



**Modern + Neurosurgical + Education**



The Foundation for International  
Education in Neurological Surgery

# Nepal Tribhuvan University Teaching Hospital

## Excerpts from the blog of Ashwin Viswanathan

- Tribhuvan University Teaching Hospital (TUTH) is an academically oriented full service hospital with a neurosurgical unit. Many patients with traumatic brain injuries are brought to TUTH. Patients here must wait to be admitted for surgery, though the waiting time is on the order of weeks to months, rather than months to years. There are approximately seven operating days per month, including every Thursday and some Mondays.
- I am learning that increased technological development does not necessarily equate to a better product. For example, take the bone punch — a punch to safely make a little hole in the skull for either sewing the bone together or for tacking up the covering of the brain. We always use a high speed drill back home, not any faster, and perhaps with slightly more risk.
- Today we saw a patient who needed to be emergently intubated and have a drain placed for hydrocephalus. There are only 11 ventilators at TUTH. Since all 11 ventilators were in use, the family had to bag (serve as a ventilator for) the patient. Fortunately, they had resources and requested a transfer to a private hospital where the number of ventilators is not an issue.
- There are many cultural differences between medical practice in the USA and Nepal. During rounds on Tuesday morning, we started at bed one and discussed with the family the patient's condition and plan of care. Then we moved to bed two and everyone shifted with us. It wasn't clear to me what was happening until we reached bed four. All the patients' families were actively interested and involved in the care of the other patients. Not like the situation back home, where privacy is paramount. +



## FIENS has a mission.

Since 1969 FIENS has participated in the training of neurosurgeons and the development of residency programs on three continents. Our volunteers have been placed in 20 countries around the world and have helped to treat thousands.

## YOU can help.

### TRAINING PROGRAMS



*FIENS volunteers train the nurses who care for the neurosurgical patients, in addition to teaching the residents in neurosurgical training programs.*

### **FIENS neurosurgical training locations include:**

#### **Africa**

Ethiopia  
Ghana  
Kenya  
Nigeria  
Tanzania  
Uganda

#### **Americas**

Guatemala  
Honduras

#### **Asia**

India  
Indonesia  
Korea, DPR  
Nepal  
Vietnam



## Volunteers *Make a Big Difference*

Traumatic injuries of the brain and spinal cord are more common in the developing world. Congenital disorders and infections of the nervous system frequently are of the type not seen in the developed world. Yet, in many places, access to adequate neurosurgical care is almost non-existent. Where it does exist, dedicated, hard-working neurosurgeons often find themselves in deplorable conditions with outdated equipment, inadequate medical supplies, and little or no training in new neurosurgical techniques.

### How it all started.

In the 1960s, a group of dedicated neurosurgeons banded together for the express purpose of doing something positive for the state of neurosurgery in countries where help was sorely needed.

Their organization, formally founded in 1969 as the Foundation for International Education in Neurological Surgery (FIENS), sends volunteer neurosurgeons to developing countries to teach new neurosurgical techniques and procedures, to help establish neurosurgery residency programs, and improve the standard of patient care.

FIENS volunteers generally spend a month or more abroad. FIENS provides travel expenses and, occasionally, equipment and supplies. The host country sometimes provides living accommodations.

### Education and training help others help themselves.

Until developing nations can train their own neurosurgeons, they will continue to rely on FIENS for help. We firmly believe that the only way to end this dependence is through education.

*FIENS sends volunteer neurosurgeons to developing countries like Nepal (below) to teach modern neurosurgical techniques in the operating room.*



Our ultimate purpose is to educate local neurosurgeons and help establish residency programs. During their visits, FIENS volunteers are often called upon to provide critical neurosurgical care by taking the most difficult cases, operating on patients, and assisting local neurosurgeons. Additionally, FIENS volunteers with subspecialty experience are often the first to introduce new, lifesaving procedures to a country or region.

### Volunteering in Twenty Countries.

FIENS is now involved in 20 countries, including Belize, Guatemala, Honduras, Peru, Ethiopia, Ghana, Kenya, Rwanda, Tanzania, Uganda, Thailand, Indonesia, Nepal, and Vietnam. While the ultimate goal in each location is the creation of a neurosurgical residency program, this is not always possible due to the lack of infrastructure and the number of local neurosurgeons.

The record of our work throughout the developing world speaks volumes. During 2009 we sent 21 neurosurgeons abroad. In addition, a multitude of surgical instruments from Integra, Life Instrument, Medtronic, Mizuho, and Stryker was taken to various sites. This was in addition to supplies and instruments personally obtained by volunteers.

The Neurosurgical Training Program of East Africa (NSTP-EA) including Kenya, Ethiopia, Uganda, and Tanzania is now functional.

