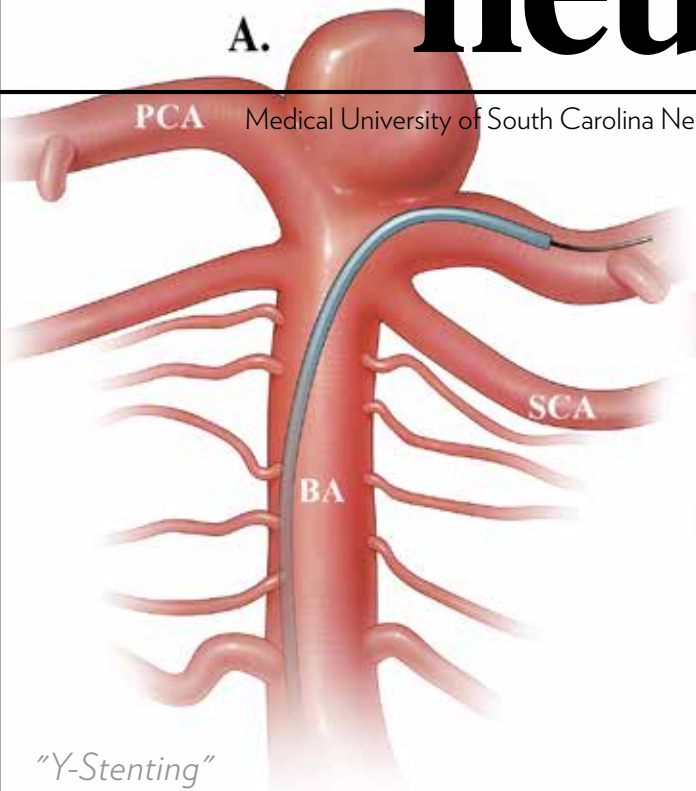


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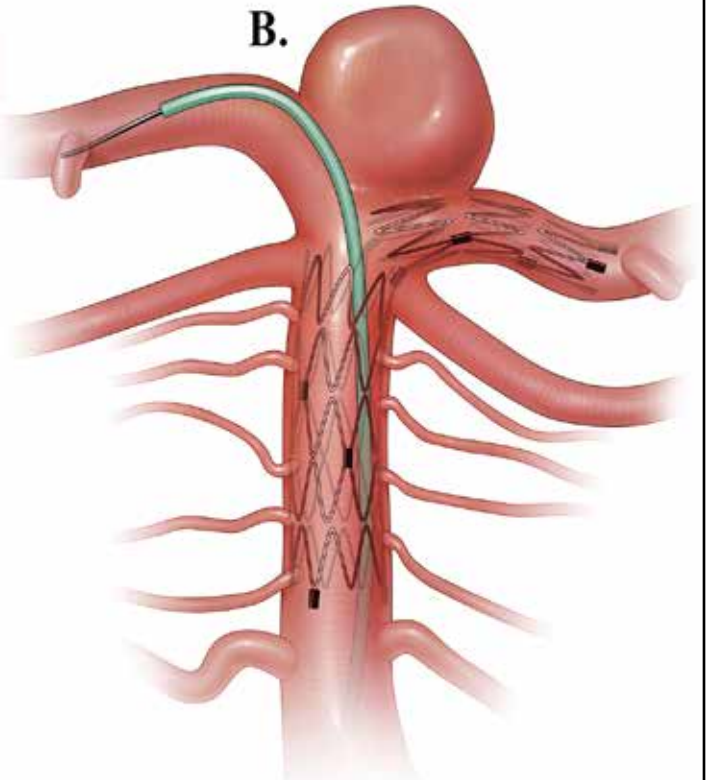
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Medical University of South Carolina Neurosciences

