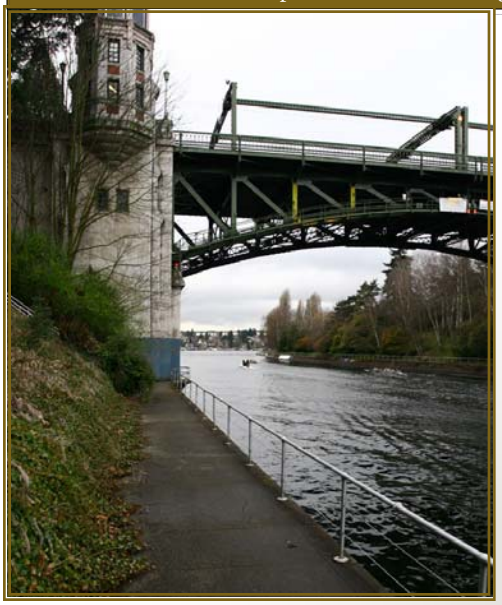
UW Medicine

The Montlake Cut

A Publication of the Department of Neurological Surgery, UW Medicine Health Care System January 2013



Chairman's Message… The View from Puget Sound ...

Richard G. Ellenbogen, M.D., F.A.C.S.

Welcome to the latest issue of *'The Montlake Cut'*.

In this issue we reflect on 2012 as a year of both transition and accomplishment. With great regret we mark the passing of two of our Department's closest friends and long-time colleagues; Professor Robert Goodkin, and Clinical Professor John Maxwell. We are pleased to introduce two major research publications describing leading edge results: Dr. Randy Chesnut's randomized control trial of ICP Monitoring in Traumatic Brain Injury conducted in Latin America with several of our faculty and reported in the *New England Journal of Medicine*, and Dr. Raimondo D'Ambrosio's study reported in the *Annals of Neurology* that concludes Mild Brain Cooling after Injury Prevents Epileptic Seizures. We welcome 2013 with Dr. Louis Kim's new role as Chief of Service for Neurological Surgery at Harborview Medical Center. Please enjoy this edition and remember, as always, we welcome your feedback and insights.

Sincerely,

Richard G. Ellenbogen, MD, FACS

Professor & Chairman, Department of Neurological Surgery

IN THIS ISSUE:

In Memory of Robert Goodkin, MD 1939-2012

We sadly mark the passage of our beloved and esteemed colleague and friend Robert Goodkin, Professor Emeritus of Neurological Surgery.

Robert performed his undergraduate work at the College of William and Mary and New York University, then received his MD degree from the Chicago Medical School. A straight surgical internship at Bellevue Hospital Center and a Neurosurgery Residency at New York University Medical Center followed.

Robert Goodkin, M.D.
Professor Emeritus
Department of Neurological Surgery
1939-2012

He was animated when he referred to his training at Bellevue under the watchful eye of his mentor, the world famous and "rough and tumble" neurosurgeon, Dr. Joseph Ransohoff. Prior to joining our faculty in 1987, he was on the neurological surgery faculty of several prestigious institutions including the Barrow Neurological Institute Residency Training Program, the University of Florida, the University of Miami School of Medicine, and the USC School of Medicine.

Bob carried a significant administrative load, both within our institution and in the greater community of neurosurgeons. At the UW he served twice on the Faculty Senate, including an elected term on the Executive Committee, and had multiple years of service with the Faculty Council on Student Affairs, and the Faculty Appeal Board and Adjudication Panel. At the VA Puget Sound Health Care System, he was an active member of the Ethics Committee, on the OR Executive Council Committee (Chairman), the Pastoral Committee, and the QI Credentialing and Privileging Committee.

Nationally, Bob was active in supporting the work of Neurological Surgery professional societies. He served on the Bylaws Committee and Professional Liability Committee of the AANS. As part of the Neurosurgery Consultants Committee of the Surgical Service, Veterans Affairs Headquarters, he was Chairman of the AANS Surgical Liaison Committee and Representative to the VA Central Office in Washington D.C. He also served as a Delegate to the Word Federation of Neurological Surgeons from the Neurosurgical Society of America where he had been involved in many leadership roles. Dr. Goodkin was President of the Neurosurgery Society of America from 1997-98.

He contributed to the growth and development of our field in various other ways. Bob authored dozens of book chapters and articles in peer-reviewed journals. He made a major contribution in the analysis of intraoperative complications and resultant litigation. He contributed to our understanding of MRI changes in damaged peripheral nerves and muscle, and developed a research program in the surgical management of Movement Disorders.

