



## Breakout Session Report

In 2004, one-fifth of U.S. hospitals offered patients traditional Chinese medicine (TCM)—such as acupuncture and *tai chi chuan*. While acupuncture and *tai chi* may be some of the better known forms of TCM, they are by no means the only ones that are gaining Western attention. With chronic disease on the rise, there has been increasing interest in traditional medicine as an alternative approach that can be used in conjunction with modern treatments to detect and treat disease early, as well as treat the side effects of Western modalities. In addition, ancient remedies are also revealing new uses across the globe. For example, the largest clinical trial ever conducted on the treatment of severe malaria brought calls for an immediate change to the medication regime for that disease after the number of deaths was reduced by more than 30 percent by using artesunate—a drug derived from artemisinin, a traditional Chinese medicine.\*

Recognizing that TCM can improve and complement Western treatments, and that it is sometimes a safe and less expensive alternative to some modern pharmaceuticals, the 2006 Pacific Health Summit featured TCM as a key component of its discussions. The “East Meets West: Staying Healthy vs. Curing Disease” breakout session in 2006 traces its origin back to a plenary panel discussion titled “East Meets West: Personal Health” at the inaugural Summit in June 2005. That spirited panel discussion explored how science, medicine, technology, and industry could bridge and integrate differing Western and Eastern approaches to human health to promote wellness and better disease management. That discussion launched an East Meets West Workgroup, which produced its [first publication](#) for Summit 2006. This June’s East Meets West breakout session represents the continuation of this dialogue.

**Haruo Shimada**, Director of the Fujitsu Research Institute, opened with a definition of Eastern medicine, noting its primary focus on treating patients before they become sick, emphasizing prevention, early detection, and early treatment—also the cornerstones of the Summit. He further characterized traditional Eastern medicine as having several distinct features, while at the same time facing several challenges. The first distinction is that physicians take a

holistic approach to care, considering the unique characteristics of the patient’s body, mind, and spirit as the context for illness or imbalance. Secondly, traditional medicine is highly individualized, with no standardized treatment that is standardized for all patients.

**Hongxin Cao**, President of the Academy of the Chinese Medical Sciences, highlighted examples of TCM use and success, pointing out that the integration of Western and Eastern medicine is already taking place in numerous institutions in many countries. In China, TCM enjoys the same legal status as Western medicine, and patients may choose either one method or a combination of both, according to personal preference. While only a small percentage of medical doctors specialize in TCM, at least half of all health services in China incorporate elements of TCM into general treatments. He anticipates the continued expansion of this integration in the future, both in China and in other countries. Additionally, as opposed to the environment for integration 30 years ago, doctors and scientists today are much more open-minded and interested in collaborating with practitioners of different approaches, especially as TCM proves helpful in treating HIV/AIDS, SARS, and several forms of cancer.



Hongxin Cao

Appreciating and understanding TCM, however, are two different things. Acknowledging the dilemma of how to analyze and isolate the mechanisms of Eastern medicine in keeping with Western and drug regulation and approval guidelines, Cao warned participants: “Do not try to fit a square peg into a round hole” (i.e. use only Western evaluation tools for analyzing traditional medical remedies).

In other words, reductionism (the theory that the nature of complex things can always be reduced to simpler, more fundamental ideas)—albeit responsible for tremendous successes in modern medicine—is not the only way to explain how or why certain treatments work. For TCM treatments especially, noted **Yung-Chi Cheng**, Henry Bronson Professor of Pharmacology at Yale University, the way components interact with one another in the context of the individual and that individual’s environment is the key to understanding success.

\* SEAQUAMAT Group, “Artesunate Versus Quinine for Treatment of Severe Falciparum Malaria: A Randomised Trial,” *The Lancet* 366, no. 9487 (August 27, 2005): 717-25.

### Major challenges facing traditional Chinese medicine:

- Lack of understanding about TCM in Western society
- Lack of scientific evidence and quantitative data supporting the efficacy of TCM
- Lack of understanding—even among Eastern practitioners of TCM—of the exact biology of why traditional preparations are effective.