*Children benefit when FIENS volunteers train residents in innovative techniques, and find ways to provide much needed equipment and medical supplies.*



In Ethiopia there currently are seven residents in training and two graduates. The programs in both Uganda and Tanzania are undergoing revitalization.

### **They need our help. We need yours.**

Countries like these face some of the biggest challenges in providing neurosurgical care, but many more need our help. And we need yours. Our mission statement is: *To sustainably improve neurosurgical education and patient care in the developing world.* The number of countries we can visit and how much help we can provide in each is limited only by funding.

### **Volunteers change lives...and enrich their own.**

FIENS volunteers work in difficult and sometimes extreme conditions, teach with the materials they have at their disposal, and improvise on the spot. All are generous and compassionate individuals who bring hope to those who need it most.

**If you are a neurosurgeon who would like to help, please consider volunteering.**

*For more information, please contact Gail L. Rosseau, MD at 847-933-3908, or visit our website at [www.fiens.org](http://www.fiens.org).*

**Vietnam**

## *Danang General Hospital*

### **Excerpts from the blog of Ashwin Viswanathan**

- Today, I made my way to the **Danang General Hospital** to begin my work with their neurosurgery department. The department is led by the senior neurosurgeon, Dr. Ba. He has developed an excellent neurosurgery program. The neurosurgeons are very collegial and all work is considered a team effort. In an operation, there are usually three neurosurgeons involved.
- The hospital is a 1100 bed facility. On an average week they perform around 15-20 elective cases in addition to emergencies. The neurosurgery service has been allocated 98 beds, and today's census is 144 patients. Patients often share beds.
- The hospital operating room is efficient and well equipped. Surgical gauze is used only once and disposed of. Suture, though certainly not used liberally, is not for want. And most surgical equipment is available and functional — microscope, bipolar, Bovie, punches. There is no craniotome available in the emergency operating rooms, so the trusty Gigli saw makes a routine appearance.
- Motorbikes serve as the dominant means for transportation here. Unfortunately, this means there is an overwhelming number of motorbike accidents and hence neurosurgical trauma.

**“Medicine in the USA has become so specialized it would be quite unusual for one surgeon to have the opportunity to treat this range of pathology in one week.”**



*There is an overwhelming number of motorbike accidents and hence neurosurgical trauma.*

- This week was quite a big week in the OR — an acoustic neuroma, a right parietal AVM (arteriovenous malformation), posterior fossa AVM, and a high grade spondylolisthesis (slippage of the vertebrae). Medicine in the USA has become so specialized it would be quite unusual for one surgeon to have the opportunity to treat this range of pathology in one week.
- Danang is a fantastic city. My hosts have been very kind. Last night, Dr. Ba arranged a dinner for all the neurosurgical staff and their families. It was a ten course taste of the culinary offerings of Vietnam. Sadly, by course eight, everyone was stuffed, and we had to adjourn. It was the perfect end to a fantastic trip. +

## FINANCIAL

1 Your financial support enables us to send volunteers to the sites shown on the world map.

Travel is expensive and FIENS needs your assistance. Your donations help many people around the world. Please give generously.



## VOLUNTEER

2 As a FIENS volunteer your impact is felt by many. You can educate and perform local state-of-the-art neurosurgical techniques at one of our participating teaching hospitals. You will also treat congenital and infectious pathology not often seen in the developed world.



# FIENS

## Locations

Belize  
Ecuador  
Ethiopia  
Ghana  
Guatemala  
Honduras  
India  
Indonesia  
Kenya  
Korea, DPR  
Nepal  
Nigeria  
Peru  
Philippines  
Rwanda  
Tanzania  
Thailand  
Uganda  
Vietnam  
Zimbabwe

## Two Ways You Can Help

### Provide financial assistance.

In order to continue in our mission, we desperately need financial support to send volunteers abroad. Please contact Frank Culicchia, MD at 504-349-6985, or send your tax-deductible\* contribution to FIENS, c/o Frank Culicchia, MD, Attn.: Administrator, 1111 Medical Center Blvd., Suite S-750, Marrero, LA 70072.

### Volunteer.

FIENS volunteers are some of the best neurosurgeons in the world. They have to be. They work in extreme conditions, teach with whatever materials they have at their disposal, and improvise on the spot. All are generous and compassionate individuals who bring hope to those who need it most. There are more people in need than neurosurgeons available.

### If you are a neurosurgeon who has the unique qualities to join us, consider volunteering.

For more information, contact Gail L. Rosseau, MD at 847-933-3908 ([grosseau@northshore.org](mailto:grosseau@northshore.org)), or visit our website at [www.fiens.org](http://www.fiens.org).