

# Loupes Around The World:



Helping surgeons in developing countries

by David C. Knight, MD, FACS; with William D. Sedlack



In December 2006, I traveled to Viet Nam and Cambodia as a member of a general surgery delegation from People-to-People (PTP) Ambassador Programs. PTP was started by President Eisenhower in 1956 in the belief that the people of the world would be more likely to live in peace if they had opportunities to talk with one another. PTP organizes professional and student trips all over the globe, providing delegates with the opportunity to engage with colleagues in foreign lands and learn from each other. Our trip was organized with assistance from the American College of Surgeons and was ably led by M. Margaret Kemeny, MD, FACS; Deena Nelson, MD; and Kathleen Casey, MD, FACS, Director of Operation Giving Back (see photo, this page). The delegation consisted of more than 50 surgeons and 25 guests from all over the U.S.

After visiting hospitals and seeing the sights in Ho Chi Minh City (formerly Saigon), Viet Nam, we traveled to Siam Reap, Cambodia, home of the magnificent temples of Angkor Wat. Seeing the sun rise over Angkor Wat was an unforgettable experience and a highlight of the nonmedical portion of the trip.

From there, the group went to Phnom Penh, Cambodia, where we visited two hospitals: the Khmer-Soviet Friendship Hospital and Preah Kossamak Hospital. In Cambodia particularly, one cannot help but be impressed with the care that the hospitals are able to provide patients despite a significant lack of resources, at least according to American standards. In the course of our tour and discussions with surgeons at Preah Kossamak Hospital, I met Ly Heng, MD, a young plastic surgeon. He informed me that his work mostly involves trauma, particularly extremity and maxillofacial, and that he also repairs congenital anomalies such as cleft lip and palate. I asked him about using magnification to assist in doing delicate surgery; he said that the hospital did not have an operating microscope and that he did not own a pair of loupes. For him, loupes were a dream that would help him provide better patient care, but the cost made them unobtainable, given his government salary

Opposite: Sunrise at Angkor Wat. Inset: A Cambodian girl.



Dr. Casey (second from right) being greeted at Preah Kossamak Hospital, Phnom Penh. Also pictured is Margaret M. Dunn, MD, FACS (far right).



Left to right: Dr. Knight, Dr. Rezak, and Dr. Sedlack.



Dr. Heng wearing his new loupes in Phnom Penh.

of approximately \$60 a month. I decided that his dream should be turned into reality.

As I traveled back to the U.S., I thought about Dr. Heng's situation and surmised that there are probably many surgeons in developing countries without loupes that their patients could benefit from but who are unable to obtain them because of financial constraints. After further discussions with colleagues in Waterbury, CT—including Jeffrey Sedlack, MD, FACS, associate director of surgery, and Amy Rezak, MD, chief surgical resident, at Waterbury Hospital—and with great enthusiasm and encouragement from Dr. Casey, we have created Loupes Around The World, Inc., a charitable foundation whose mission is to provide loupes to surgeons in developing countries (see photo, page 23). The foundation is incorporated in Connecticut as a not-for-profit, charitable entity, and we have received official designation from the Internal Revenue Service as a 501(c)3 tax-exempt organization.

The first goal was to get a pair of loupes for Dr. Heng. By e-mail, he was able to provide the necessary optical measurements, and his loupes were quickly made by Designs For Vision, Inc. We contacted Operation Smile, based in Norfolk, VA—a volunteer group that sends missions around the world to repair childhood facial deformities in partnership with local physicians—that we knew was sending a mission to Phnom Penh in mid-March; they graciously agreed to hand-deliver the loupes to Dr. Heng, who was going to be working with them on this mission. Thus, by the end of March, Dr. Heng was able to send



Left to right: Jimmy Grotting of Operation Smile, Dr. Tho, and Dr. Knight.



*Dr. Knight is chair, department of surgery, Waterbury Hospital Health Center, Waterbury, CT.*

a picture of himself in the operating room in Phnom Penh wearing his new loupes as he took a resident through a cleft lip repair (see photo, page 23).

After our initial success in getting the loupes to Dr. Heng, we initiated further discussions with Operation Smile and Designs For Vision. William P. Magee, Jr., MD, FACS, founder and chief executive officer of Operation Smile, agreed that there is a great need for surgical loupes in the developing world, and his organization was eager to be involved in our work. Similarly, Peter Murphy, president of Designs For Vision, Inc., and John Walsh, vice-president, have enthusiastically embraced the concept of Loupes Around The World and have committed their company to facilitating our mission in any way possible.

We identified two potential pitfalls in our plans: first, the optical measurements must be precisely accurate, as loupes are specifically made to fit an individual's eye measurements; second, we believe that delivery of the loupes needs to be done personally rather than entrusting them to the mail. We are now working with Operation Smile to circumvent these potential problems in a couple of ways. Operation Smile brings a group of international surgeons to its headquarters in Norfolk for a training course each year; this year a representative from De-


---

signs For Vision was in Norfolk to make the measurements on more than 30 surgeons from 17 countries who were interested in obtaining loupes. From that group, surgeons from Viet Nam, Kenya, Honduras, Panama, and Peru were selected by Operation Smile as the first group of recipients. Dr. Nguyen Tho received his loupes in Hanoi in July (see photo, page 24), and Dr. Edwin Rono will receive his in Nairobi, Kenya, at the end of August. In addition, we are hoping to train several of the Operation Smile mission coordinators to make these measurements in the field. Thus, when the mission coordinator makes a pre-mission site visit, he or she will be able to take the measurements and e-mail them back to us for manufacture; the loupes will then be delivered by the main mission team several weeks later. As our programs develop, and using our experience with Operation Smile as a guide, we are looking forward to working with other volunteer organizations to develop similar systems for identifying suitable recipients, getting the measurements, and delivering the loupes.

We are excited about developing a collaborative relationship with loupe manufacturers to facilitate our mission. A very exciting concept that we have developed with Designs For Vision is a program to recycle old loupes. In this program, which we are calling Recoup The Loupes, we will recover telescopes from old loupes; if they are in good condition, they can be installed in new lenses and frames for substantially less cost than a brand-new pair. In this way, we will be able to provide loupes to many more surgeons around the world. Many of us have old loupes lying around that we no longer use; by donating them to Recoup The Loupes, they will have a new life and help improve surgical care for many more patients.

On our Web site ([www.loupesaroundtheworld.org](http://www.loupesaroundtheworld.org)), we provide information on our programs, including "Recoup the Loupes"; in addition, donations to support the work of the organization can be made through the site. We are planning to collect old loupes this month at the ACS Clinical Congress in New Orleans, LA; the donation would be tax-deductible. Further details will be available on our Web site.

Loupes are used in a wide variety of surgical practices, including plastic, pediatric, general,

and cardiovascular surgery; urology; and neurosurgery. By magnifying the operative field, surgical repair of delicate structures can be accomplished more accurately. Loupes are advanced technology that can easily be transferred to developing countries because they are durable, uncomplicated to use, and require minimal maintenance. Through Loupes Around The World, we look forward to providing loupes to surgeons in developing countries and thus improving their ability to care for patients. 

---

**Mr. Sedlack** is an undergraduate student at the University of Vermont in Burlington.