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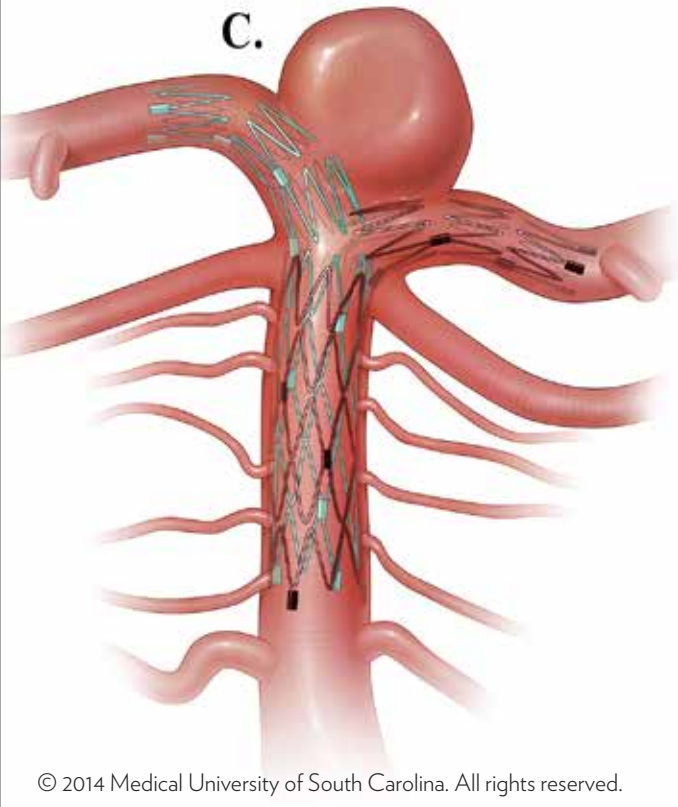


Featured Articles

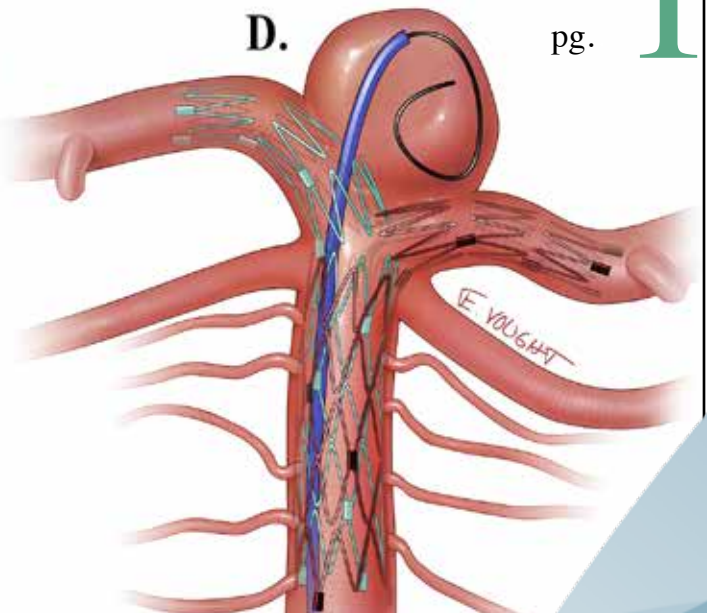
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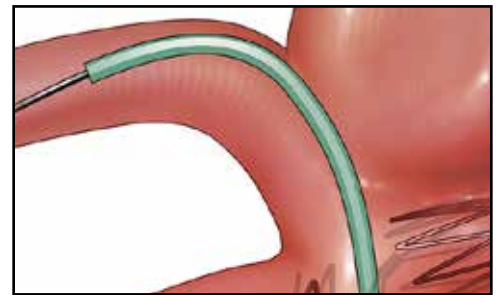
Emma Vought, MS

This newsletter is made possible from the generous contributions of MUSC Neurosciences faculty and staff. The success of this publication is dependent upon this support. Thank you for your interest, time and information. For inquiries, suggestions or submission information please email vought@musc.edu.

