HORSE POWER
CAN HORSES HEAL PATIENTS WITH CHRONIC FATIGUE SYNDROME?

by Phillip K. Peterson, M.D.

The question posed in the title of this article was sparked by a visit from my four year-old grandson, Anders. He began collecting a menagerie of toy animals as a toddler. By the time of his visit from Seattle the summer of 2008, he declared he was going to be a veterinarian. Thus, when Tom Molitor, a research collaborator at the University of Minnesota College of Veterinary Medicine, arranged a tour for us of their Equine Center, Anders was thrilled.

My work with Tom Molitor necessitated many trips to the veterinary campus over the years, but never to the Louise and Doug Leatherdale Equine Center. Recently opened, it was spectacular: large, well-lit spaces, magnificent horses standing quietly in stalls, veterinarians talking to and examining horses. But the most stunning part of the tour was a program for people living with disabilities called We Can Ride. We watched as a staff member lowered a boy with cerebral palsy on a beautiful horse and led them around a large arena. The boy was overjoyed. And the tour director told us an autistic child recently uttered his first words on that same horse!

By chance, our visit to the Equine Center occurred a week after a phone call from Dr. Zona McKenzie. At the time, Zona was a 45 year-old physician who gave up her cardiology practice ten years earlier because of disabling fatigue. I first got to know her in the early 1990s as an attending physician on our Internal Medicine Residency Teaching Service. Zona was a star
trainee. However, when I saw her in our clinic in 1998, she was a patient suffering from chronic fatigue syndrome (CFS). I was unaware of her many accomplishments as a mountaineer. But in 1998, she could barely climb a flight of stairs due to the sensation of profound exhaustion. As she met the diagnostic criteria of CFS, we enrolled her in our University of Minnesota Chronic Fatigue Syndrome Research Program. Still sick when she called in 2008, she ended our conversation with the puzzling statement: “You know, Phil, the best thing I ever did for my chronic fatigue syndrome was to get a horse.” If it were not for my visit with Anders to the Equine Center, I never would have given her comment a second thought.

The idea that animals can influence human health is, of course, nothing new. But Zona McKenzie’s suggestion that horses, in particular, can help patients with CFS was totally new to me. My interest in finding out whether there is anything to support such a claim is rooted in the focus of my research collaboration with Tom Molitor. At the time our Chronic Fatigue Syndrome Research Program was established in 1988, we postulated many infectious agents can trigger CFS, but that stress plays a key role in development of the chronic illness. Thus, before exploring territory that was totally foreign to me—the therapeutic potential of horses—it is important to understand what is meant by the term “stress.” It is also essential to summarize what is known (and unknown) about the illness called chronic fatigue syndrome.

**The Pathophysiology of Stress**

My first trip to the University of Minnesota College of Veterinary Medicine occurred in 1985. This visit was prompted by a talk given by Tom Molitor on pseudorabies encephalitis. This viral infection of the brain, I learned, poses a serious threat to swine. Pseudorabies is caused by one of the herpes group viruses (suid herpesvirus-1), a virus that shares many features of herpes simplex virus-1. Herpes simplex virus-1 is the most important cause of fatal
encephalitis in humans in the United States. Although encephalitis is relatively rare, herpes simplex virus-1 also causes cold sores (herpes labialis), a common human malady. Typically, both forms of herpes simplex virus-1 infection occur in otherwise healthy people. In the case of cold sores, however, psychological stress is thought to be a risk factor for reactivation of the virus.

Tom Molitor and I were both interested in herpes encephalitis, albeit in different animal species. But it was our shared interest in the mechanism whereby stress promotes the development of infectious diseases that brought us together.

