# people whis

#### WILLIAM BENDA AND RONDI LIGHTMARK

ver the past two decades, research has demonstrated that the benefits animals provide to *Homo sapiens* are far greater than simply pleasure or assistance with daily labor. In the last ten years, we were introduced to the concept of the "horse whisperer," a person who by training and intuition can communicate nonverbally with his or her equine counterpart, and thus experience harmonious connection from the "equine viewpoint." What our culture is just beginning to realize now (but mainstream science has not yet grasped) is that animals themselves are by nature "people whisperers," and they have, whether innately or intentionally, the capacity both to restore and to sustain us in ways that we have either forgotten or never imagined.

#### Human/Animal Interaction and Physical Health

Perhaps the most measurable effects of any therapeutic modality lie in the physical realm, and perhaps the best-studied effects of relationships with animals are demonstrated by improvements in human cardiovascular health. Researcher Erika Friedmann and others looked at survival rates of patients hospitalized with myocardial infarctions, or unstable angina, and found that only 5.7 percent of pet owners died within one year of discharge compared with 28.2 percent of non-pet owners, all other medical and demographic factors being equal (p<.05). Dog owners in particular were 8.6 times more likely to be alive in one year as compared to those who did not own dogs. This study was later expanded to 369 patients with similar results.

In Melbourne, Australia, cardiac risk factors such as high cholesterol (p<.01), high triglycerides (p<.01), and high

systolic blood pressure (p<.01) were determined by researchers to be higher among non-owners than pet owners. After the investigators employed the *Australian Department of Human Services and Health 1995 Statistical Overview* to estimate cost savings that could arise from owning pets, they hypothesized economic savings of \$26.244 million from decreased medical visits, \$18.856 million from pharmaceutical savings, and \$99.792 million from hospitalizations, which amounts to a total healthcare savings of nearly \$145 million annually.

The effect of pet ownership on blood pressure, a major risk factor for several of the leading causes of death in this country, is of particular interest. One of the most telling studies, by K. M. Allen and others at the State University of New York, investigated forty-eight New York City stockbrokers with hypertension.<sup>2</sup> They found that people with a dog or cat measured half the increase of blood pressure under artificial stressful situations compared to those without pets. These effects were noted even when the subject was not in the same locale as his or her animal. Interestingly enough, it has been found that dogs themselves undergo a 50 percent reduction in blood pressure when petted by humans, suggesting that the physical benefits of the human/animal bond is not unilateral.

Recent studies by one author of this article of the benefits of hippotherapy (physical therapy on horseback) used remote surface electromyography (EMG) to measure muscle activity in truncal musculature of children with spastic cerebral palsy.<sup>3</sup> Sixteen children were randomized to either hippotherapy or sitting on a stationary barrel, and EMG readings were taken during sitting, standing, and walking before and after the intervention. Reduction in spasticity after only eight minutes resulted in an average of more than 60 percent shift toward right/left symmetry in children on the horse compared to those on the barrel, suggesting a most desirable alternative to invasive neurosurgery and injection of botulinum toxin for this condition.

The physiological reasons for such effects in these examples are myriad, and, as of yet, not clearly delineat-

# perers

ed. They most likely fall into two categories, the first being purely physical. The daily walks required by canine companions, for example, result in patterns of daily physical exercise beneficial to heart health. The three-dimensional movement of the horse is so similar to the normal human gait that the disabled child imprints his or her nervous and musculoskeletal system, while at the same time truncal muscles are strengthened, and contracted joints loosen and move more freely.



ED RUSCHA

The second physiological effect is stress reduction: The very act of communing with an animal companion results in decreased release of stress hormones from the adrenal medulla, and therefore mitigates blood pressure escalations.

Although published data of the physical benefits of animal-assisted therapy are miniscule when compared to more traditional approaches, anecdotal evidence abounds. We should indeed remember that anecdotal observations are more than fleeting descriptions of random experience, but in fact the ubiquitous origin of randomized controlled trials.

### Human/Animal Interaction and Psychological Health

Improvements in emotional and psychosocial function have been more difficult to capture with precise measurement. And yet, the majority of research has focused on this area, perhaps because of the large numbers of therapy and service animals used specifically to provide companionship in hospitals, nursing homes, prisons, mental-health institutions, and in-home health care. Such studies consistently note positive improvements in emotional stability, self-esteem, identity, and self-worth in patient populations of all ages, and with a wide variety of psychological dysfunctions.

Why should this be? If we look beyond the rigid constraints of the scientific method, and tap into our own emotional experience, we will see how a deep connection can be achieved with a different species. Although we may normally prefer the support of a human being, under duress the quality of connection becomes more important than the origin of such support. When we are ill—and especially when we are chronically ill—we feel lonely, isolated, and out of contact with the normal routines of everyday life. Long-standing chronic illness or disability, with its attendant specter of social and cultural rejection, serves to intensify our fears and sense of separation and isolation. Our emotional state is often contagious, reflected as fear, concern, and, at times, feelings of guilt in our loved ones, further disrupting our social fabric and magnifying overall stress.

## The State of the Art of Animals as Healers

ountless non-human therapists are working incognito as household pets. From 1980 to 2001, the number of dogs and cats in the United States grew from 98 million to 130 million, and North Americans are found to spend nearly three times as much money caring for their pets as the federal government spends on welfare. It is far from uncommon for a person to forego his or her own medical treatment out of cost considerations, but to write any check necessary to preserve the life and health of a pet. 63 percent of pet owners say "I love you" to their pets daily, and 83 percent refer to themselves as their pet's "mom" or "dad." Research shows that we use exactly the same facial expressions and vocal characteristics in speaking to a puppy as we do to a human infant.