(Continued on next page)

(Continued from previous page)

One of his signal accomplishments and a significant point of pride was the instrumental role he played in starting a new neurosurgery journal, *Surgical Neurology International*, an open access, Internet-only journal that rapidly publishes the latest developments in the field. Importantly, its papers can be downloaded free by anyone. He saw this as critical to advancing neurosurgical education on a global basis and believed the journal had the potential to grow internationally into one of the highest circulation resources in our field.

Dr. Goodkin was a superb teacher who lastingly contributed to the education of our residents, fellows and medical students on elective rotations. He was consistently ranked as one of the best in our Department.

Sandy & Bob Goodkin
Wedding photo.

Bob was dedicated to his family, synagogue and profession. He and his wife Sandy married in his second year of medical school and raised a wonderful family. Sandy and Bob had recently celebrated their 55th wedding anniversary. A couple more dedicated to each other would be hard to find. Sandy was the love of his life and his two boys were the object of his pride. He was modest but a spark came to his eye when he talked about the very accomplished Jared (attorney) or Howard.(Academic Pediatric Epileptologist) One of his finest tributes came in 2011 with the establishment of the Department of Neurological Surgery Robert Goodkin Endowed Lectureship. This was especially meaningful as the inaugural lecture *"Etat de mal"* was given by his son Howard P. Goodkin. MD. PhD, an Associate Professor in the Department of Neurology at the University of Virginia.

Bob Goodkin was a man of great integrity. He was a model spouse, father, and mentor. He was incorruptible, bright, honest, outspoken, dedicated, and forever a great friend and supporter to those worthy of his impeccable honor. He will be sorely missed by us and remembered in perpetuity by our department."

Rich Ellenbogen and Rick Rapport

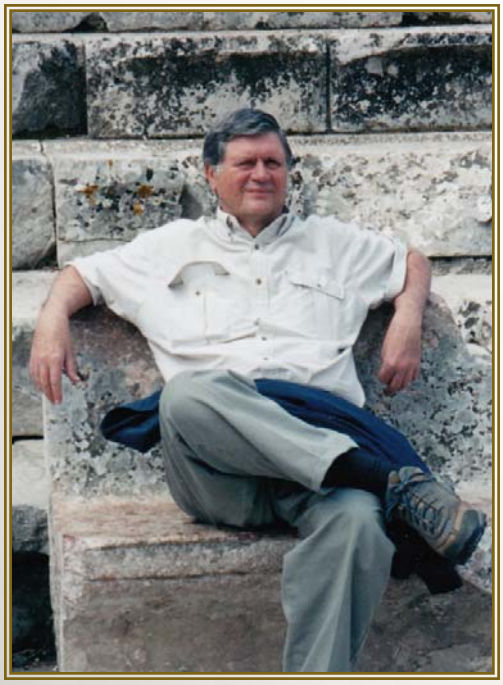
Excerpt from Eulogy by Rich Ellenbogen:

If you have integrity nothing else matters!
If you do not have integrity nothing else matters!

Apologies to Senator Alan Simpson, WY

In Memory of John Maxwell, M.D. 1933-2012

John Alan Maxwell was born June 24, 1933 in Lima, Ohio. He spent his childhood in Kansas, and in 1951 went to Harvard College on a scholastic scholarship. He graduated Cum Laude with a degree in chemistry in 1955. Almost immediately, he entered the U.S. Navy as a line officer and served in the Pacific Command. In 1957, he returned to Cambridge to attend medical school and graduated in 1961.



Dr. Maxwell relaxed at Epidaurus, Greece in the amphitheater, waiting for the games to begin.

John did his residency at the University of Michigan under the direction of Professors Edgar Kahn and Richard Schneider. He finished in 1967, and was always fond of telling the story of getting ready to leave Ann Arbor just as his car suffered irreversible mechanical failure. When he told Eddie Kahn about it, and when cars were cheaper and times were different, his professor bought him a new one so he could get to Kansas City. Once back in the Midwest, John became an Instructor in Neurosurgery at the University of Kansas with Charlie Brackett. His research interests centered on lung and fluid balance complications of head injury. He quickly advanced to assistant and then associate professor by 1973.

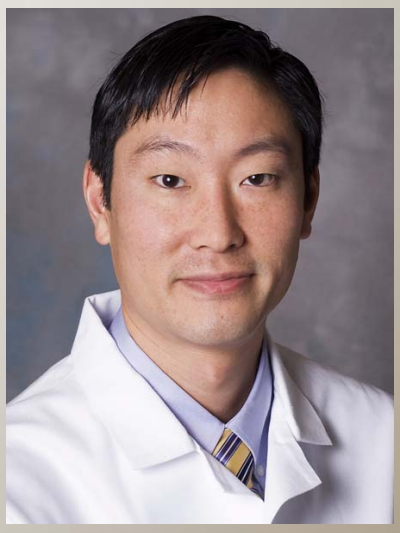
In 1975 Dr. Maxwell, his wife Margaret, and their sons, John, Chris, and Fred moved to Medina when he entered the private practice of neurosurgery at Overlake and Evergreen Hospitals. He brought considerable intellect and surgical skill in clinical neurosurgery to the Eastside, and also had privileges at Virginia Mason and Children's Hospital. John quickly established himself as a gifted physician and trusted colleague. After he retired, he filled in at Group Health for a while, and was just as much valued there.