At about the same time we forged our research collaboration, CFS emerged. First recognized in epidemic form in Lake Tahoe, Nevada, this disabling illness initially was linked to another member of the herpes group viruses: Epstein-Barr virus (EBV). EBV is the cause of infectious mononucleosis, an illness associated with profound fatigue typically lasting several weeks. In 1985, it appeared the patients in Lake Tahoe had a form of chronic EBV infection or chronic mononucleosis. However, by 1988, when the name and defining characteristics of CFS first appeared in the medical literature, it was clear EBV is not the cause of the disorder.

Our suspicion that stress is a cofactor in the development of CFS was linked to a scientific awakening in the 1980s that the central nervous system (i.e., the brain) and the immune system can affect each other. By the time we established our Chronic Fatigue Syndrome Research Program, a new field called psychoneuroimmunology was blossoming. Researchers in this multidisciplinary field demonstrated that the nervous system and the immune system clearly are connected. They showed that stressful life events, such as losing one’s job, divorce, caring for a loved one with Alzheimer’s disease, and taking exams, result in impairments of the immune system.
At the time we embarked on our studies, the definition of stress that made the most sense to us was: “a state of uncontrolled physiological disequilibrium provoked by an external or internal stressor.” This pathophysiological state is also referred to as “distress.” By the mid-1980s, many external and internal factors, or “stressors,” were shown to provoke a stress response in animals and humans. Experimentally, noise, cold temperature, constraint, and mild foot shock were often studied in rodent models, whereas taking final exams by medical or dental students was a common stress paradigm in human studies. Measurements of physiological disequilibrium, i.e., the “stress response,” included impairments of the immune system and increases in stress-responsive hormones.

Because the main function of the immune system is to protect us against microbial invaders, we reasoned the best place to look for evidence of the impact of stress is in infectious diseases. Carefully designed studies in human volunteers by other researchers demonstrated that psychological stress increases the severity of viral infection of the upper respiratory tract (i.e., the common cold). However, the most convincing evidence of the impact of stress on infection comes from animal models. And in studies that assessed the effect of stress on infectious disease-related mortality, researchers clearly demonstrated “stress can kill.”

**Chronic Fatigue Syndrome: What Is Known and Unknown**

With this interest in the connection between the nervous system and the immune system in mind, we launched the University of Minnesota Chronic Fatigue Research Program in 1988. This was the same year the original publication on CFS provided a working definition for all researchers so they would be studying the same illness. Subsequent to this initial report, several attempts were made to refine the case definition. However, the criteria for making the diagnosis
today are similar to the original description. By definition, CFS is a disorder of unknown cause characterized by disabling fatigue for at least six months. Typically, the fatigue is exacerbated by physical activity and unrelieved by sleep. Other troublesome symptoms include muscle or joint pains, headaches, difficulty concentrating, and memory problems.

Despite a prodigious research effort over the past two decades, the cause of CFS is still unknown and hotly debated. During this time period, more than 3,200 peer-reviewed articles and 150 books were published dealing with CFS or chronic fatigue. Whether infectious agents and stress play a role in the initiation and development of CFS, as we originally postulated, remain unclear. To date, at least 22 microbes have been implicated. Most recently, hopes were raised by a report in *Science Magazine* in October 2009 linking a retrovirus, murine leukemia virus-related virus (XMRV), to CFS. And in 2010, a similar virus, murine leukemia virus, was found in a high percentage of CFS patients in another carefully performed study. However, not a trace of these viruses could be found by at least four other research groups. Also, a number of immunological, neuroendocrine, and neuropsychiatric disturbances have been identified. But these abnormalities appear to be of secondary rather than of primary importance, i.e., they are caused by and not the cause of CFS.

Similarly disappointing, but more importantly for the patients, a medical therapy has not materialized. In all, over twenty-five medical and non-medical therapies have been tested in randomized clinical trials in the past two decades. Of these, only graded exercise therapy (a form of individualized, slowly progressive physical therapy) and cognitive behavioral therapy (a psychotherapeutic approach focused on changing attitudes and beliefs) showed benefit for some CFS patients.
Even though CFS remains idiopathic (meaning we don’t know the cause), two things were clear to us from the beginning of our studies. First, this illness is both real and can be severely disabling. Also, it is stressful. Adding to the frustration of suffering from a disabling illness is the absence of a diagnostic laboratory test. Sadly, this fuels stigmatization of CFS patients. Second, all patients need to be reassured they may fully recover. About twenty percent of the 390 patients enrolled in our research program eventually returned to normal health. But, in the meantime, we knew they all needed help coping with a chronic, stressful illness.

