ORIGINAL ARTICLE

Challenges and Opportunities Faced by Biofield Practitioners in Global Health and Medicine: A White Paper

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ABSTRACT

Biofield therapies (BTs) are increasingly employed in contemporary healthcare. In this white paper, we review specific challenges faced by biofield practitioners resulting from a lack of (1) a common scientific definition of BT; (2) common educational standards for BT training (including core competencies for clinical care); (3) collaborative team care education in complementary and alternative medicine (CAM) and in integrative health and medicine (IHM); (4) a focused agenda in BT research; and (5) standardized devices and scientifically validated mechanisms in biofield research. We present a description of BT and discuss its current status and challenges as an integrative healthcare discipline. To address the challenges cited and to enhance collaboration across disciplines, we propose (1) standardized biofield education that leads to professional licensure and (2) interprofessional education (IPE) competencies in BT training required for licensed healthcare practitioners and encouraged for other practitioners using these therapies. Lastly, we discuss opportunities for growth and a potential strategic agenda to achieve these goals. The Academy of Integrative Health and Medicine (AIHM) provides a unique forum to facilitate development of this emerging discipline, to facilitate IPE, and to further increase the availability of BT to patients.

BIOFIELD THERAPIES

Definition

Biofield therapies is a term coined by the National Center for Complementary and Alternative Medicine (NCCAM, known from 2015 onward as the National Center for Complementary and Integrative Health [NCCIH]) to categorize therapeutic approaches within energy medicine that involve using the body's energy field (biofield) for therapeutic benefit. Energy medicine is defined as including "veritable" energy fields that can be measured for diagnosis and treatment and "putative" energy fields (also called biofields) that do not have standardized, reproducible measurements. Veritable energy fields include vibration (such as sound waves), lasers, light, and magnetism. Putative

energies are based on the belief that a subtle form of vital energy infuses all living systems. Many of the world's traditional medicine (TM) and CAM disciplines, systems, and professions acknowledge this concept as a vital or life force that is central to organizing and healing processes in biophysical systems. This central feature within TM and CAM healing systems is referred to by many terms, including prana in Ayurvedic medicine, "the innate" in chiropractic, vis medicatrix naturae or "vital force" in naturopathic medicine, and qi (or *ch'i*) in acupuncture and Oriental medicine (AOM). Healing touch (HT) and gigong also are examples of putative energy healing modalities Consequently, several TM and CAM disciplines, in addition to nursing, physical therapy, and massage therapy, are included in the broad community of practice using BTs.

NCCAM originally classified energy medicine (BTs) as I of 5 CAM domains, and NCCIH currently classifies energy medicine under the broader term of "mind-body practices." However, because these therapies have roots in many global healing traditions and disciplines, it is best classified as an emerging science and profession that is recognized and integrated into various systems. Selected examples of BTs and the disciplines that employ them are listed in Table I.³⁻⁵

Table 1 Selected Examples of Biofield Therapies (BTs) and the Modalities and Disciplines That Use Them³⁻⁵

Selected Categories and Types of BTs		Disciplines Using BTs
Acupressure Aura balancing BodyTalk Electrodermal therapy Healing Touch holographic repatterning Johrei magnet therapy	phototherapy polarity therapy Pranic Healing qigong Reiki reflexology sound therapies Therapeutic Touch Zero Balancing	Acupuncture and Oriental medicine Allopathic medicine Ayurvedic medicine chiropractic homeopathic medicine massage therapy naturopathic medicine nursing physical therapy Tibetan medicine Unani medicine

An Interprofessional Presence

As Table 1 illustrates, many disciplines and communities of practice employ BTs, and interprofessional education is becoming an increasing focus for IHM.^{6,7} This interprofessional presence has 2 important implications: it provides the terrain for evolution of these therapies into a distinct, licensed discipline, as described later in this paper, and it establishes a firm foundation on which to include standardized IPE com-

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Biofield, profession, practitioner, education, energy medicine

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petencies in BT discipline—level education. This underscores the opportunity for distinguishing the levels of training required and how current trends in integrative health may be synergistic.