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"Y-Stenting"
Cover Image by Emma Vought

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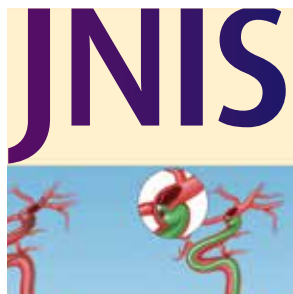


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Jim Simpson, who suffered a stroke in 2007, participates in a study using tDCS, a new technology that helps with brain recovery for stroke patients. photo by Dawn Brazell



Sheri Davis and Dr. David Bachman review a brain image of a potential participant. photo by Mikie Hayes

Investigators involved in ground-breaking stroke research

■ MIKIE HAYES // MUSC PUBLIC RELATIONS

His head wrapped in blue bandages attached to wires leading to a mysterious black box, Jim Simpson stares at a computer screen, trying to distinguish whether the word he hears actually matches the picture he's looking at. His task is to press the green button if it does and red button if it doesn't.

As random images appear and just as quickly disappear, properly identifying the object is not nearly as easy as it looks — especially considering the fact Simpson continues to battle back from a debilitating stroke. More than seven years later, he still suffers the effects of aphasia — a speech and language disorder that resulted from the assault to his brain's language system.

Stroke, one of the most disabling conditions in the U.S., can result in a multitude of long-term or permanent disabilities like aphasia. Simpson had his stroke on February 2, 2007, and since that time has experienced a number of residual problems that have severely impacted his quality of life, aphasia being one of the most frustrating.

The left side of Simpson's brain was affected by the stroke, which is the reason he was left with significant problems with speech and language. His wife, Donna, explained that he knows what things are but has difficulty expressing himself. He learned to write with his left hand and is able to write basic things such as his name. He enjoys reading, especially his Bible, Donna shared, and he is able to pick out words on a menu.

Language problems, in particular, can be very upsetting to patients and their families. Aphasia, according to the National Center on Biotechnology Information, tops the list of symptoms people fear most about stroke, which is not surprising as patients often may have a great deal of difficulty with critically necessary day-to-day functions such as speaking, recalling words, and reading and writing. In more severe cases, aphasic patients may have difficulty comprehending what people are saying to them.

As researchers learn more about brain recovery, they strive to find ways of improving the brain's response to injuries such as stroke. David Bachman, M.D., a professor in the Department of Neurosciences, said, "At this time, we are more or less dependent on the natural recovery processes of the brain for improvement to occur. Speech therapy is important in recovery, but often there is still a substantial language disability."

Patients often, though not always, improve after a stroke, but there are no medications to speed up or enhance that recovery. "We have relatively good insight into how to prevent stroke," Bachman said. "We also have new drugs and treatments for acute stroke, especially the first five hours after symptom onset. However, aside from speech therapy, which is very important, we have no therapies to change the brain to improve its ability to recover." Hopefully that is about to change.

Through an ongoing research study, funded by the National Institutes of Health Institute on Aging, Bachman and two other MUSC researchers, Leonardo Bonilha, M.D., Ph.D., an assistant professor in the Department of Neurosciences, and Mark George, Ph.D., Distinguished University Professor in the Department of Psychiatry and Behavioral Sciences, are investigating a new form of brain stimulation, called transcranial direct current stimulation, which could potentially improve language function in stroke patients when administered during speech therapy.

Bachman holds out great hope for this study. He explained, "We are very excited. This new technology uses a very low voltage electrical current applied directly to the scalp with electrodes for a period of about 15 to 20 minutes. Studies suggest that brain cells directly under the electrodes may be activated. Increasing the activation of these neurons potentially could allow more opportunity for the brain to 'rewire' itself, thus enhancing stroke recovery."

To read the rest of this story visit the Catalyst at: <http://academicdepartments.musc.edu/catalyst/archives/2014/11-14Stroke.html>

Editor's note: The article ran June 15 in The Post and Courier and is reprinted with permission.

<http://academicdepartments.musc.edu/catalyst/archives/2014/11-14Stroke.html>

Investigators involved in ground-breaking stroke research

■ STAFF REPORTS // MUSC NEWS CENTER

A study involving MUSC sickle cell anemia researchers Robert Adams, M.D., and Sherron M. Jackson, M.D., has been stopped early due to conclusive data that showed hydroxyurea therapy offers safe and effective disease management of sickle cell anemia (SCA) and reduces the risk of stroke. The early termination of this key clinical trial studying the drug's efficacy was issued by the National Heart Lung and Blood Institute (NHLBI) about one year ahead of when it was originally scheduled to end.