“Coping,” according to Webster’s Dictionary of the English Language, means “to struggle or contend, especially on fairly even terms or with some degree of success.” Thus, I wondered had my patient, Zona McKenzie, found her horse helpful in coping with her stressful illness? With this question in mind, I called her back and asked what she meant by her reference to getting a horse. She was kind enough to put this in writing.

“One day as I was facing the third year of my illness I decided I needed a horse! This idea arrived with passion. I had to follow my vision no matter how crazy it seemed to others. It was clear to me that I was not improving. It appeared that I would never resume my career as a cardiologist. I did not require a physician, medication, or more health care. I required a horse! Soon I found the horse of my dreams, Coal Dancer, a tall black Friesian who moves with elegance and rhythm. Together we started down a trail of discovery. At first, I was happy to only sit on my horse. Then gradually I was able to walk, trot and canter. It was amazing how efficient this was for me to build strength, balance and stamina.

There is something magical about a horse that engenders a relationship of harmony and balance. The horse has a wild nature with the attributes of power, grace, and beauty. I experience pure joy when I feel the power and grace in the movement of my horse which I can no
longer generate for myself. Every aspect of my experience with Coal Dancer has been healing. My horse displays emotion and connection. I had been longing for connection after so many years of isolation with my illness.

The horse is also a great teacher. He will always show you the truth of your state of mind and spirit. Coal Dancer became a mirror for me. If I felt fear, he displayed fear. If I felt anger, he was agitated. If I was sad, he was sluggish. If I felt peaceful, he was peaceful.

Trust is not instinctive or automatic for a horse. When trust is established with care, a horse will show compassion and kindness to its rider. I was in need of compassion and kindness!”

My suspicion that Zona McKenzie’s horse was relieving stress certainly was endorsed by this description of her experience: “. . . a horse . . . engenders a relationship of harmony and balance.” But it appeared Coal Dancer was providing much more than a coping skill. “Healing” is the word Zona used to describe her relationship with Coal Dancer. When she called, I had no idea there is a substantial literature and clinical experience suggesting horses possess an innate ability to foster healing. Thus, before trying to answer the question Can horses heal patients with CFS?, I needed a better understanding of the term “healing.” For this, I first turned to recent work in the field of stress research.

Healing: The Journey to Restored Health

In the past decade, Esther Sternberg emerged as a forceful spokesperson for the field of psychoneuroimmunology and stress research. She received her MD degree and training in Rheumatology at McGill University, the home of the pioneer of stress research Hans Selye. Currently, she is Chief of the Section on Neuroendocrine Immunology and Behavior at the
National Institute of Mental Health, one of the institutes of the National Institutes of Health (NIH) in Bethesda, Maryland.

Dr. Sternberg’s career was dramatically influenced by a transformative experience in Lentas, a small village on the southern coast of Crete. When she arrived in Lentas, she was suffering from arthritis that developed while caring for her dying mother. In the serene and welcoming environment of Lentas her arthritis resolved. In her book *Healing Spaces: The Science of Place and Well-Being*, she describes insights from advanced neuroimaging studies that help explain how healing spaces reduce stress and thereby promote health.

What Zona McKenzie ascribed to her relationship with her horse seemed compatible with Esther Sternberg’s view of healing: “If illness and health are nouns, then healing is a verb. It is movement in a desired direction—a journey that takes you from illness to health. There are as many kinds of healing as there are cells and organs in the body and diseases that can affect them, but all involve restoring the body to a state of balance.” Thus, by definition, healing alleviates the uncontrolled physiological imbalance (disequilibrium) called stress.

