



MISSION: BRAIN
FOUNDATION

newsletter

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Welcome

“Mission: BRAIN creates a platform that goes beyond what we do every day. Together we will change the world. I can see it and I can feel it now. It has become clear that what we are doing has a depth and reach beyond what we imagined only a few years ago. It has become clear to me, and I am blessed to be part of this with all of you! Thank you!”

Alfredo Quiñones-Hinojosa, M.D.
President, Mission: BRAIN Foundation

WELCOME to the inaugural issue of the Mission: BRAIN newsletter. This edition profiles the work we performed during our October 2016 mission to Mexico City. We provide a look at how Mission: BRAIN started, where we are today, and a look ahead to future plans including events, fundraisers and upcoming missions.

Today’s world needs bridges between countries, cultures, and people. We are honored to represent all of you who support us, as we travel around the world to alleviate suffering and bring hope.

Calendar

JUNE 10, 2017

The Gala
Fairmont Hotel, San Francisco

JUNE 25-28, 2017

Guadalajara, Mexico

LATE SEPTEMBER, 2017

Mexico City, Mexico

SEPTEMBER 2017

Haiti

DATE TBD

Manila, Philippines



Mission Profile: Mexico City — 2016

From October 9 to 14, 2016, the Mission: BRAIN team worked with the neurosurgery department at Hospital Juárez in Mexico City, where we evaluated fifteen patients and performed ten procedures.

The Mission: BRAIN Team

Alfredo Quiñones-Hinojosa, *Tumor Specialist, Mayo Clinic, Jacksonville, FL*
George Jallo, *Pediatric Specialist, Johns Hopkins All Children’s Hospital, St. Petersburg, FL*
Michael Lawton, *Vascular Specialist, UCSF, San Francisco, CA*
Geoffrey Colby, *Endovascular Specialist, Johns Hopkins, Baltimore, MD*
Rabih Tawk, *Tumor Specialist, Mayo Clinic, Jacksonville, FL*
William Aarsheim, *Owner of Q Surgical, Sausalito, CA*
Carleen Carolus, *Surgical Nurse, UCSF Health, San Francisco, CA*
Lisa Hannegan, *Nurse Practitioner, UCSF Health, San Francisco, CA*
Carla Vazquez-Ramos, *Trip Coordinator, Mayo Clinic, Jacksonville*

The Hospital Juárez Neurosurgery Team

Arturo Ayala Arcipreste, *Skull Base and Neurovascular Surgery, and primary host in Mexico City*
Rafael Mendizabal Guerra, *Chairman of Neurological Surgery*
Rubén Acosta Garcés, *Vice-Chair of Neurological Surgery*
Alberto de Montesinos Sampedro, *Pediatric Neurosurgery*
Gustavo Melo Guzmán, *Endovascular Neurosurgery*
Durdica López Vujnovic, *Neurophysiologist*
The Neurosurgery Residents of Hospital Juárez
The host group also included recent neurosurgery resident graduates Moisés Jiménez Jiménez and Diego León López.

We want to express our gratitude to the Mayo Clinic, Jacksonville for providing air transportation for the attendees from Florida. And we thank the Hotel Krystal Grand Reforma for their generous donation of eight hotel rooms for four days for Mission: BRAIN team members. This donation was coordinated by Federico Martin del Campo.

Mexico Mission Case Study: Complex AVM Surgery, Without Embolization



The patient in this case is a 49-year-old man who first presented in June 2016 with a sudden onset of severe headache and subsequent loss of consciousness. He was diagnosed with a ruptured aneurysm on a vessel feeding an arteriovenous malformation (AVM) in the left cerebellum. The aneurysm was repaired, and the patient recovered, but the AVM was considered too dangerous to treat.

The surgical procedure to repair this AVM was particularly complex and would typically require embolization. (Use of embolization makes the surgery safer by decreasing the risk of hemorrhage.) However, this patient could not afford either the cost of the surgery or the use of embolization.