Dr. Maxwell derived enormous pleasure from his association with the neurosurgery program at UW. He began to come to Grand Rounds and conferences during the time Arthur Ward was chairman. In 1980 John was appointed Associate Clinical Professor and in 2004 Clinical Professor of Neurosurgery. Former residents and faculty will fondly remember his dedication to the Neurosurgery Service at the Veteran's Hospital where he attended with the residents in clinic for several years.

Five years ago Dr. Maxwell developed the first symptoms of what proved to be ALS. Throughout that illness he retained a good humor and joy of what he had left. He died of this relentless disease on November 18, 2012.

John Maxwell loved his family, his profession, and his very productive and rich life. He will be long remembered by grateful patients, colleagues, and his many friends.

Louis J. Kim, M.D. Appointed



Louis J. Kim, M.D.
Associate Professor
Service Chief
Neurological Surgery
Harborview Medical Center

In an administrative move to consolidate the management of neurosurgical patients, Chairman Richard G. Ellenbogen nominated Dr. Louis Kim to be the new Chief of Service at Harborview. This appointment was ratified as of December 14, 2012. In addition to his more than fulltime clinical practice on the neurovascular service at HMC, endovascular and teaching responsibilities, Dr. Kim will now help to lead the reorganization of the always busy neurosurgical service at the only Level One trauma center in the WWAMI Region.

Dr. Kim received his MD in 1999 from the Columbia University College of Physicians & Surgeons in New York and completed his Neurosurgery residency in 2006 in the Division of Neurological Surgery at the Barrow Neurological Institute in Phoenix, Arizona. He has participated in an impressive sequence of research and clinical fellowships including a six-month Research Fellowship in the BNI Microvascular & Skull Base Anatomy Laboratory in 2002 (Joseph M. Zabramski, M.D. & Robert F. Spetzler, M.D.) and one-year as a Research Fellow in the Neurovascular Laboratory at Columbia in 1997-1998 (E. Sander Connolly, Jr., M.D.). His clinical fellowships are equally impressive. He had a significant Neuro-Endovascular Fellowship at Barrow (2004-05; 2006-07) under Cameron G. McDougall, M.D. & Felipe C. Albuquerque, M.D., and a Cerebrovascular & Skull Base Fellowship in 2005-6, with Robert F. Spetzler, M.D: also at Barrow. In addition, he completed a Spine Fellowship with Volker K. H. Sonntag, M.D., April-June 2003, and a Gamma Knife Fellowship with Andrew G. Shetter, M.D., Kris A. Smith, M.D., & Randall W. Porter, M.D., December 2002-February 2003.

Dr. Kim joined the University of Washington Department of Neurological Surgery in August 2007. Dr. Kim is an excellent surgeon and consummate team player.

We remain anxious to publish stories, photos about all aspects and activities of the Department. Please share your memories, ideas, and suggestions for stories and news items that expand our common ground. Please contact us at these email addresses:

Editor-in-Chief ····· Richard G. Ellenbogen, M.D. ····· rge@ uw.edu
Editor ····· Richard Rapport, M.D. ····· rappor@uw.edu
Scientific Editor ····· Sean Murphy, Ph.D. ····· seanm6@uw.edu
Associate Editors ····· James Pridgeon, MHA ····· pridgeon@uw.edu
····· Mary Gilbert ····· mmg@uw.edu
Layout Director ····· Mary Gilbert ····· mmg@uw.edu

Tony Avellino Runs 50 Miles!

On Saturday October 27, 2012 Professor Tony Avellino ran an ultra marathon to help support the Matthew Metcalf Memorial Scholarship Fund at Life Christian Academy in Tacoma, Washington. Matthew was a brave young man who in his brief life survived leukemia only to die of a secondary brain tumor.

Dr. Anthony Avellino

Tony notes that, "there are times in life when we are fortunate enough to meet someone who both charms and inspires us." For him, his patient, Matthew Metcalf, was such a person. Tony was privileged to meet this exceptional child in 2003. Although he was successful in removing 75% of the tumor, it returned within the month. Matthew and his parents, Sue and Dan Metcalf, might easily have allowed this terrible disappointment to get the best of them. Instead, Matthew decided that he wanted to spend the next month traveling the United States with his dad on their heavy-haul tractor trailer. Sadly, Matthew passed away shortly thereafter.