Modality-level or Discipline-level Education? The Importance of Definition and Standardization

It is important to distinguish between BT used as a singular therapy or used as a modality. Some healthcare practitioners may employ 1 type of BT as a single therapy that defines their practice (eg, Reiki) while practitioners in other disciplines (eg, nursing) may employ selected BTs as I modality within a broad armamentarium of approaches. Some modalities, such as nutrition therapy or pharmacology, are found within multiple healthcare disciplines, and training and standards for these modalities vary. In licensed healthcare professions, a modality may be defined by state licensing and accreditation standards and board examinations. Yet other modalities, such as botanical medicine, also have become "emerging professions," and this is a potential avenue for BT (as discussed below). Distinguishing between modality-level and disciplinelevel training and practice, therefore, becomes essential to defining education and training requirements.^{8,9}

NCCIH's legislative mandate specifies a collaborative research mission across CAM and conventional modalities, disciplines, and systems, and the modality of BT is now included among these. Despite legislative progress, BT remains one of the most marginalized and poorly understood of the CAM modalities, and integrating its practitioners into conventional health and medicine is challenging. However, the potential exists for it to develop further as a healthcare discipline, and we propose that this can be beneficial to all disciplines, organizations, communities of practice, and patients. For example, when a modality or a therapeutic approach, such as nutrition or lifestyle therapy, also develops into a distinct discipline, the discipline itself becomes a resource and potential benefit to other fields that include these approaches.

The Role of Integrative Health and Medicine in Advancing Biofield Therapies

IHM embraces CAM and global healing traditions alongside conventional treatments. Integrative health-care programs for cardiovascular disease, for instance, may offer nutrition, fitness, and meditation services to prevent future cardiovascular events, and medical doctors may work alongside naturopathic physicians, nurses, AOM or traditional Chinese medicine (TCM) practitioners, chiropractors, and other CAM and TM providers within integrative team settings. The Academic Consortium for Integrative Medicine & Health (formerly the Consortium for Academic Health Centers for Integrative Medicine) and the AIHM define the term *integrative medicine* as "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." ¹⁰ In 2014, NCCAM acknowledged the increasing presence of integrative healthcare, stating "The integrative trend is growing among providers and healthcare systems. Driving factors include marketing of integrative care by healthcare providers to consumers who perceive benefits to health or well-being, and emerging evidence that some of the perceived benefits are real or meaningful." ¹¹

"Integrative health care" and "integrative health and medicine" have emerged as new phrases representing a pluralist healthcare system. These include all healthcare disciplines that share common values, including CAM, TM, integrative medicine as a subspecialty of biomedicine, holistic nursing, holistic medicine, and emerging allied health disciplines that practice according to shared values and philosophies (eg, AIHM, Academic Consortium for Complementary and Alternative Healthcare [ACCAHC], and Integrative Healthcare Policy Consortium [IHPC]).

Brief Description and Current Professional Status of Selected Biofield Therapies

Many BTs are used successfully in hospitals, clinics, and other healthcare settings¹² by biofield practitioners and/or by other healthcare practitioners trained in specific therapies. The 4 most common therapies are reviewed below as examples of practice and education in the field.

- I. Therapeutic Touch (TT) was the first modality in BT to conduct nursing research and to provide nursing continuing education credits. Therapeutic Touch International Association (TTIA) was established as Nurse Healers-Professionals Associates in 1973 by Dolores Krieger, PhD, RN, and Dora Kunz. Numerous clinical trials of TT (1975-present) indicate its potential efficacy and effectiveness for diverse conditions, including pain, nausea, and anxiety¹³; neonatal health conditions¹⁴; and cancer. The credentialing process to become a qualified TT practitioner includes completing coursework totaling a minimum of 26 hours and applied work with a TT mentor of at least 36 hours throughout a 1-year period.
- 2. Reiki, developed in the early 20th century by Japanese monk and educator Mikao Usui, is based on the concept that an unseen "life force energy" flows through organisms and sustains life. A 2002 survey by NCCAM and the National Center for Health Statistics found that more than 2.2 million US adults have used Reiki and an increasing number of licensed healthcare professionals are seeking training in Reiki. 16,17
- 3. Reiki is not taught in the usual sense but through a process of transfer or attunement. The training program includes 3 levels that must be taught by

an experienced teacher or "master." A licensed teacher completes at least 1 year of requirements, including required classes, passing a written exam, submitting a written thesis, completing a minimum of 100 full Reiki treatments, and coinstructing classes. Requirements for maintaining licensure help ensure Reiki training is rigorous, consistent, and verifiable. Reiki classes are available internationally.

