From the Research Editor's Perspective...

I want to open the Research section of this premier issue of the *International Journal of Therapeutic Massage and Bodywork: Research, Education, and Practice* (IJTMB) with a provocative question. Does the massage therapy profession actually need research? To many, it may seem that it does not. Consider the following positions I have encountered that are sometimes held by proponents of massage therapy:

- The practice of administering massage for health and well-being is thousands of years old and predates modern methods of scientific inquiry. A practice as time-tested as massage does not need to be proven by science.
- Every day, massage therapists are confronted with the evidence that massage works. They see it each time a recipient is happier, calmer, more relaxed, less anxious, or in less pain following treatment. We do not need research when the daily experience of thousands of massage therapists already proves that massage therapy works.
- Massage therapy is a profession built on compassion, caring, and warmth, whereas science is cold, clinical, and devoid of feeling. The scientific approach is incompatible with the very nature of massage therapy.
- Science is fine for studying conventional treatments and therapies, but massage therapy is different. Because massage therapy is holistic, the reductionistic methods of science just do not apply.

It is worth seeing whether these positions can be refuted, because if they cannot, we need not even have a research section in the IJTMB! Let us examine each in turn:

• The test of time is proof of massage therapy's effectiveness.

Proponents of massage therapy are right to be proud of its unique and ancient history. However, that heritage cannot serve as evidence of effectiveness, for human history is littered with other longlived practices that can be shown to be totally ineffective. Take dowsing, the practice of using a specially shaped stick to detect the "energy" emitted by sought-after water or minerals⁽¹⁾. Like massage, dowsing is old, with a history that extends back at least several hundred years. And, also like massage, it continues to be used in modern times. (In fact, I was personally alerted to its use in modern times just two years ago, when a colleague told me she had hired a dowser to find the best place to site a well on her land.) Does dowsing work? In a word, no. Under controlled conditions, dowsers never detect their targets any better than chance predicts⁽²⁾, which demonstrates that the longevity of a practice cannot be evidence of its effectiveness. Astrology⁽³⁾, creationism⁽³⁾, and several vitalistic theories of health and healing^(4,5) also have ancient histories and modern adherents despite having no evidence for their tenability, which further illustrates that "old" and "persistent" are not synonymous with "correct." Thankfully, massage therapy has much better evidence than longevity for its effectiveness.

• The observations of thousands of massage therapists are proof that the treatment works.

When therapists see a before-and-after change in a client they are treating, one possible explanation for that change is that the therapy worked as intended. But it is also true that other competing explanations for the change cannot be ruled out. It is possible that the client's own healing processes were at work all along and that those processes are responsible for the change, which would have unfolded in the same way without treatment. Or perhaps the treatment itself was not effective, but the client's expectation that it would work elicited a placebo effect. In addition, it is impossible for any therapist to be completely objective about a practice to which he or she has devoted so much time and energy, and so it must be accepted that such before-and-after observations are always going to be prone to bias. This is not to say that the clinical observations of massage therapists are not a form of evidence. In fact, my colleagues and I look forward to receiving them in the form of case reports from the field for inclusion in the IJTMB, because such reports constitute the front line of any clinical science⁽⁶⁾. But these observational approaches must be complemented with research designs that address the previously mentioned evidentiary shortcomings by means of control groups, randomization, and blinding when appropriate. The full range of research designs must be used in concert if an optimal understanding of massage therapy is to be achieved.

• The cold, clinical nature of science is at odds with the warm, compassionate nature of massage therapy. To be an effective therapist, massage or other-