Anyone who knows Tony understands that long distance running is what keeps him connected to helping others, both spiritually and emotionally. Thus, for his own challenge, he completed the 50 mile race in 10 hours and 7 minutes. It rained all day and he had to change his socks, clothes, and sneakers three times. His support crew included Matthew's mom and dad, Dan and Sue, who came from Missouri for the event, kept him nourished and going throughout!

Tony was fortunate to have raised $8000 and the Scholarship Fund has now achieved official endowment status. This will enable more children to attend Life Christian Academy, where their focus is: "educating the whole person: spirit, mind, and body!" Further, Tony and his wife, Jennifer, were fortunate to visit Life Christian Academy, and were impressed by their commitment to education.

Dr. Minku Chowdhary
Chief, Neurosurgery
Overlake Hospital

Puzzler

This "Little Doc" often was kicked by horses and had an 11% survival rate in the first group he studied which eventually led to a Nobel Prize. Who is this person, and how did he help shape the University of Washington as we know it today?

Bonus:

What special diet did the patients in the above study receive?

Aubriana Ard Named New Residency Program Coordinator!

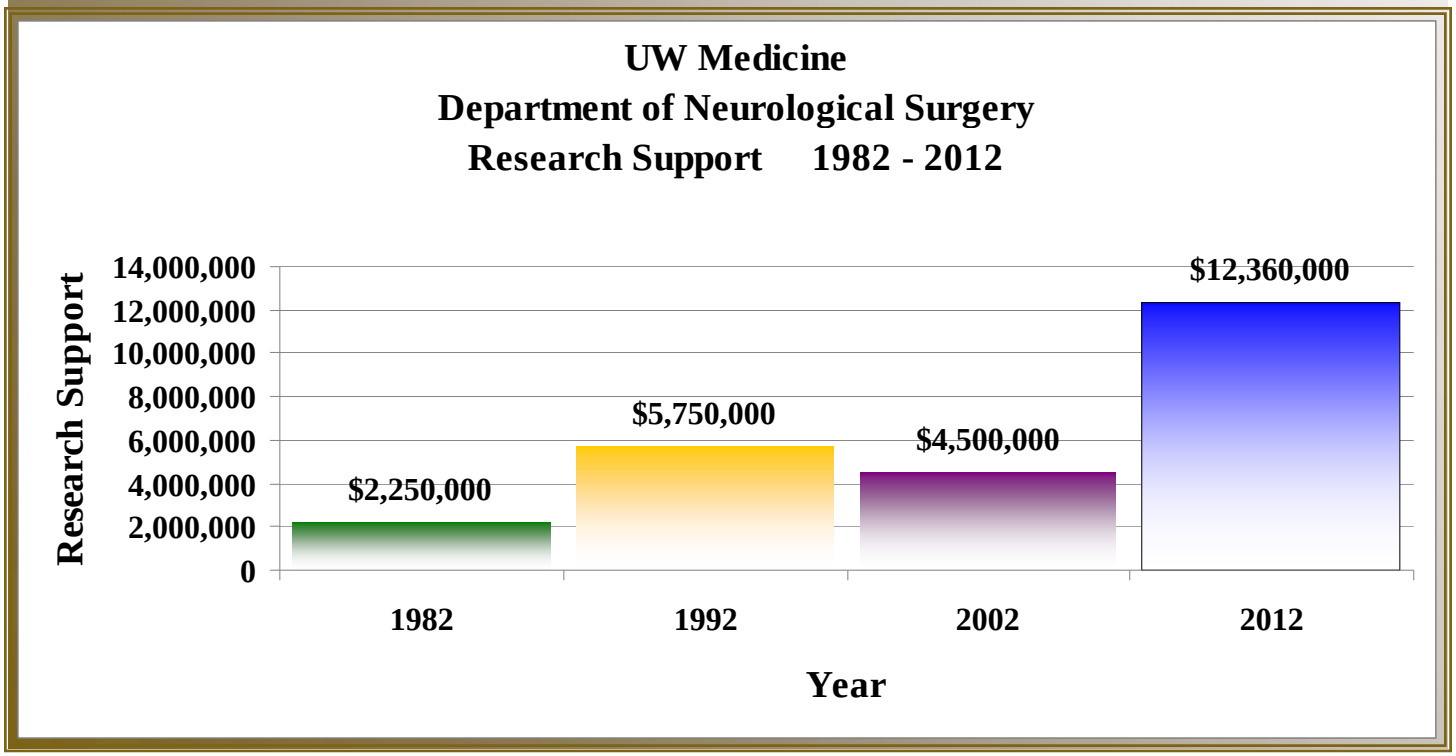
Aubriana comes to the Department of Neurological Surgery from a financial software company, where she worked as an analyst/product manager. Before moving to Seattle, she worked for the University of Michigan as a research assistant for 3 years, contributing to projects in cardiovascular pathology and public health. Aubriana earned a BA in Economics and Spanish from U of Michigan, and also completed a pre-medicine certificate. She was a varsity diver on the "Big Blue" University of Michigan swim/diving team.