- 4.Qigong is the practice of aligning breath, body, and mind for health, meditation, and martial arts. Traditionally, qigong training has been esoteric and clandestine, with knowledge passed from master to student through lineages that maintain their own unique interpretations, ethical emphasis, and methods. Research in qigong has been conducted for a variety of medical conditions.¹⁸⁻²⁰
- 5. HT was developed by Janet Mentgen, BSN, RN, and further developed into a certification program by the American Holistic Nurses Association (AHNA) in 1989. In 1996, Healing Touch International (HTI, now called Healing Beyond Borders) was established as the certification body for healthcare professionals—a significant benchmark in professionalization. HT is now a continuing-education, multilevel nursing program in energy-based therapy taught by certified HT instructors. Continuing education is recognized through the AHNA and the National Certification Board for Therapeutic Massage and Bodywork (NCTMB).

Participants who successfully complete the core curriculum can use the designated title Healing Touch Practitioner (HTP) and are eligible to apply for certification following a 1-year mentorship. Healing Beyond Borders administers certification through a separate review by the certification board using standardized criteria. The average training requires 2.5 to 3 years. Instruction is available internationally in universities, medical and nursing schools, and other settings.

Diversity of Current Academic Stakeholders and Resources in Biofield Therapies

Academic stakeholders and resources that include some form of biofield therapeutics training within their system of care range from communities of practice to programs, modalities, and therapeutic approaches to full disciplines and systems of care (see the Appendix for a list of these resources). These include subsets of training within degree programs in regulated and recognized disciplines and systems of care and programs offered by communities of practice and by modality-level training programs. Accredited education leading to licensure is available in acupuncture, AOM, chiropractic, massage therapy, naturopathic medicine, osteopathic medicine, and homeopathic medicine. These licensed disciplines provide modality-level training in BTs (under differing names) within their academic curricula. TM training in subsets of BTs also exists.

Types of Training Programs in Modalities and in Therapeutic Approaches

Certificate programs and degrees are available from private workshops and schools. Workshops include TT, Reiki, and HT. Private schools such as The Barbara Brennan School of Energy Healing, Boca Raton, Florida; Rev Rosalyn Bruyer's Healing Light Center Church, Sierra Madre, California; and Eden Energy Medicine Ashland, Oregon; also offer certification. These certifications are not state licensed, although most provide nursing continuing education credit. Private programs that do not have a relationship with recognized accreditation and state licensure are not eligible for student loans, which poses a major obstacle for many students.

Degree Programs in Disciplines and Systems Acupuncture and Oriental Medicine Degrees

Although the scope of this paper does not include a full assessment of training programs available within all disciplines and systems of medicine, AOM is one example of a recognized and regulated field that includes BT core competencies in its training. The Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) is recognized by the US Department of Education and accredits master's degree, certificate, and diploma programs in acupuncture and Oriental medicine (www.acaom.org provides a list of schools offering accredited education). Although specific academic requirements vary, most acupuncture schools require 3 years of training, and Oriental medicine programs require 3 to 4 years. Many schools require a bachelor's or associate's degree for admission. The National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) oversees certification in acupuncture and Oriental medicine, administers the Asian Bodywork Therapy exam, and lists state-by-state requirements for certification and licensure in acupuncture and Oriental medicine (see www.nccaom.org). Healthcare practitioners who use energy medicine can seek certification in BT. These programs, such as HT, are endorsed by the AHNA and by the NCTMB.

Master's Degree in Holistic Nursing, Integrative Medicine, or Integrative Health

These programs address individuals seeking more formal instruction and credentials that will be accepted among conventional healthcare organizations and delivery systems. The programs (like the one offered via National University sites) are designed for current and future healthcare practitioners and researchers and typically accept students with undergraduate degrees in nursing, premedicine, or most other healthcare majors.

Master of Science in Nursing or Holistic Nursing

Holistic nursing programs train nurses for advanced practice nursing or clinical nurse specialization. Some fully accredited nursing schools offer energy medicine in their integrative nursing curriculum (eg, the program at the University of Colorado at Colorado Springs).

Doctorate in Nursing

The doctorate of philosophy (PhD) and the doctorate of nursing practice (DNP) are available at major universities. Many of these degrees include BT in their core curriculum (as at the University of Minnesota's Center for Spirituality and Healing, Minneapolis).