wise, requires warmth and compassion; being an

effective scientist requires the ability to be judgmental and dispassionate. As a person dually trained as both a scientist and a therapist, I can say from firsthand experience that it is often difficult to integrate those qualities in a single person. Nevertheless, although therapeutic and scientific activities frequently emphasize different strengths that can be difficult to balance within oneself, it does not follow that the two domains are incompatible. In fact, the opposite is true. Effective therapeutic practices must be informed by science, and the science of a therapy must be informed by the way in which the therapy is practiced, for that is the only way in which a viable therapy progresses. Further, it is a popular misconception to think of scientists themselves as cold, detached, and uncaring. Yes, a good scientist must logically follow the data wherever they lead, even if that means abandoning a cherished theory; to become too emotionally attached to one's theories is a mistake in science. But the tireless work of collecting data, and of refining theories that make sense of those data, is often driven by a passion to benefit humanity, for the hard work of science is just too daunting in its absence. The example of recently deceased medical pioneer Michael DeBakey⁽⁷⁾ comes to mind, for I am certain it had to be a passionate drive to improve the health of humanity that motivated him to continue to invent life-saving medical devices and procedures when it would certainly have been easier to rest on the laurels earned early in his long and stellar career. Science, then, like therapy, can be driven by warmth and compassion, even if the similarities are not immediately apparent.

• The reductionistic approach of science is at odds with the holistic nature of massage therapy.

There is a kernel of truth in this position, but only a kernel. It is true that massage therapy is holistic, because a good massage therapist attempts to respond to the recipient as a whole person and attends, often simultaneously, to myriad details that permit the treatment to be something greater than the sum of its parts. It is also true that scientists, when attempting to understand something, focus their efforts and attention on just certain aspects, while holding constant—or even ignoring—other aspects. But so what? Not only massage therapy, but anything worth understanding-planetary motion, internal combustion, the social organization of beehives, love in Homo sapiens—is, to a greater or lesser extent, greater than the sum of its parts. However, this holism does not mean giving up any attempt to identify and understand those parts, because it is only by *reducing* the focus to a specified level that some understanding of the whole can be approached. An examination of the effect of massage therapy on body chemistry does not reveal everything we would like to know about the psychosocial interaction of a massage therapist and a client, nor does an examination of the psychosocial interaction of a massage therapist and a client reveal everything we would like to know about the effect of massage therapy on body chemistry. But by reducing the scientific focus to a specific level of understanding, each reveals something very important about the complex nature of massage therapy, which is what practitioners ultimately care about. When properly understood, "reductionism" is not a dirty word, and there is absolutely no reason that the reductive methods of science cannot be used to further the understanding of massage therapy.

The massage therapy profession needs research, for only research can definitively tell us what massage therapy does—and does not—do; how it does what it does; and when and for whom it works. For these reasons, I look forward to helping the IJTMB in its research mission, and I invite you to communicate with me whenever I can be of assistance in furthering that mission.

> Christopher A. Moyer, PhD Research Section Editor, IJTMB Assistant Professor Department of Psychology University of Wisconsin–Stout Menomonie, WI, USA

COMPETING INTERESTS

The author declares that there are no competing interests.

REFERENCES

- 1. Vogt EZ, Hyman R. *Water Witching USA*. 2nd ed. Chicago, IL: University of Chicago Press; 2000.
- Enright JT. Water dowsing: the Scheunen experiments. Naturwissenschaften. 1995;82(8):360–369.
- Percy JR, Pasachoff JM. Astronomical pseudosciences in North America. In: Pasachoff JM, Percy JR, eds. *Teaching* and Learning Astronomy: Effective Strategies for Educators. Cambridge, UK: Cambridge University Press; 2005: 172–176.
- 4. Rosa L, Rosa E, Sarner L, Barrett S. A close look at therapeutic touch. *JAMA*. 1998;279(13):1005–1010.
- Shang A, Huwiler–Müntener, Nartey L, *et al.* Are the clinical effects of homeopathy placebo effects? Comparative study of placebo-controlled trials of homeopathy and allopathy. *Lancet.* 2005; 366(9487):726–732.
- Moyer CA. Case studies: the soul of massage therapy's applied science. www.MassageTherapyPractice.com website. http:// www.massagetherapypractice.com/Text/1178027145046-4614/pC/ 1171109454229-6311. Published n.d. Accessed July 20, 2008.
- Altman LK. Michael DeBakey, rebuilder of hearts, dies at 99. *The New York Times* website. http://www.nytimes.com/2008/ 07/13/health/13debakey.html?_r=1&adxnnl=1&partner=rssnyt &emc=rss&adxnnlx=1218045974-PaOUD7P6BHkeQDNza A4yIQ&oref=slogin. Published July 13, 2008. Accessed August 6, 2008.