Miller School Neurology Chairman

Inducted as President of the American Heart Association

Miller School Neurology Chairman Ralph L. Sacco, MD, MS, is the new president of the American Heart Association (AHA) for its 2010-11 fiscal year beginning July 1st. He became the first neurologist to hold the position when he was inducted into office during a ceremony in Dallas on June 22nd. As president, Dr. Sacco will be the chief volunteer scientific and medical officer, responsible for medical, scientific and public health matters.

“My professional life has been focused on preventing these illnesses, so I am really excited to be playing a leading role as the AHA takes on this ambitious goal.”

“We’ll also continue to broaden our mission to build healthier lives free of cardiovascular diseases and stroke. With our nation’s constantly changing demographics, we not only want to reach out to all population groups through our programs, but also get more people from diverse backgrounds involved in our mission as volunteers.”

In addition to his chairman role at the medical school, Dr. Sacco is also the Olemberg Family Chair in Neurological Diseases, Miller Professor of Neurology, Epidemiology and Human Genetics and Chief of the Neurology service at Jackson Memorial Hospital. He is also Principal Investigator of the Northern Manhattan Study (NOMAS). Now on its 18th year, Dr. Sacco started NOMAS while on the faculty at Columbia University to investigate stroke incidence and environmental and genetic risk factors affecting stroke. The study continues as a collaboration between University of Miami and Columbia University.

Dr. Sacco has been an American Heart Association volunteer for more than 25 years, beginning when he was a student at Boston University Medical School, after the association awarded him a medical student scholarship. He later served as President of the New York City Regional Board while on the faculty at Columbia University.

In 2007, he received the association’s Chairman’s Award for his pioneering role in Power To End Stroke, an initiative to heighten awareness of stroke risk among African Americans. He is also past chairman of the association’s Stroke Advisory Committee (2005–08) and was lead author of the 2006 publication, “Guidelines for Prevention of Stroke in Patients with Ischemic Stroke or Transient Ischemic Attack.” He is currently a member of the organization’s Science Advisory & Coordinating Committee and Stroke Council Leadership Committee.

“This is an exciting time to be involved with the American Heart Association,” Dr. Sacco said. “We are taking a bold approach to preventing cardiovascular diseases through our new initiatives and strategic plan for the coming decade. Our 2020 goal is to improve the cardiovascular health of all Americans by 20%, as well as continue to reduce death from cardiovascular disease and stroke. Most of my professional life has been focused on preventing these illnesses, so I am really excited to be playing a leading role as the AHA takes on this ambitious goal.”

About the American Heart Association

The American Heart Association was founded in 1924 by six cardiologists. Their goal was to improve public and medical awareness. Today, the AHA is a national voluntary health agency whose mission is to: “Build healthier lives, free of cardiovascular diseases and stroke.” The 2020 impact goal is to educate the general public about what AHA/ASA does while influencing behavior change toward ideal heart health.
For more information on Neurology clinical trials please call 1-800-996-3783

Neurology
Mechanisms of Stroke in Intracranial Stenosis and Stenting (MoSISS)
Intracranial atherosclerotic disease accounts for 10% of strokes in the US and may be the most common cause of stroke worldwide. Contrary to extracranial carotid disease, intracranial stenosis has only recently been systematically studied. The lack of knowledge regarding mechanisms of stroke in patients with intracranial stenosis limits development and implementation of effective and targeted treatments. The primary objective of this NIH-sponsored multicenter study is to understand the mechanisms of stroke in intracranial atherosclerotic disease and establish imaging markers to predict recurrent ischemic events. MoSISS is an ancillary study to SAMPRIS. The ongoing NIH-funded Stenting and Aggressive Medical Management for Preventing Recurrent Stroke in Intracranial Stenosis study.
PI - Jose Romano, MD

Novel Factors for Unexplained Phenotypes of Subclinical Carotid Atherosclerosis
Individuals with progression of subclinical atherosclerosis have twice the risk of stroke, myocardial infarction or death over 5 years, compared to those with stable plaque or regression. Atherosclerosis is a complex condition with a substantial genetic contribution. Precursor conditions or subclinical markers provide an opportunity to understand the early determinants of atherosclerosis. The primary aims of this study include identifying individuals with unexplained subclinical atherosclerosis and unexplained protection against atherosclerosis and identify genes that are associated with these by performing a genome wide association study. New quantitative characteristics developed in this study will make possible to identify novel and previously unsuspected genetic associations for those contributing to excessive atherosclerosis, and those protective from atherosclerosis. This NIH-sponsored study will analyze data already collected as a part of the population-based Northern Manhattan study- an ongoing 18-years study of stroke and stroke risk among a multiethnic population.
PI - Tanja Rundek, MD, PhD