The notion that healing is a journey, with a patient actively engaged in the process, as opposed to coping, which implies putting up with something, better fits what Zona McKenzie experienced and what CFS patients need. As I mentioned earlier, all CFS patients can realistically hope for an eventual cure, i.e., complete eradication of their illness. In the meantime, however, they need healing, i.e., the journey back to normal health.

Similar to our research focus, Esther Sternberg studies communication between the nervous system and the immune system. In contrast to our notion that an activated immune system is a culprit, however, Esther Sternberg’s view is the immune system “...provides the machinery of healing.” Recent studies of immune cells that reside within the brain, called
microglia, has shown these cells are a double-edged sword, both causing disease and promoting healing. Thus, both ideas may be valid.

Dr. Sternberg points to mounting evidence from sophisticated neuroimaging studies that support the notion that one’s environment impacts brain function. Having visited the beautiful island where Zona McKenzie now lives, I wondered if along with her horse, the sight, sound, and smell of the beautiful countryside and ocean were contributing to her improvement.

To explore the concept of healing further, I next turned to other colleagues at the University of Minnesota: this time at the Center for Spirituality and Healing. This center was founded within the Academic Health Center in 1995. It was one of the first Integrative Medicine Centers, now numbering over forty at academic health centers throughout the United States.

The Center for Spirituality and Healing provides information on a number of complementary and alternative medicine therapies. Their unifying theme is “mindfulness-based stress reduction.” Equine-assisted therapy is one such therapy. Not surprisingly, Drs. Mary Jo Kreitzer, founder and director of the center, and Karen Lawson, an internist and Program Director for Health Coaching, were familiar with and endorsed Esther Sternberg’s views about healing spaces.

**The Healing Power of Horses**

So, can *horses* heal patients with CFS? To find an answer to this question, I first wanted to see what, if anything, is published on the topic. Given my complete unfamiliarity with the subject, I was astounded by the number of books and articles on equine-assisted therapy and the healing influence of horses.
Of the many books, I was immediately drawn to one published in 1997 entitled: *Horse Sense and the Human Heart: What Horses Can Teach Us About Trust, Bonding, Creativity and Spirituality*. My interest was piqued by my use over the years of common sense (“horse sense”) in teaching trainees about medical decision-making.

The authors of this book, Adele and Marlena McCormick, use Spanish Peruvian horses in their clinical psychology practice. Upon reading their book, it immediately became clear that the “horse sense” they described had nothing to do with common sense. Rather, to them, “horse sense” refers to an innate ability of horses to sense the emotional and physical state of the rider. According to the McCormicks, horses have extraordinary powers to teach and see through humans, as well as to heal. And they nourish creativity and spirituality.

Looking for further information on equine-assisted therapy, I found another book with the intriguing title *The Healing Power of Pets: Harnessing the Amazing Ability of Pets to Make and Keep People Happy and Healthy*. Written by a veterinarian, Marty Becker, he tells of the therapeutic effect of his horse, Sugar Babe, and his dogs. “Although I have always lived surrounded by animals, I never really tapped into the healthful powers of my menagerie until I got sick. When illness forced me to shift my focus to the here and now, my pets became my physical therapists, pain management consultants, personal trainers, and psychological counselors. I only received these benefits because I took the time to enhance our Bond: to slow to their pace, follow their instinct, and begin, like them, to listen to my heart and express gratitude for simpler gifts.”

According to Becker, hippotherapy programs are found in twenty-four countries. (*Hippos* is the Greek word for horses.) Hippotherapy is a form of equine-assisted therapy guided by a licensed physical, occupational, or speech/language therapist. It uses equine movement to treat a
variety of medical conditions, including cerebral palsy, spina bifida, multiple sclerosis, and mental retardation.