Crossdisciplinary Education in Biofield Therapies

Various BTs are used by a wide range of healthcare practitioners in TM, CAM, and IHM. Despite requests to institute collaborative training in BT throughout CAM and conventional disciplines, systems, and modalities, crossdisciplinary training or IPE is minimal. AIHM, launched in 2013, provides a unique venue for IPE through its critical forums for collaborative education by developing team care and by stimulating innovative research on the transdisciplinary concept of life force or vital force (the biofield). IPE and collaborative scientific discovery among stakeholders can potentially contribute to improved outcomes of care.² Reports from the following leading national healthcare organizations support IPE development.

- The White House Commission on Complementary and Alternative Medicine (WHCCAM) recommended in its 2002 report regarding health practitioner education and training that (1) the education of CAM and conventional practitioners should be designed not only to improve public health and ensure public safety, but also to increase the availability of and collaboration among qualified CAM and conventional healthcare practitioners (recommendation 10); (2) CAM and conventional training programs should include curricula to enhance collaboration among students and that such efforts should be widely supported by organizations, researchers, educators, and practitioners (recommendation 10.3); and (3) increased funding from the federal, state, and private sector should be available to "expand and evaluate CAM program development at accredited CAM and conventional institutions" (recommendation 10.4).21
- IHPC enacted a call to act on the WHCCAM recommendations in 2004 with 2 projects to serve increased interest between educators in conventional disciplines (medicine, nursing, public health, and allied disciplines) with educators in CAM and TM disciplines. IHPC first cofounded ACCAHC in part to sustain "a network of global educational organizations and agencies, which will promote mutual understanding, collaborative activities and interdisciplinary healthcare education."
 22 IHPC then convened diverse health educators in the National Education Dialogue (NED) to Advance Integrated Healthcare project to establish

- a strategy to create common ground among educators in integrative health education and to inform "leaders of diverse healthcare disciplines about the priorities of educators in creating collaborative, integrated care." More than 95% of participants described interdisciplinary collaboration as key to advancing integrative healthcare. NED and ACCAHC share a vision of a healthcare system that is "multidisciplinary and enhances competence, mutual respect, and collaboration across all CAM and conventional healthcare disciplines."
- The Institute of Medicine (IOM) of the National Academy of Sciences in its report Complementary and Alternative Medicine in the United States (2005) called for comprehensive care that is effective and safe, including "effective interventions from all sources"²⁴ and observed that collaborative education is needed for both conventional medical and for CAM practitioners.

CHALLENGES TO INTEGRATION

Although many approaches, disciplines, and systems using BTs have existed for thousands of years (ie, Chinese and Ayurvedic medicines), the challenges to full integration are multifactorial.

Lack of a Common Lexicon for Biofield Therapies

Various BTs lack common terminology and a unifying definition. Currently, a clearly defined biofield mechanism and a standardized technology to assess the biofield are not readily available; therefore, a common definition of the biofield has not been attained in the scientific community. This lack of uniform agreement on accepted terminology, principles, and standards of practice has led to confusion among the medical community, educators, and patients.

Lack of Common Educational Standards Including Core Clinical Competencies for Training in Biofield Therapies

Therapies that treat the biofield and the human energy system are generally absent from conventional and nursing healthcare education.² Although there are many training programs for CAM and TM disciplines, professions, systems, and modalities that include aspects of BT, not all are regionally and professionally accredited in the United States or Canada; global recognition of standards varies by country, and a school's accreditation status and government recognition are important considerations for student loans and career options. For example, while there are accredited degree programs and certifications for AOM and other recognized disciplines, there are only a few standardized training programs specifically for energy medicine practitioners. Some programs like HT offer training and certification in BT; however, there currently is no recognized state licensure for biofield. Although many government-recognized CAM and TM systems include some BTs as modalities, this is complicated by the existence of many differing therapies, training standards, theories, practices, and clinical approaches.

Lack of Collaborative Team Education in Biofield Therapies

Despite inclusion of Martha Rogers' 1994 theory of the Science of Unitary Human Beings²⁵ in nursing education, most conventional medical and nursing schools do not acknowledge (or teach) the existence of the human energy system. There is increasing acceptance of BT, as illustrated by the inclusion of modalities like HT, TT, and Reiki at major medical centers.¹¹ Yet the concept remains debated in nursing, and the North American Nursing Diagnosis Association (NANDA) has removed the diagnostic category of Disturbed Energy Fields from the 10th edition of its diagnostic manual.²⁶ In order to achieve collaborative healthcare teams and acceptance of biofield modalities, continued focus on educating physicians and nurses in BT is critical.