Twelve-year-old John Lewis smiles at his mother while Dr. Sherron Jackson examines him in the Sickle Cell Clinic at MUSC. Photo by Sarah Pack.

Going by the title TWiTCH (TCD With Transfusions Changing to Hydroxyurea), the Phase III randomized clinical trial at 25 medical centers in the U.S. and Canada compared standard therapy (monthly erythrocyte transfusions) with the alternative (daily hydroxyurea) for children with elevated transcranial Doppler (TCD) velocities and high risk of stroke.

"This signals a paradigm shift in treating children with sickle cell anemia who are at risk for stroke," said Adams, South Carolina Centers of Economic Excellence for Stroke endowed chair and director, and co-principal investigator for the study's neurological core.

"We are moving from stroke prevention to vascular protection,

with screening early and often for the risk factors of stroke in these patients. We've been working on this for decades and it's gratifying to see this work come to fruition. We have an incredible opportunity to offer a less complicated and invasive therapy that can reduce the likelihood of stroke in these patients and improve the health of their blood vessels, too."

An important reason for testing hydroxyurea is that the current standard therapy of monthly blood transfusions to reduce stroke risk can lead to problems such as antibody formation and iron overload, which are increasingly recognized as a source of morbidity in young patients with SCA.

According to Russell E. Ware, M.D., Ph.D, principal investigator of the larger study and director of Hematology at Cincinnati Children's Hospital Medical Center, which served as the study's medical coordinating center, these early results indicate that TWiTCH is a success. "Hydroxyurea works as well as blood transfusions to lower TCD velocities, which lowers the risk of the child having a stroke," he said.

"A group of outside experts has been reviewing the TWiTCH data every few months to ensure the safety of children in the clinical trial and to monitor the data. This group met recently and after careful consideration of the interim data results, recommended that the study be stopped since hydroxyurea worked as well as transfusions to lower TCD velocities."

The study enrolled its first patient in September 2011 and included children between ages 4 and 16 years with sickle cell anemia and abnormally elevated TCD velocities, which increases their risk of developing a stroke. The current standard therapy for children with elevated TCD velocities is monthly blood transfusions. A total of 121 children were randomized: half received the standard therapy of transfusions while the other half received the alternate treatment with daily hydroxyurea, which has not yet been approved for children with sickle cell anemia.

During the past decade, the laboratory and clinical efficacy of hydroxyurea has been demonstrated in children and adults with SCA. Originally developed as a drug to treat cancer and infections, hydroxyurea boosts fetal hemoglobin production in SCA, which prevents the red blood cells from acquiring the sickled shape that fuels the many complications. Hydroxyurea has been previously shown to have clinical efficacy for a variety of sickle-related complications, but TWiTCH is the first Phase III trial that demonstrates its benefits for children with cerebrovascular disease and increased stroke risk.

To view this story visit theCatalyst at: <http://academicdepartments.musc.edu/pr/newscenter/2014/sickle-cell.html#.VJh2yUAFB2u>

High School Concussion Policy and Management

■ AVERY L. BUCHHOLZ, M.D., MPH // MUSC NEUROSURGERY



Sports related concussions have become an increasingly important topic. Research has shown a steady increase in the rate of concussions in high school athletes. This along with a better understanding of the injury has added increased importance to the proper management of these athletes. South Carolina has recently passed legislation regarding education and management of concussions. The exact bill passed in South Carolina can be seen using the following link:

http://www.scstatehouse.gov/sess120_2013-2014/bills/3061.htm

In summary, the South Carolina concussion policy states that

1. Local school districts will develop guidelines based on recommendations from the South Carolina Department of Health and Environmental Control.
2. Each year coaches, student athletes, and their parents/guardians will receive information on concussion education and the school must have documented receipt and understanding of this information prior to practice of competition.
3. Any athlete suspected of sustaining a concussion must be removed from play immediately and evaluated prior to returning to play. A player may return to play that same day if the on-site and qualified athletic trainer, physician, physician assistant, or nurse practitioner determines there are no signs of concussion.
4. Players thought to have a concussion will need written medical clearance by a physician prior to returning to play.