Dr. Michael Lawton, one of the world's leading vascular neurosurgeons, operated successfully, performing

a far-lateral approach resection without embolization. Dr. Lawton donated both the surgery and the titanium clips needed to close the larger blood vessels, which cost up to \$1,000 each. Significantly, the OR was completely filled with observers during the procedure. Dr. Lawton feels it is very important to demonstrate that, with experience, a procedure of this complexity can be performed safely.

Mexico Mission Case Study Cranial Reconstruction

The patient in this case is a one-year-old girl diagnosed with craniosynostosis, a condition in which one or more of the growth plates in an infant skull prematurely closes, altering the growth pattern of the skull. In some cases, the resulting growth pattern provides adequate space for the growing brain, but results in abnormal head shape and facial features.



In cases where the growth pattern does not provide sufficient space for

the growing brain, craniosynostosis results in increased intracranial pressure. This can lead to visual impairment, difficulty eating or sleeping, or impairment of mental development. The family of this young girl had no financial resources for the surgery, and the child was beginning to exhibit signs of delayed cognitive growth.



Dr. George Jallo, head of pediatric surgery at Johns Hopkins All Children's hospital, has performed many such cranial reconstructions to alleviate craniosynostosis. Dr. Jallo was joined in this case by the local pediatric

neurosurgeon Dr. Alberto de Montesinos Sampedro. The young patient was discharged three days after the successful procedure.

Little Pieces Lead to Big Outcomes

Generous donations from medical device suppliers have sustained the efforts of Mission:BRAIN and resulted in positive surgical outcomes for our patients.

- Aesculap Inc. donated approximately \$60,000 worth of vitally needed aneurysm clips, half of which were left for use by local surgeons in Manila.
- Mizuho Medical Company recently donated \$109,000 worth of clips and instruments. Two years ago, Mizuho provided us with clips and instruments valued at \$12,000.
- Medtronic has donated thousands of dollars worth of equipment and supplies that were taken directly to Guadalajara.
- Boss Instruments Ltd. is providing a generous discount on four sets of surgical instruments that will provide traveling sets for our missions, so we will no longer need to borrow instruments from UCSF.

The Mission:BRAIN policy is to leave certain vitally needed instruments with local physicians.



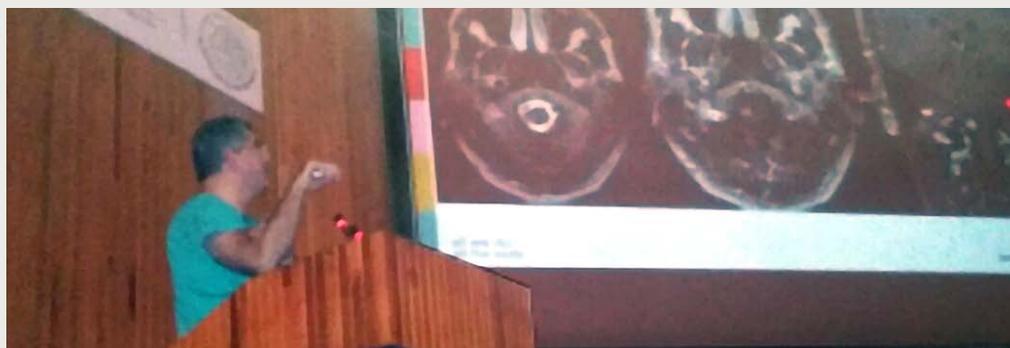
8th Neurological Conference, Hospital Juárez de México, Mexico City



An essential aspect of our mission is education, enabling host country physicians to observe surgeries rarely performed at their hospital. The Neurological Conference is the educational component outside the OR. The eighth conference, held at Hospital Juárez, was heavily attended.

Mission:BRAIN speakers included Alfredo Quiñones-Hinojosa and Rabih Tawk from Mayo Clinic, Florida; George Jallo from Johns Hopkins All Childrens Hospital, Florida; Geoffrey Colby from Johns Hopkins, Baltimore, Maryland, and Michael Lawton and Lisa Hannegan from UCSF.