Neurological Surgery
Traumatic Brain Injury (TBI)
BOOST (Benefits of Oxygen Saturation Targeting)
A Phase II NIH funded mechanistic exploitation study measuring the brain oxygen tension level in Severe TBI patients. Based on the conclusions, physicians will be able to treat low brain oxygen tension by implementing solutions like giving patients more oxygen to breathe, increasing blood pressure or changing the body temperature. The study has enrolled 4 designated research centers in the US. All data is being collected and processed at the University of Texas, Dallas, TX.
PI - M. Ross Bullock, MD, PhD

Spinal Cord Injury (SCI)
SCI BIOMARKERS
Study currently underway of neural spectrum breakdown products to identify CSF biomarkers following acute traumatic spinal cord injury. The project aims to find a panel of 6-12 sensitive and specific biochemical serum or CSF markers that will allow the rapid diagnosis of spinal cord injury (SCI) and aid in the assessment of therapeutic interventions aimed at SCI. Current results show a positive correlation between the extent of spinal cord injury and specific biomarkers. The University of Miami has currently enrolled 3 participants into the trial with a sample goal of 30.
PI - Michael Y. Wang, MD, FACS

American Heart Association
Learn and Live

Dear Colleagues,

The faculty of the Departments of Neurology and Neurological Surgery continue to be recognized for their commitment to excellence in patient care and depth of knowledge on various topics relating to neurological diseases and injuries. Dr. Roberto C. Heros, Co-Chair of the Department of Neurological Surgery, received the 2010 Cor-Vitea Award from the American Heart Association (AHA) for his contributions to stroke care. Dr. Heros was presented the award by Dr. Ralph Sacco, Chairman of the Department of Neurology, who was officially instated as president of the AHA on June 22. Dr. Sacco is the first neurologist to hold this esteemed position.

The Department of Neurological Surgery, ranked 3rd in the country for NIH funding, is conducting a variety of innovative studies in conjunction with The Miami Project to Cure Paralysis that are shaping the treatment of spinal cord injury (SCI). The Department of Neurology, ranked 17th in the country, and 3rd in the UM School of Medicine for NIH funding, continues to conduct cutting edge clinical and discovery research in cerebrovascular and mitochondrial disease.

We are offering alternative care procedures that are revolutionizing the lives of patients like Millicent Euton, a teenager formerly diagnosed with dystonia. Millicent was confined to a wheelchair for over seven years and is now walking as a result of receiving advanced Deep Brain Stimulation (DBS) treatment from the collaborative efforts of Dr. Bruno Gallo and Dr. Jonathon Jagid.

Through our groundbreaking research and exceptional patient care we continue to strive to provide excellence at the University of Miami. We look forward to sharing our stories and news with you in this, and future issues.

Ralph L. Sacco, MS, MD, FAAN, FAHA,
Professor and Chairman of Neurology
Barth A. Green, MD, FACS,
Professor and Chairman of Neurological Surgery

Dr. Roberto C. Heros
Receives the 2010 Cor Vitea Award

Dr. Roberto C. Heros, was the recipient of the 2010 Cor Vitae Award of the AHA for his contributions to stroke care. Dr. Heros is Professor and Co-Chairman of the Department of Neurological Surgery. In 1990, he was made Chairman of the Neurosurgical “Decade of the Brain” task force. In this capacity, he developed and became the founding chairman of the “Brain Attack Coalition” a multidisciplinary group that lobbied the NIH successfully to obtain funding for the development of several regional stroke centers of excellence.

At that time, he popularized the term “Brain Attack” to denote the fact that stroke, like a heart attack, needed to be recognized and treated as an emergency. Dr. Heros was funded by the NIH for several years to study experimental protective measures against brain ischemia. He has written extensively on stroke related topics, both experimental and clinical.

American Heart Association
Learn and Live

For more information on Neurological Surgery Clinical trials please call 1-877-977-7724
Dr. Allan B. Levi, clinical researcher at the University of Miami, home to The Miami Project to Cure Paralysis, and Chief of the Neurospine Service at Jackson Memorial Hospital, and colleagues have published two papers which provide the first evidence that the use of mild hypothermia is both a safe and effective strategy in acute spinal cord injury (SCI). The pre-clinical investigative data, pioneered by University of Miami/Miami Project researchers, has revealed that the treatment can be extremely neuroprotective; decreasing the severity of injury and increasing the function. The first paper was published in the March 2009 issue of the Journal of Neurotrauma and the second in the April 2010 issue of the Journal of Neurosurgery.