Lack of a Focused Agenda and Quantitative Data in Biofield Therapies Research

Of studies conducted, most include small populations and are not amenable to the quantitative analysis required within current definitions of "evidence," so they are discounted by many conventional institutions. In its early history, energy medicine therapies, especially "electrical therapies," were considered unscientific, did not reflect the dominant materialist worldview, and therefore were not supported within the biomedical field that has expanded rapidly since the publication of the *Flexner Report* in 1910. As a result, this field (including research on its potential mechanisms and benefits) has not received adequate research attention or funding.

Lack of Standardized Devices and Scientifically Validated Mechanisms to Assess the Human Riofield

Clearly defined mechanisms and standardized technology to assess the biofield are not readily available. No scientific agreement exists on the definition of biofield. This lack of agreement on terminology, principles, technology, mechanisms, and standards of training and practice and the consequent limited data have led to confusion among the medical community and patients.

ADDRESSING KEY CHALLENGES

To successfully establish crossdisciplinary research, interprofessional education, and collaborative practice in BT requires further evolution of the existing community of practice along the continuum of an emerging profession. Although the process of "professional formation" is not frequently elucidated in the development of disciplines, it is nevertheless a defined process within a framework of 5 standards or benchmarks that can provide the structure and legitimation required to achieve wider integrative goals. These standards, as defined by the University of

California, San Francisco (UCSF) Center for the Health Professions,²⁷ are (1) establishing a definition/description of the profession, (2) establishing safety and efficacy standards, (3) attaining government and private sector recognition, (4) establishing education and training (accreditation and academic standards), and (5) establishing a proactive practice model and viability of the profession.

Applying these standards improves understanding, acceptability, and legitimacy of the field. An organized approach to attaining these benchmarks provides the framework that supports growth of the profession and enhanced acceptance ("social closure"28) among the public, legislators, and other healthcare professions. An immediate opportunity exists to enhance efforts in the education and training benchmark by increasing interprofessional education and collaboration among the integrative healthcare disciplines (including integrative and holistic physicians, nurses, and other healthcare practitioners) that incorporate BT. Such interprofessional training, resulting in team care, can enhance patient experience, improve patient outcomes, and increase understanding among provider groups as recommended by WHCCAM, NED, and IOM.

Role of the Academy for Integrative Health and Medicine

In 2013, AIHM was created to serve as a vehicle to enhance interprofessional collaboration, education, and leadership among all healthcare disciplines, stakeholders, and organizations. AIHM is a direct response to the national mandates issued between 2002 and 2005. Enhancing interdisciplinary education in all IHM and CAM disciplines, systems, and modalities (including BT) is a key objective of AIHM. Its mission is also to advance scientific understanding of the nature of health and healing, including advancing theory-driven research.²⁹ Several organizations and workgroups have addressed the scientific development of theory-driven research and/or education.30,31 AIHM's mandate is to foster transformation of healthcare and global health creation through education, research, and leadership, based on the core philosophies and values of IHM. This mandate will enable AIHM to become a leading forum for future expansion on transdisciplinary scientific work and education about the biofield.

A Strategic Plan to Address Specific Challenges

To meet the challenges to integration cited above, we propose that education in BTs be standardized to lead to professional licensure and that interprofessional education in BT be supported to enhance collaboration among all disciplines. Table 2 outlines a broad strategic plan that addresses the key challenges identified. A focused and systematic effort to accomplish the 3 actions outlined will further enable BT to become a recognized licensed profession with professional and safety standards, increased research evidence, and public and legislative legitimation.

Table 2 Strategic Plan to Address Specific Challenges and Enhance Professional Licensure and Interprofessional Education in Biofield Therapies (BTs)

Identified Challenge	Proposed Targeted Action	
No common scientific definition of BT	Establish interdisciplinary scientific and educational collaboration	
Lack of common educational standards for training in BT	enabling the discipline to consolidate its definition, core principles and theories, educational standards, and core competencies, thereby establishing the identity of BT as a profession.	
Minimal collaborative education in complementary and alternative medicine and integrative health and medicine	 Increase training across provider groups in team care, consultation, collaboration, comanagement, and referral. 	
No focused agenda across stakeholders in BT research	Support transdisciplinary research, scientific discovery, and research question prioritization in BTs to expand understanding of health,	
No standardized devices and scientifically validated mechanisms in BT	healing, and illness and collectively clarify the potential and scope of BT as a healing practice. Develop agreements on standardized devices and validated mechanisms for research.	