Dr. Alfredo Quiñones-Hinojosa, formerly of UCSF, is now Neurosurgery Department Chair at Mayo Clinic, Florida. In July 2017, Dr. Michael Lawton will join the Barrow Neurological Institute in Arizona. Both will continue to play active roles in Mission:BRAIN.



A Successful Evening Benefiting Brain Aneurysm and AVM Research!

Mission:BRAIN was delighted to join The Aneurysm and AVM Foundation and the Joe Niekro Foundation in a joint fundraiser on June 10, 2017 at the Fairmont Hotel in San Francisco. Over \$125,000 was raised to help underwrite future surgical missions and fund the purchase of full sets of instruments to enable complex surgeries.

The celebrity host for this entertaining and elegant evening was actor/director Zach Braff, best known for his role as Dr. 'J.D.' Dorian on the hit television series *Scrubs*. After sharing a poignant story of his sister's hemorrhagic brain aneurysm, he led the guests through the rest of the evening with humor, building excitement and encouraging bids for the live auction.



At the Gala, Michael Lawton, MD was honored as the first William L. Young Achievement Award recipient. Dr. Lawton was recognized for advancing the treatment of brain aneurysms, AVMs, and hemorrhagic strokes. In July, Dr. Lawton will assume the position of Chair of Neurosurgery and President/CEO of Barrow Neurological Institute in Phoenix, Arizona.

About Us

Bridging Resources... Advancing International Neurosurgery

Mission:BRAIN conducted our first mission in 2011 at the original Fray Antonio Alcalde Hospital Civil in Guadalajara, Mexico, founded in the late 1700s. The neurosurgery mission was organized by Alfredo Quiñones-Hinojosa and Michael Lawton, and was attended by April Sabangan and Will Aarsheim. They operated on three patients, and surgeries included an "awake craniotomy," which enabled precise removal of a brain tumor with the patient awake and able to respond to requests and questions.



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To date, we have conducted missions at Philippine General Hospital in Manila, Department of Neuroscience at the University of Guadalajara and Civil Hospital of Guadalajara, Mexico and the Department of Neurosurgery at Hospital Juárez in Mexico City. We have also conducted an exploratory trip to Haiti to evaluate the future role for Mission:BRAIN there.

Sharing information Works Both Ways

Mission:BRAIN performs surgeries for people who lack the financial resources for treatment, but our role is much larger. By performing surgical procedures not typically attempted at local hospitals due to limited resources, world-renowned surgeons perform procedures that many resident physicians have heard of but have rarely seen. Our surgeons show that even complex procedures can be successfully performed with the limited resources available in these hospitals.



*Our vision is simple:
To change the world —
with the generous support of
all of you who partner with us.*

In return, Mission:BRAIN surgeons learn from the local surgeons about what can be accomplished without the resources generally considered an absolute necessity in the U.S. Both teams see new techniques and treatments. Such lessons learned during one mission are then utilized and shared with physicians during subsequent missions.

Looking Ahead

Our immediate goal is to expand the number of sites where we operate each year and bring in additional teams of surgeons. Thanks to our generous donors, we will soon be able to purchase four sets of neurosurgical instruments. We will be able to handle four cases per day, with teams equipped with full sets of instruments. In addition, we are exploring new sites each year.

How You Can Help

At some point in the future, Mission:BRAIN will begin to recruit surgeons, operating nurses, teachers, anesthesiologists, medical supply companies and residents. We currently welcome donations to assist with the purchase of medical equipment for the missions and to help us meet the equipment needs of local hospitals. Medical suppliers who donate equipment or provide us with major discounts are vital to our cause. Donations also enable us to set up exploratory visits to new public hospitals in other cities and countries.

At this time, every donation is used for the missions. All board members and volunteers pay their own way or obtain sponsorship for the trips. Local donors, governments and sponsors help to provide lodging.

Donate to Mission:BRAIN now. Help us build bridges with hospitals leading physicians round the world, as we work together to advance international neurosurgery.

[Make Your Donation to Mission:BRAIN](#)