Relying solely on reductionism and isolation would not elicit the understanding we seek. Since most diseases have multiple etiological factors, drugs should have multiple targets, which underscores a need for a systems approach to medicine where the individual, not the disease, achieves central importance. This emphasis on the individual, and the synergistic effect of different chemicals in the body of that individual, lies at the foundation of TCM philosophy. Reductionism does not always leave room for context—one of the most important elements of TCM and a systems approach.

While the interactions between many components within a TCM treatment may be key to the treatment's effectiveness, according to



Si Lok

**Si Lok**, Professor of Genomic Medicine at the University of Hong Kong, being able to understand and explain that interaction poses a different challenge, especially when taking into account drug approval regulations and guidelines. Additionally, for physicians and scientists with Western training, the varying toxicity levels in TCM preparations can be a deterrent to endorsement. Their hesitance comes from

concern for patients, not necessarily because they doubt TCM's value. Even if certain TCM treatments are known to be effective in reducing pain after surgery, for example, many physicians are uncomfortable prescribing traditional remedies if they do not understand exactly how and why pain is reduced. This challenge also complicates FDA approval for specific remedies and could present regulatory problems.

The U.S. Food and Drug Administration's 2004 guideline for clinical trials of plant mixtures was a turning point for research into TCM's effectiveness. The guideline allows researchers to experiment with materials in clinical drug trials without first identifying their active ingredients. This development illustrates a new openness to and respect for traditional remedies in the West, as well as recognition that reductionism may not be the only useful approach to analysis.

As we work towards finding a better way to analyze the effectiveness of TCM treatments, **Wei Zhou**, Vice President of Intellectual Property and the China Country Manager for Affymetrix, Inc., suggested that pharmaceutical companies focus resources on developing better diagnostic tools to aid doctors in supporting personalized medicine and treatments. He acknowledged that quality control will be a challenge for TCM, but that industry could help. Technology can also play

an important role in increasing our understanding of TCM.

Calling upon technology to increase and broaden our understanding of TCM, Yung-Chi Cheng added that data-mining and other modern technologies



Yung-Chi Cheng and Wei Zhou

could help identify functions and structures of groups of TCM compounds, and ultimately identify the derivatives of those compounds. A stepwise process is necessary. Existing infrastructure in the West (such as the National Cancer Institute's Center for Alternative and Complementary Medicine in the United States) illustrates the increasing popularity and exposure of Eastern medicine. Yung-Chi Cheng suggested that a government mandate might help to accelerate and facilitate integration and collaboration.

Moving from the policy and research level to the individual, **Don Short**, President of Coca-Cola's Beverage Institute for Health and Wellness, reminded participants that general openness to and adoption of Eastern medicine among individuals in Western countries is another important element of successful integration. While TCM is gaining broader acceptance in Western systems and many people are actively seeking out alternative treatments, widespread adoption may still be further off. Lack of awareness and doctor endorsement of TCM treatments are two reasons for hesitance, as is a different contextual lens for some of the treatments themselves. For example, some traditional treatments, such as massage, are considered luxuries in Western countries, not deserving of real consideration.

### Examples of the Benefits of Integrating Western and Eastern Approaches:

- Incorporating the personalized element of TCM could help physicians detect diseases earlier than if they rely solely on modern diagnostic tools.
- Clinical studies have shown that acupuncture is an effective treatment for nausea caused by surgical anesthesia, chemo and radiotherapy, and post-surgery dental pain.

In order to address the challenges articulated during the session, participants agreed that more examples of successful case studies are necessary, as is more wide-spread evidence-based research and a discussion about grassroots acceptance and education. At the close of the discussion, all expressed a desire to meet again to continue dialogue on an "East Meets West" approach to medicine. The Academy of Chinese Medical Sciences will likely host this discussion in Beijing in April 2007.

To learn more about the Pacific Health Summit, please visit [www.pacifichealthsummit.org](http://www.pacifichealthsummit.org), or email [ctopal@nbr.org](mailto:ctopal@nbr.org).