Framework to Achieve the Strategic Plan

Achieving transdisciplinary research and interdisciplinary education and practice in BT (as outlined in Table 2) requires evolution of the current community of practice to a licensed discipline with consequent professional and public legitimation. This evolution is defined by specific developmental benchmarks, as noted previously. We propose the following 3 categories of defined actions that address the fundamental steps of professional formation in addition to the direct actions required to enhance interprofessional education.

1. Establish Biofield Therapies as an Emerging Profession

We intend to convene diverse BT stakeholders over a 3-year period to define the field and establish core standards for the profession of BT. This requires that we understand and apply the basis of professional formation, distinctions between professions and emerging professions, and UCSF's 5 standards for emerging professions and related benchmarks of professional formation (listed above). Table 3 provides a brief list of definitions employed within the current lexicon of "professional formation," the formal process by which communities of practice like BT can evolve to an established, accredited profession. Table 4 lists specific actions and goals to achieve these standards.

2. Establish International Interdisciplinary Training in Biofield Therapies

To do so, we must apply concepts of interprofessional education and collaborative or team care and recognize and implement the following priorities established by NED:

- a. Facilitate development of interinstitutional relationships and geographically based groupings of conventional and CAM institutions and disciplines in diverse regions.
- b. Promote student and faculty exchanges, create new clinical opportunities, facilitate integrated postgraduate and residency programs, and provide opportunities for students to audit classes and share library privileges.
- c. Create resource modules for distinct CAM (includ-

- ing BT), conventional, and emerging disciplines (approved by the disciplines) that can be used in several formats (eg, from supporting materials, such as glossaries, to complete curriculum models).
- d. Develop a website and other forums to share educational and faculty resources for teaching or administrative functions (eg, interinstitutional relationship agreements).
- e. Continue multidisciplinary work to create a concise statement of core values that resonates with other disciplines and can guide efforts to create quality integrated healthcare education.
- f Collaboratively develop and sponsor continuing education initiatives to attract participants from diverse disciplines, including resources that prepare students and practitioners for collaborative practice in integrated clinical settings.
- g. Develop materials to support collaboration among all providers engaged in integrative healthcare.

3. Host a Series of International Interdisciplinary Scientific Forums

AIHM would convene forums with biofield thought leaders to expand biofield research, scientific discovery, and education. AIHM would then publish each forum's conclusions and recommendations as a series of white papers for advancing the BT discipline.

SUMMARY

IHM has now begun to more fully realize the potential of working with the human biofield. Bringing professional standards and rigor to BT as an emerging discipline while maintaining its diversity of principles and practices can enable these therapies to become increasingly accessible to patients, physicians, and to integrative health practitioners in training. Scientific discovery and further understanding of the nature of health, healing, and illness have the potential to increase as the field becomes more accessible to scientific evaluation. Interprofessional education has been acknowledged as an effective vehicle for preparing future healthcare practitioners, and this can be enhanced through greater recognition of common ground and exploration of diverse epistemologies. The

