchers, and she co-organized a major scientific conference on spirituality and healing, first held at Harvard University in 1997. Schlitz is also a senior scientist at California Pacific Medical Center, where she is a principal investigator on a National Institutes of Health (NIH) project investigating distant healing.

She frequently appears in the media, including PBS and CBC science documentaries such as *Nova* and *The Nature of Things*, television programs such as NBC's *Date-line* and ABC's *20/20*, and National Public Radio and New Dimensions radio programs. She has presented dozens of invited talks ranging from Harvard University's Medical School, to Cambridge University, the Smithsonian, and the United Nations.

A reporter once described Schlitz as “a vivacious woman with a ready smile, a well-groomed look, a gentle style, and a razor-sharp analytical mind.” Another described her as having the “wholesome blond radiance of a Midwesterner.” With such glowing personal impressions, the reporters were understandably mystified because Schlitz did not match their stereotype of a radical. She laughs when she's asked about the paradox, replying, “I am a conservative revolutionary. I am embracing revolutionary ideas, but doing it in a very cautious, conservative, and rigorous fashion. I would call myself a radical empiricist: Anything we experience is a valid domain for scientists.” She lives in Petaluma, California, with her fledgling radical-empiricist son, four-year-old Skyler. —DR