One comprehensive book by Leif Hallberg, *Walking the Way of the Horse: Exploring the Power of the Horse-Human Relationship*, traces the impact of horses on culture and human health to ancient times. “Therapeutic Riding,” as it is practiced in the United States today, was introduced only about fifty years ago. In Therapeutic Riding the instructor doesn’t need to be a licensed professional. Nonetheless, it uses equine-assisted therapies for the purpose of improving cognitive, physical, emotional, and social well-being of people with a number of disabilities.

In addition to a surprisingly robust literature, I found a number of national and international societies dedicated to equine-assisted therapy. PATH (Professional Association of Therapeutic Horsemanship) International (formerly NARHA) appears to be the largest. A nonprofit organization founded in 1969, PATH International promotes equine-assisted therapies for children and adults with physical, mental, and emotional challenges. With over 6,500 members, 3,500 of whom are certified instructors, PATH International is linked to 800 member centers around the world.

The We Can Ride program my grandson and I witnessed at the University of Minnesota Equine Center is one such PATH International-registered center. We Can Ride is a nonprofit organization founded in Minnesota in 1982. In an interview with the Executive Director, Brad Thorsen, I learned they have four treatment sites. Currently, they are treating over two hundred-sixty clients: children and adults living with a variety of disabilities, such as, traumatic brain injury, stroke, Down’s syndrome, cerebral palsy, and autism. We Can Ride offers Hippotherapy
and Therapeutic Riding. And for those who exceed the one hundred-eighty pound weight limit for riding a horse, they provide Carriage Riding.

I next wanted to meet first hand with a practitioner of equine-facilitated therapy. I was directed by Mary Jo Kreitzer to Tanya Welsch, a lecturer and consultant to the University of Minnesota Center for Spirituality and Healing. Tanya is the director of the nonprofit organization Natural Connections Learning Center (formerly MNLINC), located in the Twin Cities. After receiving a Masters in Social Work, Tanya started working with “at risk” (severely abused) children in the inner city of Minneapolis over twenty years ago. In addition to treating well over one thousand children with severe emotional and behavioral problems, she has worked with their parents and in schools with their teachers. Tanya’s approach, called “Equine-Facilitated Mental Health and Learning,” is systems-based and holistic, incorporating healing connections to the environment. She pointed out the involvement of the therapist spans a continuum from “hands on” (especially with disabled children who might fall off a horse) to standing at the fence and just observing the horse and rider.

My pursuit of an answer to the question *Can horses heal patients with CFS?* now came full circle: a trip back to the University of Minnesota Equine Center, where my inquiry originated. This time I spoke with professor Stephanie Valberg, a veterinarian and director of the center. Stephanie received her PhD in exercise physiology and applies her expertise to the mission of the Equine Center: advancing the health, well-being, and performance of the horse.

I mentioned the anecdote of when I was taken on a tour of the Equine Center with my grandson and saw the expression of joy on the face of the handicapped boy. She was not surprised. And I was not surprised to learn she had an affinity for horses since age two. She fully endorsed the notion that for “horse people” riding is both healthful and therapeutic. She
claimed horses have an innate sense to tell what mood a person is in: a sense of confidence or fear and anxiety. I recalled for her my generally fearful experiences horseback riding as a young boy. She pointed out good riders master their emotions and aren’t even aware they are doing so. I found out that about 80 percent of riders are women, although in the western United States, more riders are men. Gender is also important in terms of the therapeutic effect of horses. While female horses and gelded (castrated) males are predisposed to helping riders, stallions (“intact males”) are more aggressive and can even cause harm. (Maybe I only rode stallions as a young boy?)

I mentioned the case of my CFS patient to her. As graded exercise therapy is one of the only modalities shown to be helpful for some patients with CFS, I asked if exercise could be part of the therapeutic effect of riding. Evidently, slow physical exercise, in the ritual of going to the stable and grooming, is part of the experience. And if one is riding with a group with a shared passion for horses, so are positive social interactions.