As of January 2014, all 50 states have passed concussion laws focusing on various topics including coach training, parent/athlete education, return-to-play (RTP) restrictions, and medical clearance. It is important to recognize that as both players and parents these are now required tasks and having a solid understanding of concussions and proper management will help keep play safe.

Loss of consciousness is not required for the diagnosis of a concussion. In fact most concussions happen without loss of consciousness. Concussions can result from a hit to the head or body resulting in a force causing a disruption of the brain. The most common symptoms of concussion are headaches, nausea, vomiting, dizziness, loss of bal-

ance, and blurry vision. Additional symptoms can include emotional changes, irritability, depression, sleep disturbance, poor concentration, sensitivity to light and memory impairment. These later symptoms are often not recognized immediately which is why it is important for players and parents to be properly educated and be able to recognize these symptoms when they occur. If these symptoms are identified it is important to suspect a concussion and seek medical advice. Do not allow continued participation if you suspect a concussion.

Once a concussion is identified it will need to be managed appropriately. Coaches, trainers and team personal should all have undergone training about how to safely get an athlete back into competition after having a concussion. In addition to having medical clearance from a physician prior to resuming athletics an athlete will need to have successfully completed Return to Play Guidelines (RTP). RTP is a graduated return to play strategy consisting of five steps with increased activity in each step. Each step is 24-hrs long and as long as the athlete remains asymptomatic after each step they may advance to the next. If the athlete becomes symptomatic at any point they must stop, rest, and start back at the first step when completely asymptomatic which would be the following day at the earliest. It is also important for athletes to be off all medications which may hide symptoms. The details of allowed activities for each step can be viewed using this link:

http://www.muschealth.com/neurosciences/about/sports_neurology/resources/play.htm

Concussions happen and are a part of being active. As players and parents it is important to recognize them when they occur and avoid any activity until the athlete is completely asymptomatic. This can mean both physical and mental rest. Once asymptomatic coaches and trainers will be following return to play guidelines and it is important for you to understand these guidelines as well so you can participate safely.

Doctors performed a CT perfusion study to determine the current state of the brain: how much of the brain had already been affected by the stroke and how much could be saved. While a small portion of the brain was already irreparably damaged, a much larger portion of his brain would die if they didn't move quickly.

To read the rest of this story visit the MUSC Health Blog at: <http://www.muschealth.org/health-blog/date/2014/8/9>

Departmental News

■ **Dr. Christine Holmstedt**, Director of our Clinical Stroke Program, was recently featured on a Channel 5 news story with one of her recent patients. Great work Dr. Holmstedt! Please see the following link for the story <http://www.live5news.com/story/25557898/knowing-the-risk-factors-of-a-stroke-could-save-your-life?autostart=true>

■ On October 1, 2014, **Dr. Jerry Kurent** became Interim Director of our Neuromuscular Disorders Division. Dr. Kurent has kindly agreed to provide leadership and management to this Division until a permanent Director is identified.

■ **Ms. Mary Ellen Sutton**, passed away on August 31, 2014 at the age of 92. Over several decades, Ms. Sutton gave substantial monies to support our Alzheimer's Research program, and only in July 2014 became a Centurion member of the MUSC Society of 1824 recognizing her lifetime of giving to support the mission of MUSC. We were extremely privileged to have known Ms. Sutton and will remain eternally grateful for her enduring moral/financial support of our Department. She will be greatly missed.

■ In follow-up to the success of the MUSC Stroke Center in leading the NIH funded Stenting and Aggressive Medical Management for Preventing Recurrent stroke in Intracranial Stenosis (SAMMPRIS) trial, the MUSC Stroke Center will be coordinating the medical management in another NIH funded multicenter trial called the **Carotid Revascularization and Medical Management for Asymptomatic Carotid Stenosis (CREST 2)** trial. CREST 2 will be performed at 120 sites in the USA and Canada and will compare carotid endarterectomy plus intensive medical management versus intensive medical management alone and carotid stenting plus intensive medical management versus intensive medical management alone in two parallel trials of 2480 patients with asymptomatic carotid stenosis. The Mayo Clinic in Jacksonville Florida is the overall coordinating center for this \$48 million trial, of which \$10 million has been awarded to MUSC to coordinate the medical management at all 120 study sites and to assist the Statistical and Data Management Center at the University of Alabama in Birmingham. MUSC Stroke Center faculty Drs. Tanya Turan and Dr. Marc Chimowitz will be leading the medical management center for the trial and Dr. Jenifer Voeks will be one of the lead statisticians.