Years of extensive laboratory experience under the supervision of Dr. W. Dalton Dietrich at The Miami Project, and through other research groups, provided the impetus to conduct this trial. The clinical protocols were created by Miami Project / University of Miami clinicians and researchers. The University of Miami/ Jackson Memorial Hospital is the only institution in the world doing regimented hypothermia treatment and follow up for patients with acute spinal cord injury.

The study enrolled 14 participants that were complete cervical spinal cord (Asia A) injuries with an average onset time of 9 hours. Patients were cooled using a balloon catheter placed in a blood vessel of the abdomen. Upon evaluation one year post treatment, 6 of the 14 patients had switched an Asia grade. The patients’ outcomes were as follows; 3 patients

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<th>Asia Grade</th>
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By June of the following year, she was able to cross her legs normally in her wheelchair and transfer herself with greater ease from chair to bed. Dr. Gallo continued with outpatient programming of the device and noted, “by August of 2009, I specifically remember getting a phone call from the patient’s mother telling me that Millicent ‘was walking’ all alone!”

Prior to being seen by Dr. Gallo, Ms. Euton had been treated with Carbipoda-Levodopa having some efficacy but the benefit was not long lasting. Later, she required combination therapy with Carbamazepine, Trihexapentidyl and multiple courses of physical therapy but suffered from medication side effects. While receiving treatment with the Movement Disorders team, Dr. Gallo

In May of this year, Millicent Euton returned to The University of Miami and met with her team Dr. Bruno V. Gallo (left) and Dr. Jonathan R. Jagid (right).

and the clinical staff held lengthy counseling sessions with the patient and her parents about the medical treatment of dystonia and available surgical approaches, including the use of DBS. At that time, the family decided to explore some additional medical therapies for Millicent as an alternative to the proposed surgical intervention.

The additional medical therapies failed and she was seen in 2008 by Dr. Jonathan Jagid, Assistant Professor of Neurological Surgery and Director of Functional Neurosurgery at the Miller School of Medicine, who recommended proceeding with DBS of the globus pallidus pars interna in the hopes of making a difference in her quality of life. Comprehensive dystonia rating scales were completed in the office in preparation for surgery and that November, she underwent the surgical procedure at Jackson Memorial Hospital.

Advanced 3 Tesla MRI CT fusion technology and intraoperative neurophysiologic microelectrode recordings resulted in accurate electrode targeting and placement. “Few neurosurgical procedures have the ability to alter the function of the brain producing such profound improvements in quality of life” noted Dr. Jagid. Postoperatively, Millicent did well with no complications and the programming of her deep brain stimulators began a month later in December of 2008.

By June of the following year, she was able to cross her legs normally in her wheelchair and transfer herself with greater ease from chair to bed. Dr. Gallo continued with outpatient programming of the device and noted, “by August of 2009, I specifically remember getting a phone call from the patient’s mother telling me that Millicent ‘was walking’ all alone!”

Millicent is now independent with all her activities of daily living and last fall enrolled in art school in Charlotte, North Carolina beginning classes in January 2010. She has done well and is currently enjoying the normal college experience along with her other 19 year old peers.
The departments of Neurological Surgery and Neurology graduated their 2010 class of residents on June 12. “The Neurology Resident(s) of the Year Award” was given to Leticia Tornes, MD, graduate and Diogo Haussen, MD, PGY-3, both outstanding contributors to the department of Neurology. The “Teacher of the Year Award” from the Department of Neurology was presented to Salim Dib, MD. The “Highest Board Score of the Year” was awarded to Neurosurgery Resident, Brain Hood, MD, PGY-4. Roberto C. Heros, MD, Neurosurgery Department Co-Chair, presented faculty member Sanjiv Bhatia, MD, with the “Neurosurgery Faculty Teaching Award” for his dedication to the education of residents in the field of pediatric neurosurgery.

This talented class of Neurology and Neurosurgery graduates is continuing on to various academic and private practice positions throughout the country.

Neurology Residency graduates (from left); Prasad LP Nidadavolu, MD, Nicolas A. Bianchi, MD, Jeremy R. Grimes, MD, Taryn K. Fortune, MD, Leticia Tornes, MD, Hong Jiang, MD, PhD, David Z. Rose, MD, Benjamin M. Thomas, MD.