Aubriana Ard

"I am looking forward to being a resource for our residents and accomplished faculty, and to contributing to an evolving residency curriculum and the *Milestones Project*."

Departmental Funding Continues to Rise

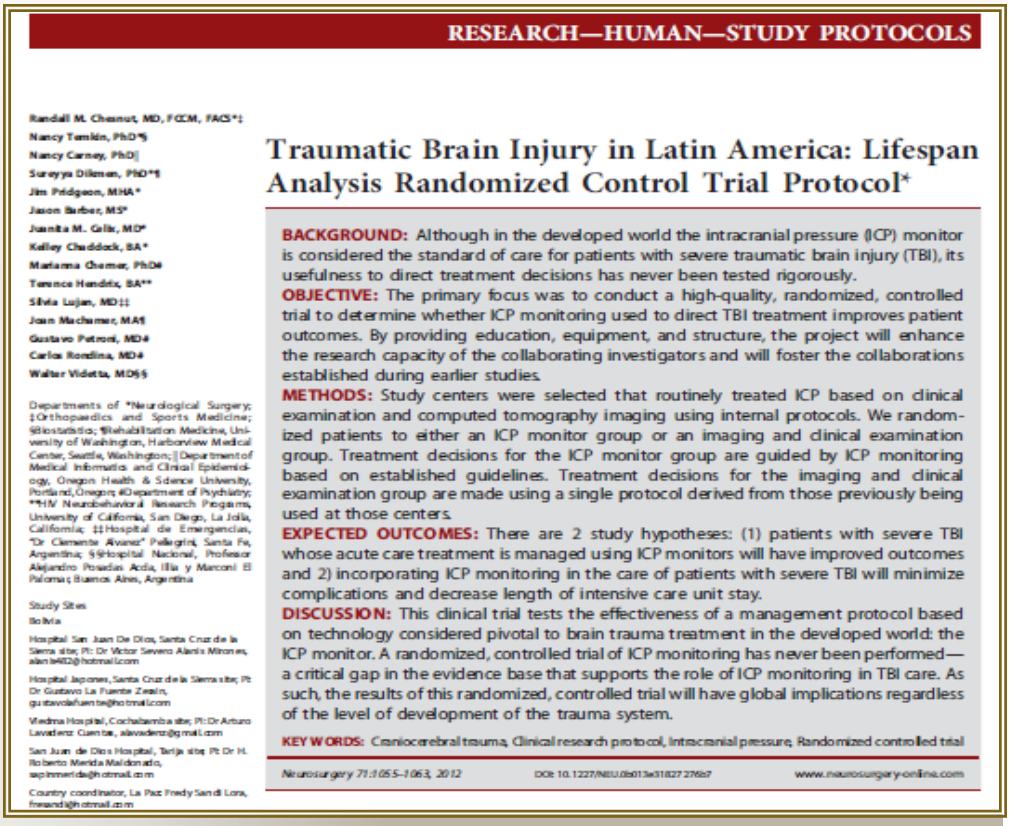
Neurological Surgery has a long history of successful research engagement in keeping with our mission to generate new neuroscience knowledge and translate basic and clinical science discovery into improved patient care. This graph shows the growth of research funding over the past 30 years starting in 1982 to its present high of over $10M. These figures are derived from the University of Washington Office of Research Annual Funding Report and include research support from all sources for all faculty. Neurological Surgery derives the majority of its research finding from NIH and DOD awards.



Major Study Results in Prestigious Publications

"A Trial of Intracranial Pressure Monitoring in Traumatic Brain Injury," *The New England Journal of Medicine*: December 27, 2012. Professor Randall Chesnut, PI.

Traumatic Brain Injury (TBI) is a major cause of mortality and disability world wide, now responsible for about 85% of all trauma-related fatalities. Though there is a lack of research traditions in Latin America, 9 institutions in 5 countries have conducted two studies during the past 5 years. Despite resource differences, investigators believe that systematic research in Latin American and putting those results into practice could improve outcome in all countries. The results of this randomized control trial have been much anticipated and mark new directions in the study of care for severe TBI.