■ Channel 2 Your Health News in a segment titled "**What you may not know about ALS**". See Dr. Katherine Ruzhansky's interview here: <http://www.counon2.com/story/26366916/2-your-health-what-you-may-not-know-about-als>

■ **Mental decline a risk factor for stroke.** <http://www.13abc.com/story/26363936/mental-decline-a-risk-factor-for-stroke>

■ The Post and Courier's article this week: "**Dementia hasn't sacked NFL patriarch Clay Matthews' humor**" See the full story here: <http://www.postandcourier.com/article/20140929/PC1211/140929323>

■ ABC News 4 segment on stroke recovery, "**Can electrical brain stimulation combined with speech therapy help recovery?**". See Dr. Bachman's full interview here: <http://www.abcnews4.com/clip/10539136/musc>

■ Kidney disease doesn't bar **thrombolytic therapy** in stroke. <http://medicalxpress.com/news/2014-09-kidney-disease-doesnt-bar-thrombolytic.html>

■ The MUSC Stroke Program Heart Walk Team "The Circle of Willis" lead by **Diana Barrett** and **Fay Davis** raised over \$2,200 for the American Heart and Stroke Association by walking in the event on Saturday, September 27th. Thanks to those who attended and supported the cause!

Awards & Presentations

- The MUSC Center for Global Health awarded one of it's six 2014-2015 pilot grants to **Andrea Summer, M.D.**, **James McElligott, M.D.**, and **Kenton R. Holden, M.D.** for their grant application on "Establishment of a Pilot Telemedicine Network in Honduras".

- **Maria Podbielska** - Adjunct Professor in Microbiology, Hirsfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences: Awarded a ten month fellowship to conduct research on whether alterations in calpain (intracellular neutral protease) activity during relapse and remission in multiple sclerosis (MS) patients are involved in T helper (Th1/ Th2) cells dysregulation at the Medical University of South Carolina with Professor Naren L. Banik.

- Congratulations to neurosurgery resident **Dr. Rick Liogier-Weyback**, winner of the Faculty Excellence Awards (FEA) for Block 4. Rick was nominated by the clinical classes of the College of Medicine for the FEA. This award goes to attendings, residents, and interns who go the extra mile with thier teaching in the hospital.

- **Dr. Chalela** was asked to serve in the Fundamentals of Disaster Support Section of the Society of Critical Care Medicine.

- Extramural Appointment (August 2014) - **Bruce Ovbiagele**: Vice Chair, American Heart Association, Cardiovascular Disease in Women & Special Populations Committee.

• **Dr. Gonzalo Revuelta** is now a member of the American Academy of Neurology Minority Scholarship Subcommittee. This committee oversees the Minority Scholars Program (which provides medical students with the opportunity to augment their education, training, and networking by attending educational and scientific programming at the AAN Annual Meeting) and the Visiting Professor Program (Committee selects a visiting professor to give Neurology Grand Rounds and other lectures on neurological topics to medical students, lead a discussion with medical students regarding careers in neurology and the neurosciences, and observe neurology patient rounds and clinic).

• **Dr. Wayne Feng:** Recipient of the first-ever International Stroke Conference Stroke Rehabilitation Award for his abstract entitled “Dose Response Relationship in Transcranial Direct Current Stimulation Stroke Motor Recovery Studies”. Dr. Feng will give an oral presentation of this work and receive this prestigious award at the International Stroke Conference being held in Nashville in February, 2015. We are extremely proud of you!

• **Dr. Leonardo Bonilha** received an R01 from the National Institute on Deafness and other Communication Disorders.