I was now convinced considerable anecdotal experience supports the possibility that horses can help heal patients, even potentially those suffering with CFS. However, evidence-based medicine, the gold standard for assessing the risks and benefits of a treatment, requires data from randomized clinical trials. But who would be interested in funding such a study? Because equine-facilitated therapy is considered an alternative or complementary medicine treatment, the National Center for Complementary and Alternative Medicine (NCCAM) was the logical answer.

**Horses and Alternative Medicine**

During the period our Chronic Fatigue Syndrome Research Program was most active, I got to know many researchers from around the world who were studying CFS. Most notable
among them was the late Dr. Stephen Straus. As the Senior Investigator in the Laboratory of Clinical Investigation at the NIH’s National Institute of Allergy and Infectious Diseases, he led the scientific investigation of CFS. Because of his demanding scientific perspective, yet open mind, he was the perfect choice in 1999 to serve as the first Director of NCCAM, also at the NIH.

While there is no agreed upon definition of what constitutes complementary and alternative medicine, NCCAM’s definition captures its essence: “Complementary and alternative medicine is a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine.” Advocacy by NCCAM for evaluation of complementary and alternative treatments for safety as well as efficacy has spawned many studies that would not have been feasible without their support.

A major goal of NCCAM is to fund evidence-based research on complementary and alternative medicine, thereby promoting development of integrative medicine. According to NCCAM, integrative medicine combines complementary and alternative treatments for which there is evidence of safety and effectiveness. Another important feature of integrative medicine is its emphasis on the centrality of the patient-practitioner relationship. As defined by the Consortium of Academic Health Centers for Integrative Medicine, of which the University of Minnesota’s Center for Spirituality and Healing is one: “Integrative Medicine is the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing.”
To my knowledge, a formal survey of CFS patients regarding their use of complementary and alternative medicine has not been carried out. Based upon my experience with the 390 patients in our CFS Research Program, however, I would be surprised if any had not turned to at least one form of alternative therapy.

Equine-assisted therapy, however, is out of reach, geographically or financially, for many of the estimated one to two million CFS patients in the United States. Nonetheless, I believe it should be considered for a randomized clinical trial in CFS. But, such a trial would not be easy. What would constitute a proper control group: CFS patients who do not connect with horses? Or, patients treated with usual management, which likely would include other alternative therapies as well as conventional medical treatment? And most provocatively, if equine-assisted therapy were put to the test and found safe and effective (thereby becoming a form of integrative medicine): would horses need to be included in our definition of practitioners?

**Horses and the Healing Environment**

Until an evidence-based randomized clinical trial is carried out, *experience*-based medicine is all we have. While experience is definitely limited in CFS, I was surprised to find considerable experience with other disabilities to support the claim there is something special about the healing power of horses. For patients like Zona McKenzie, horses can be a powerful vehicle for reducing stress, i.e., restoring harmony and balance.

Recent epidemiological studies by the Centers for Disease Control and Prevention in Atlanta, Georgia indicate that the early data regarding who is at risk of CFS were flawed by what is called “referral bias.” In our Chronic Fatigue Syndrome Research Program, for example, a large majority of patients were professionals with advanced degrees. And most patients were
self-referred. Recent community-based surveys, however, indicate that CFS is actually more common in lower than higher socioeconomic groups and in minorities than Caucasians.

Thus, for CFS patients who do not or cannot connect to horses, their road to recovery needs to include connecting to other aspects of a healing environment, e.g., a knowledgeable and compassionate practitioner, family members, friends, religion, the arts, nature, and for some, animals other than horses.

At the end of my search for an answer to the question *Can horses heal patients with chronic fatigue syndrome?* I thought it fitting to review my findings with my patient, Zona McKenzie. I was amazed that just as she described earlier, her idea to get a horse seemed to come out of nowhere. She didn’t have a therapist (except for Coal Dancer) and knew nothing about the various forms of equine-assisted therapy I have mentioned. And the good news: she continues on her journey to recovery, despite several recent stressful life events. I asked if she would provide her thoughts about healing. Given her spontaneous inspiration she needed a horse, I also asked if she would comment on an element of healing we often witness in clinical practice, i.e., mystery.