RESEARCH—HUMAN—STUDY PROTOCOLS

Randall M. Chesnut, MD, FCCM, FACS*‡; Nancy Temkin, PhD*§; Nancy Carney, PhD‖; Sureyya Dikmen, PhD*¶; Jim Pridgeon, MHA*; Jason Barber, MS*; Juanita M. Celix, MD*; Kelley Chaddock, BA*; Marianna Cherner, PhD#; Terence Hendrix, BA**; Silvia Lujan, MD‡‡; Joan Machamer, MA¶; Gustavo Petroni, MD#; Carlos Rondina, MD#; Walter Videtta, MD§§

Departments of *Neurological Surgery; ‡Orthopaedics and Sports Medicine; §Biostatistics; ¶Rehabilitation Medicine, University of Washington, Harborview Medical Center, Seattle, Washington; ‖Department of Medical Informatics and Clinical Epidemiology, Oregon Health & Science University, Portland, Oregon; #Department of Psychiatry; **HIV Neurobehavioral Research Programs, University of California, San Diego, La Jolla, California; ‡‡Hospital de Emergencias, "Dr Clemente Alvarez" Pellegrini, Santa Fe, Argentina; §§Hospital Nacional, Professor Alejandro Posadas Acda, Illa y Marconi El Palomar, Buenos Aires, Argentina

Study Sites

Bolivia

Hospital San Juan De Dios, Santa Cruz de la Sierra site; PI: Dr Victor Severo Alanis Mirones, alan9402@hotmail.com

Hospital Japones, Santa Cruz de la Sierra site; PI: Dr Gustavo La Fuente Zeain, gustavolafuente@hotmail.com

Viedma Hospital, Cochabamba site; PI: Dr Arturo Lavadenz Cuenca, alavadenz@gmail.com

San Juan de Dios Hospital, Tarija site; PI: Dr H. Roberto Merida Maldonado, sspinmerida@hotmail.com

Country coordinator, La Paz: Fredy Sandi Lora, fresandi@hotmail.com

Traumatic Brain Injury in Latin America: Lifespan Analysis Randomized Control Trial Protocol*

BACKGROUND: Although in the developed world the intracranial pressure (ICP) monitor is considered the standard of care for patients with severe traumatic brain injury (TBI), its usefulness to direct treatment decisions has never been tested rigorously.

OBJECTIVE: The primary focus was to conduct a high-quality, randomized, controlled trial to determine whether ICP monitoring used to direct TBI treatment improves patient outcomes. By providing education, equipment, and structure, the project will enhance the research capacity of the collaborating investigators and will foster the collaborations established during earlier studies.

METHODS: Study centers were selected that routinely treated ICP based on clinical examination and computed tomography imaging using internal protocols. We randomized patients to either an ICP monitor group or an imaging and clinical examination group. Treatment decisions for the ICP monitor group are guided by ICP monitoring based on established guidelines. Treatment decisions for the imaging and clinical examination group are made using a single protocol derived from those previously being used at those centers.

EXPECTED OUTCOMES: There are 2 study hypotheses: (1) patients with severe TBI whose acute care treatment is managed using ICP monitors will have improved outcomes and 2) incorporating ICP monitoring in the care of patients with severe TBI will minimize complications and decrease length of intensive care unit stay.

DISCUSSION: This clinical trial tests the effectiveness of a management protocol based on technology considered pivotal to brain trauma treatment in the developed world: the ICP monitor. A randomized, controlled trial of ICP monitoring has never been performed—a critical gap in the evidence base that supports the role of ICP monitoring in TBI care. As such, the results of this randomized, controlled trial will have global implications regardless of the level of development of the trauma system.

KEY WORDS: Craniocerebral trauma, Clinical research protocol, Intracranial pressure, Randomized controlled trial

Neurosurgery 71:1055–1063, 2012 DOI: 10.1227/NEU.0b013e318272766f www.neurosurgery-online.com

Traumatic Brain Injury in Latin America: Lifespan Analysis Randomized Control Trial Protocol Neurosurgery. 2012 Dec;71(6):1055-1063.

The New England Journal of Medicine published the main study results in its December 27, 2012 issue (Chesnut, et al). Further, an overview of the study protocol entitled "Traumatic Brain Injury in Latin America: Lifespan Analysis Randomized Control Trial Protocol" (Chesnut, et.al.) was published in *Neurosurgery* on December 7, 2012. The study was also covered in the *International Brain Injury Association Newsletter* in an article entitled "Intracranial Pressure Monitoring In Severe Traumatic Brain Injury In Latin America" (Pridgeon, et al) in June, 2012, and a paper describing the overall process of the study "Intracranial pressure monitoring in severe traumatic brain injury in Latin America: Process and methods for a multi-center randomized controlled trial" (Carney, et al) appeared in the *J Neurotrauma* in July 20, 2012.