Term	Definition
Community of Practice (CoP)	"A CoP includes individuals who share a common interest, trade, or craft, and who exchange information and knowledge about it. Sharing knowledge can be intentional or can be a passive result of involvement with the group. Three key features exist within all CoPs: a shared domain of interest, a community of interaction and learning, and shared resources and tools regarding their practice." A CoP is distinguished from a profession by its position and actions concerning public accountability." (unpublished material)
Emerging profession	"[A] developing profession which has undertaken and has successfully achieved a number of the benchmarks along the continuum of professionalization and accountability: and which have evidence that others are being developed. The profession begins to 'emerge' as a significant number of the key benchmarks are established. An emerging profession contains the basic characteristics of a profession; these characteristics or benchmarks are in various stages of actual development."8,9
Healthcare discipline	A branch or domain of knowledge, instruction, or learning. Nursing, medicine, physical therapy, and social work are examples of health-related or professional disciplines. The sake of this discussion, the terms <i>profession</i> and <i>discipline</i> can be used interchangeably. A "whole-healthcare system" is also a healthcare discipline. Not all healthcare disciplines consider themselves whole-healthcare systems; for example, direct entry midwifery, although a healthcare discipline, does not consider itself a whole-healthcare system. Naturopathic medicine, chiropractic medicine, acupuncture and Oriental medicine, and Ayurvedic medicine are healthcare disciplines that also are whole systems of healthcare.
Healthcare system	A discipline or system of healthcare is "the structure or whole formed by the essential principles or facts of a science or branch of knowledge or thought: an organized or methodically arranged set of ideas, theories or speculations [This] may imply that the component units of an aggregate exist and operate in unison or concord according to a coherent plan for smooth functioning." 34 "Whole medical systems" involve complete systems of theory and practice that have evolved independently from or parallel to allopathic (conventional) medicine. Many are traditional systems of medicine that are practiced by individual cultures throughout the world. Major Eastern whole medical systems include traditional Chinese medicine (TCM) and Ayurvedic medicine, one of India's traditional systems of medicine. Major Western whole medical systems include homeopathy and naturopathy. Other systems have been developed by Native American, African, Middle Eastern, Tibetan, and Central and South American cultures."35 "A 'whole system' of healthcare is typically titled by its system name, and is usually comprised of modalities. Therapeutic interventions exist within these modalities. A whole system or discipline of healthcare may incorporate a discrete, limited amount of knowledge or a group of strategies from another system or discipline [as a] modality, rather than incorporating the entire system itself."8
Modality	A form of application or employment of a therapeutic agent or regimen. ³⁶ A modality for one profession may be another healthcare profession's entire discipline or system. Examples of modalities found within many healthcare systems are diet and nutrition therapy, physical medicine, and pharmacology, among others. Training and standards for modalities vary between systems. In licensed healthcare professions, they may be defined by state licensing and accreditation standards and board examinations. Some modalities, such as botanical medicine, also are "emerging professions." Distinguishing between modality-level and discipline-level training and practice is essential. ^{8,9}
NCCAM Legislation	Legislation (Public Law 113-296) that created the National Center for Complementary and Alternative Medicine (NCCAM) uses the language "complementary and alternative medicine (CAM) modalities, disciplines and systems" throughout to describe the purpose and focus of NCCAM's research. For example, "the Director of the Center shall identify and evaluate alternative and complementary medical treatment, diagnostic and prevention modalities in each of the disciplines and systems with which the Center is concerned, including each discipline and system in which accreditation, national certification, or a State license is available." These terms guide NCCAM's research on integration of CAM modalities, disciplines, and systems into mainstream healthcare delivery systems; the composition of NCCAM's advisory council, scientific review panels, research centers, and the investment in CAM (accredited/licensed) research and education facilities.
Profession	"[A] calling or vocation requiring specialized knowledge, methods, skills, and training in a defined preparation or an institution of learning, in the scholarly, scientific, clinical, artful and historical, social and cultural principles underlying such methods and skills. A profession continuously enlarges and evaluates its body of knowledge, functions autonomously in formulation of policy, and maintains by force of organization or concerted opinion high standards of achievement and conduct. Members of a profession are committed to continuing study, are guided by a code of ethics, place service above personal gain, and are committed to providing practical services vital to human and social welfare."8
Therapy	A specific treatment for a specific condition or symptom, within a modality or from a combination of modalities. Examples: a vitamin for arthritis or an herb for the flu, or a vitamin and massage therapy for arthritis, etc. ⁸
Traditional (world) medicine professions	"Traditional medicine (TM) includes diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and/or mineral-based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness Traditional Medicine arising from the experiences of the past and embedded in the culture of each society cannot stand still and must change and develop. Along with allopathic medicine it shares issues in appropriate and rational use. This includes qualification and licensing of providers, proper use of good quality products, good communication between TM providers and patients and provision of scientific information and guidance to the public. The patient is the ultimate beneficiary of any system of medicine and therefore should have access to good scientific information. The provision of such information is a shared responsibility of TM providers, their professional associations and the government."38

professional accountability and patient safety fostered by professional standards and academic rigor built collaboratively across disciplines and practitioners will provide a platform for BT to become more widely available and to enhance the field's contribution to 21st-century medicine and health.

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Appendix

Resources in Biofield Therapies

- Academic Consortium for Complementary and Alternative Healthcare
- Academic Consortium for Integrative Medicine and Health
- Academy of Integrative Health and Medicine
- American Holistic Nurses Association
- The Center for Reiki Research
- Foundation for Alternative and Integrative Medicine
- Healing Beyond Borders
- Integrative Healthcare Policy Consortium
- International Association of Reiki Professionals
- The International Center for Reiki Training
- National Center for Complementary and Integrative Health
- National Qigong Association
- The Qigong Institute
- Qigong Research and Practice Center
- The Reiki Alliance