“*Healing is all about heart. There may be a mystery and majesty in horses. There may be a mystery and miracle in the recovery of health.*

*You have just received the news that you have CFS. You are in the grips of losing everything. Your flame has been extinguished. But tell yourself, although I am limited, I will do the best I can with what I have. I can still love, and learn, and grow. I may be diminished, but I am not in danger or under threat. I will continue to live fully awake and fully alive. I can still give connection, kindness, and compassion to all who come into my life. I can endure and thrive. I will become stronger and more loving, and more passionate.*
The old flame may be extinguished, but I can light a new torch. That is when I said: I need a horse! That is when a new vision was born. A new flame was ignited. The flame came in a tall and handsome black horse with a long flowing black mane. His name was Coal Dancer.

When I am with Coal Dancer I become lost in his being of ‘horse-ness.’ It is not about my doing anything. The magic is that I become transported to a place of delight in this time of ‘being-ness’ which happens between my horse and me. There is no CFS in this place. There are no conscious thoughts about CFS to weigh me down. I feel fully alive in this time of alert spontaneity with Coal Dancer.

We are the dance and the dancer, without the dancing. Every breath is precious, every glimpse of light is warming, every witness to a sunrise is stunning, every moment spent with friends and family is a treasure.

This is healing. It is all about heart!”

Shortly after receiving this eloquent description of healing from Zona McKenzie, I gave Internal Medicine Grand Rounds on CFS at our hospital. Grand Rounds are weekly educational conferences at which speakers provide updates on important medical problems. In the audience was the usual assembly of faculty members and trainees (medical students and residents). But I planted one attendee: Tanya Welsch, the practitioner of Equine-Facilitated Mental Health and Learning. I began and ended my presentation with a taped interview of Zona McKenzie. Not surprisingly, everyone was moved by her story of the impact of CFS on her life and the cardiology career she deeply loved but had to abandon. I discussed the need of a healing environment for all CFS patients and showed a slide of Zona smiling atop Coal Dancer.

For the medical students in the audience who were just beginning to care for patients, I quoted Francis W. Peabody, an extraordinary internist, who pointed out in a famous lecture to
Harvard medical students in 1925: “The secret of the care of the patient is in caring for the patient.” This is what patients struggling with CFS need most from their doctors, to remember: caring is always important medicine.

In my talk I also emphasized that while we don’t yet know the cause of or how to treat CFS, considerable progress has been made in the past two decades. We are getting closer to answering what I believe is the most important question in CFS research: What is the neurochemical basis of the symptom of fatigue? As I pointed out in my Grand Rounds, finding an answer to this question will benefit not only CFS patients but many millions of patients with other chronic illnesses in which fatigue is a disabling symptom (e.g., cancer, multiple sclerosis, lupus, rheumatoid arthritis, as well as heart, kidney, liver, and pulmonary failure). Additionally, debilitating fatigue is a prominent symptom in patients with idiopathic disorders akin to CFS, e.g., fibromyalgia, Gulf War syndrome, and chronic Lyme disease. I expressed my optimism that sustained research support by the NIH will yield scientific understanding of the pathophysiology of fatigue, thus paving the way to a conventional medical therapy of CFS.

After my presentation, Tanya Welsch came up to speak with me. She suggested this may have been the first Internal Medicine Grand Rounds in which equine-assisted therapy was mentioned in the context of healing patients with a chronic, stressful illness. Given what I had learned of the healing power of horses, we both agreed it is time to connect our healing disciplines. We also agreed that the recent advances in the field of Integrative Medicine are bringing us closer to our common goal: caring (in all senses of the word) for our patients.