Institutions from schools to prisons to nursing homes have long employed dogs, rabbits, birds, and a variety of other species to help people of all ages and disability. There are currently more than 2,000 canine programs and 650 equine-therapy centers in the US alone, and countless others abroad, as the movement did not originate in the US, but in Central Europe. Not only are a large percentage of such centers and their human therapists trained and certified under national guidelines, but numerous not-for-profit organizations exist to ensure the continued quality, credibility, and viability of the field.

—WB and RL

In contrast, many of our animal companions not only continue to accept us just as we are, when we are sick, disabled, depressed, cranky, grieving, or afraid, but are delighted to have unlimited alone time with us, letting us know that we are still loved and needed no matter how we look or feel—an emotional lift during bouts of the flu for most of us, yes. They can be an absolute soul-saving presence for those afflicted with disabilities lasting months, years, or lifetimes, as well as for those who are trapped within dysfunctional families, an aging body, or the prisons of stone or of the mind.

The gift is not unilateral — life is as much about caring as it is about being cared for; if a sick or disabled person can keep an animal happy, alive, and thriving, the individual experiences a sense of empowerment that can only enhance health and healing. This occurs not only with companion animals, but also through connections with wild animals, fish, or birds (many of us have seen, for example, the image of the elderly woman in the tattered coat feeding pigeons in the park).

In the end, the song says, "the love you take is equal to the love you make." When one feels useful and needed, one strives to become and remain healthy in order to continue caring for those that need support. It is not uncommon for the healthcare system to find pet owners insisting upon early discharge so that they can get back to their species-specific responsibilities.

### Human/Animal Interaction and Spiritual Health

Animals have been used as symbols for different spiritual qualities by shamans, medicine men and women, and religious scribes since the first recorded word. Animals have also historically been associated with fertility, power, the cycle of life, and numerous other mythical and archetypal images. Many of us have experienced how a magnificent landscape or dramatic sunset can evoke deep emotion and a sense of the sacred. If the sunset had its own heartbeat and palpable life force, if the landscape demanded presence and engagement from the viewer as an essential part of the experience, the effect would likely be far more moving. Looking deep into the eyes of an animal, whether tame or wild, can evoke a nameless thrill, a sense of recognition of one's own sacred, ultradimensional, natural self.

One can argue that it is particularly in the human/animal bond (and most frequently in the human/canine relationship) that we encounter that elusive force we call unconditional love. Let us put aside for a moment the connotations found in song, poetry, and Hollywood, and examine this rather esoteric ideal a bit more objectively.

Fundamentally, to love is to be open, to surrender, to drop all personal boundaries that cause distance and separation. To love is active; it does not exist in the past or future, but only manifests in the present moment. Unfortunately, such love generally eludes those of us at the pinnacle of the food chain; we tend not to live in the present, but in the intellectual, time-bound fantasies of past and future. Animals, however, not only live in the moment, but can live nowhere else (unless made susceptible to human neuroses through overbreeding or abuse). Of course, more is involved here than being capable of love; the creature must have the desire to participate in the relationship, and many do, despite neglect by some of their human companions. It is often said that a dog, for example, is the only thing on Earth that loves you more than he loves himself, reflected by its number one ranking in animal companions.

If it is true that unconditional love and self-acceptance is the road to psychological and emotional healing, then being in the presence of one who always lives in that space can show the way. On these terms, the look in the eyes of our animal companion takes on a whole new meaning. We are looking into the soul of nature, where we all live, regardless of shape, hide, or number of legs.

#### A New Vision and Model for Healing

As medical professionals with a goal of facilitating wholeness in the highest and best sense of the word, to push for a medicine that is integrative and healthcare that is integral, our perspective needs to embrace not only the human up close and personal, but also the human in context with the natural world, specifically in relation to other sentient beings.

This can come to pass only with continual inquiry into the meaning of nature, life, and our existence upon this planet. We must foster respect not only for the patient we meet in the clinic or the reflection we greet in the mirror, but also with every other form of life, even includWhat is man without the beasts? If all the beasts were gone, man would die from a great loneliness of the spirit.

All things are connected.

CHIEF SERTILE, 1854

ing those beings which nourish our bodies and our spirits. This is not impossible—indigenous cultures who once lived on the very land we walk upon embraced such a model for living.

Our call for a new paradigm of healthcare has paraphrased Chief Seattle in evoking that all things are connected. The time has come to live what we speak; otherwise the evolution we are seeking can never fully materialize. And those who will help us reach such a goal may well be waiting for us at home.

#### **ENDNOTES**

- 1. E. Friedmann and S.A. Thomas, "Pet Ownership, Social Support, and One-year Survival After Acute Myocardial Infarction in the Cardiac Arrhythmia Suppression Trial (CAST)." *American Journal of Cardiology*, No. 76, (1995).
- 2. K.M. Allen, J. Blascovich, J.Tomaka, and R.M. Kelsey, "Presence of Human Friends and Pet Dogs as Moderators of Autonomic Responses to Stress in Women." *Journal of Personality and Social Psychology*, No. 61 (1991).
- 3. W. Benda, N.H. McGibbon, and K.L. Grant, "Improvements in Muscle Symmetry in Children with Cerebral Palsy after Equine-assisted Therapy (Hippotherapy)." *The Journal of Alternative and Complementary Medicine*, Vol. 9, No. 6, (2003).



笔

BILL BENDA, MD, is a graduate fellow of the Program for Integrative Medicine at the University of Arizona, and a member of the research faculty at Bastyr University. He documents the effects of equine-assisted therapy on children with physical and psychological disabilities, bringing interspecies therapeutics into the medical mainstream. Rondi Lightmark, MA, is a freelance writer and teacher, and co-author of Beyond Obedience: Training with Awareness for You and Your Dog. Her website exploring life after death is www.healgrief.com