The following investigators and institutions participated in this study:

The NeuroTrauma Research Group Latin America Investigators: G. Petroni, S. Lujan, C. Rondina, F. Rondina Dr. Clemente Alvarez, W. Videtta. **United States Investigators:** R. Chesnut (PI), N. Temkin, S. Dikmen, J. Machamer, J. Barber, J. Pridgeon, K. Chaddock, J. Celix (UW Seattle, Washington). N. Carney, A. Huddleston (OHSU Portland, Oregon). M. Cherner, T. Hendrix (UCSD).

Intracranial Pressure Monitoring In Severe Traumatic Brain Injury In Latin America

The Benchmark Evidence from South American Trials:
Treatment of Intracranial Pressure (BEST TRIP trial)

The UW Department of Neurological Surgery has recently concluded the first NIH sponsored clinical trial of Traumatic Brain Injury (TBI) to be conducted in Latin America. The results have just been published in *The New England Journal of Medicine*, and promise to have dramatic impact globally on TBI care. TBI is a major cause of mortality and disability in all countries, but Latin America has the highest incidence of intracranial injury worldwide due to high rates of road traffic crashes and violence. A recent WHO study projected trauma will be a leading cause of death by the year 2020. At present, TBI accounts for about 85% of all trauma-related fatalities.

Since 2007, we have been conducting a Randomized Controlled Trial evaluating management of severe TBI using intracranial pressure (ICP) monitoring in the ICU at six sites in two South American countries. Neurological Surgery Professor Randall Chesnut, MD was Principal Investigator for the NIH NINDS/Fogarty sponsored grant "Traumatic Brain Injury in Latin America: Lifespan Analysis". Other UW participants included Nancy Temkin, Kelley Chaddock, Jason Barber, Jim Pridgeon and Juanita Celix (Neurological Surgery) and Sureyya Dikmen and Joanie Machamer (Rehabiliation Medicine). The study ran in collaboration with Fundacion ALAS (Apoyo al Lesionado Neurologico Agudo – "Support to the Acute Neurological Patient"), and the Latin American Brain Injury Consortium (LABIC). The entire study group, including our Latin American Colleagues, involved 46 neuro-intensivists, nurses, outcomes examiners and support personnel.

Study sites include four centers in Bolivia and two in Ecuador. The Bolivian sites are located in Santa Cruz de la Sierra (Hospital San Juan de Dios and Hospital Japones), Cochabamba, (Hospital Viedma) and Tarija (Hospital San Juan de Dios). The two Ecuadorian centers are located in Quito (Hospital Eugenio Espejo), and Guayaquil, Hospital Luis Vernaza). Study centers in Bolivia and Ecuador were selected because they did not use ICP monitors but routinely treated ICP based on clinical examination and CT imaging using internal protocols.

Despite no Class I and minimal Class II evidence to support its use, ICP monitoring is widely considered the standard of care for severe TBI in the US, Western Europe, Australia, and Japan. This trial provides the first rigorous Class I evidence testing the value of information provided by these monitors in directing acute care treatment decisions for patients with severe TBI. The study examined the impact on outcome of two different treatment protocols. One protocol required care to be directed in response to monitored ICP values and was based on *the U.S. Guidelines for the Management of Severe Traumatic Brain Injury in Adults.* In the other protocol, treatment of intracranial pressure was guided by the results of serial CT imaging, clinical

Continued on next page 'ICP: TBI in Latin America)

Continued from previous page

examination (neurologic exam and pupillary status), and was based on an *ad hoc* single protocol derived from those previously being used at the study centers. Patients were randomly assigned to one of these two groups and outcomes examined over six months.

The most important results were:

There was no difference in outcome between the two groups in terms of mortality or degree of recovery. The group treated according to monitored ICP received significantly less treatment directed at intracranial hypertension.

These results tell us that the two protocols produce similar outcomes under similar conditions. Furthermore, under the study conditions, a protocol directed by monitored ICP was associated with fewer treatments and a shorter treatment-duration aimed at intracranial hypertension, while producing outcomes similar to the non-monitor-based protocol.

This is important because it identifies an equally effective approach to TBI care (a treatment protocol) that does not rely on ICP monitoring equipment. ICP monitoring equipment enjoys advantages in terms of shortening treatment intensity and length of ICU stay, but may not be available in some countries. Although ICP monitoring is likely to continue to play an important part in TBI management, further research is required to fine tune its precise role.

The impact of this research on global health is substantial. The NIH has just extended the study team's research for an additional 5 years by funding development and testing of a consensus protocol based on the ad hoc non-monitored protocol used in the RCT just completed.

Katie Moore, ARNP

Katie Moore Appointed Lead

In a structural reorganization of our Neurological Surgery inpatient team, long-time ARNP Katie Moore has been appointed the Lead of the mid-level practitioners. Katie brings both managerial and clinical experience to this progressively more vital post, and is already making a difference in daily operations of the service.

Mild Brain Cooling after injury Prevents Epileptic Seizures

In an upcoming issue of Annals of Neurology, UW researchers report that mild cooling of injured brain prevents the later development of epileptic seizures.

Epilepsy can either be genetic or acquired. Traumatic head injury is the leading cause of acquired epilepsy in young adults, and is often difficult to manage with antiepileptic drugs. The mechanisms leading to the onset of epileptic seizures after brain injury are not well understood, and there is currently no good treatment or prophylaxis.

Raimondo D'Ambrosio, PhD

A University of Washington led research team used a rat model in which animals develop chronic spontaneous recurrent seizures after a contusive head injury similar to the mechanism that produces posttraumatic epilepsy in humans. They randomized animals to either mock cooling or cooling of the contused brain by no more than 2 Celsius degrees. This degree of cooling, the authors say, is known to be safe and to decrease mortality of patients with head injury.

They followed animals for 4 months after injury, evaluating epilepsy by implanted EEG electrodes. They cooled contused brain continuously with special headsets engineered to passively dissipate heat. They didn't use peltier cells or other power sources for refrigeration.

The investigators report that cooling by just 2 celsius degrees for 5 weeks beginning 3 days after injury virtually abolished the later development of electrographic seizure activity. This effect persisted through the end of the study.

The treatment induced no additional pathology or inflammation, and restored neuronal activity depressed by the injury.

These findings demonstrate for the first time that prevention of epileptic seizures after traumatic brain injury is possible, and that epilepsy prophylaxis in patients might be achievable. A clinical trial is required to verify the findings in head injured patients.

Dr. Raimondo D'Ambrosio, cellular electrophysiologist, led the research, which also involved Drs. John W. Miller and Steven M. Rothman, epileptologists, Dr. Nancy R. Temkin, biostatistician, and Drs. Jeffrey G. Ojemann and Matthew D. Smyth, neurosurgeons.

The results of the study were first published online in the 7 DEC 2012 edition of *Annals of Neurology*.

http://onlinelibrary.wiley.com/doi/10.1002/ana.23764/pdf

Information on UW Medicine Department of Neurological Surgery Grand Rounds :
http://neurosurgery.washington.edu/

Visiting Scholars

The Department of Neurological Surgery welcomes many international visiting scholars and visiting professors to our department each year. This number has almost doubled since 2009. Out of approximately 30 requests in 2012, we hosted 18 visitors from countries including Mexico, China, India, Turkey, Honduras, Italy, Croatia, the Netherlands, and Brazil. Since Dr. Fangyi Zhang was charged with creating partnerships and collaboration with neurosurgeons in China that number has also increased.

Dr. Harley Brito Da Silva

The length of stay for these visitors ranges from a few weeks to an entire year, but averages about 3 months. They observe surgical procedures, participate in our weekly Grand Rounds, practice techniques in our ISIS cadaver lab, and collaborate with faculty on research projects.

Our international visitors usually identify a potential faculty host within the department and apply. Each visitor arrives with financial support for living expenses though an institution in their home country. Our administrative staff assists them with the paperwork necessary for their visit, including obtaining visas. They make their own travel and housing arrangements. The collaboration and experiences our international visitors bring with them expands perspectives in the entire department.

Dr. Harley Brito Da Silva is currently visiting our program from Brazil where he is a faculty member at the Federal University of Ceara. He is living in Seattle with his wife, Ceres, son, Lucas (11) and daughter, Sophia (2). Dr. Da Silva trained in Hanover Germany and is an attending physician at 2 hospitals in Brazil.

Q: Why did you choose to visit the UW Department of Neurological Surgery?

A: When I would ask fellow neurosurgeons about top programs in the US they consistently told me about your departments' high ranking. I also was attracted by members of the faculty. Dr. Ellenbogen, Dr. Sekhar, Dr. Ojemann, and Dr. Chesnut—all leaders in their respective specialties.

I visited Seattle to attend the International MASSIN meeting that was hosted by the UW Department of Neurological Surgery in July 2011 and found Seattle to be a very pleasant location.

Q: What are you working on during your stay?

A: I am primarily working with Dr. Sekhar on surgical outcomes for AVMs.

STAFF IN THE KNOW…

GRANT RELATED QUESTIONS?	JIM PRIDGEON	pridgeon@uw.edu
	TRAM TRAN	tvtran@uw.edu
RESIDENCY PROGRAM INFORMATION?	AUBRIANA ARD	aard@uw.edu