• **Carolyn Kay, LPN:** Recipient of MUSC Employee of the Month for her hard work and dedication. Carolyn runs our Neurology clinic on RT9, and handles this busy stroke and neuromuscular clinic with tremendous grace (and humor). Thank you, Carolyn, for all that you do for our providers and patients!

• **Dr. Gonzalo Revuelta** received a K12 Clinical Scientist Award.

• **Dr. Ken Holden:** Recipient of The Arnold P. Gold Humanism in Medicine Award at the 2014 Child Neurology Society Meeting held in Columbus, Ohio. This award honors a child neurologist or developmental pediatrician who has shown extraordinary and ongoing humanism during their medical career. Congratulations!

• Extramural Presentation - **Dr. Chalela** and **Melissa Hill, NP** presented an abstract at the European Society of Intensive Care Medicine in Barcelona, Spain (Sept 2014). Abstract title- Impact of obesity in the Neurosciences Intensive Care Unit.

• Extramural Presentation - **Dr. Chalela** and **Dr. Neyens** presented the following abstracts at the 2014 meeting of the Neurocritical Care Society in Seattle.

- Critical Care Course of Patients with Acute Basilar Artery Syndrome
- Weight-based dose-response curve of HTS versus mannitol in the management of elevated ICP

• Extramural Presentations - **Drs. Rebecca Lehman RK, Leo Bonilha, Maria Matheus and Kenton Holden:** Redefining the clinical phenotype of psychomotor disabilities with X-linked MCT8 deficiency: Implications for improved therapies. Poster presented at the 13th International Child Neurology Congress, Iguazu Falls, Brazil; May 2014.

• Extramural Presentation - **Dr. Bruce Ovbiagele:** “Renocerebrovascular Disease: A New Frontier in the Prevention and Treatment of Stroke?” Plenary Lecture at University of Ibadan, Nigeria on August 12, 2014.

• Extramural Presentations - **Dr. Sami Al Kasab, PG2** (Neurology Resident), abstract was accepted for an oral presentation at the International Stroke Conference taking place in Nashville in February, 2015. Dr. Kasab’s study is entitled “Impact of The New AHA/ASA Definition of Stroke on the Outcome of the SAMMPRIS Investigators”. Please join us in offering congratulations to Dr. Kasab for a job well done. It is never easy for residents to concurrently engage in research (especially during a busy residency) and it is relatively rare that a neurology resident (in just their second year) gets to give a platform presentation at a major academic meeting (ISC is the premier stroke research meeting in the world).

• Extramural Presentations - **Jamie Folsom, NP**, also had her abstract entitled “The Impact of Contrast Based CTA/CTP Brain Attack Protocol on Kidney Function” accepted for poster presentation at ISC 2015. Again, a phenomenal achievement given how busy stroke Advanced Practice Providers are and how difficult it is to get abstracts accepted to ISC.

• Extramural Presentations - **Dr. Jessica Hannah, PG4** (Neurology resident), and **Dr. Alison Smock, PG5** (Vascular Neurology Fellow), each had abstracts accepted for poster presentation at ISC 2015 and received Junior Investigator Travel Awards as well. Congrats!

• The Stroke Program earned the 2014 Gold Plus Award for the 5th consecutive year and also Target Stroke for a Door to Needle Time (DNT) of 28 minutes. Well done!

MUSC’s ahead of the pack when it comes to DNT times when compared to benchmarking organizations:

- MUSC: 28 minutes
- ALL Get With the Guidelines (GWTG) Hospitals: 56 min.
- ALL SC GWTG Hospitals- 55 minutes
- Certified PSC Hospitals: 54 minutes

• **Dr. Robinson** transferred a Research Scientist Development Award from Regents of the University of Michigan.

Featured Publications

Matheus MG, Bonilha L, Lehman RK and Holden KR: **Microstructural abnormalities of the supratentorial white matter tracts on brain MRI in X-linked MCT8 deficiency: Implications for earlier diagnosis and treatments.** Oral abstract presentation at the 13th International Child Neurology Congress, Iguazu Falls, Brazil; May 2014.

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Milano NJ, Heilman KM. **Cerebellar allocentric and action-intentional spatial neglect.** Cogn Behav Neurol. 2014 Sep;27(3):166-72.

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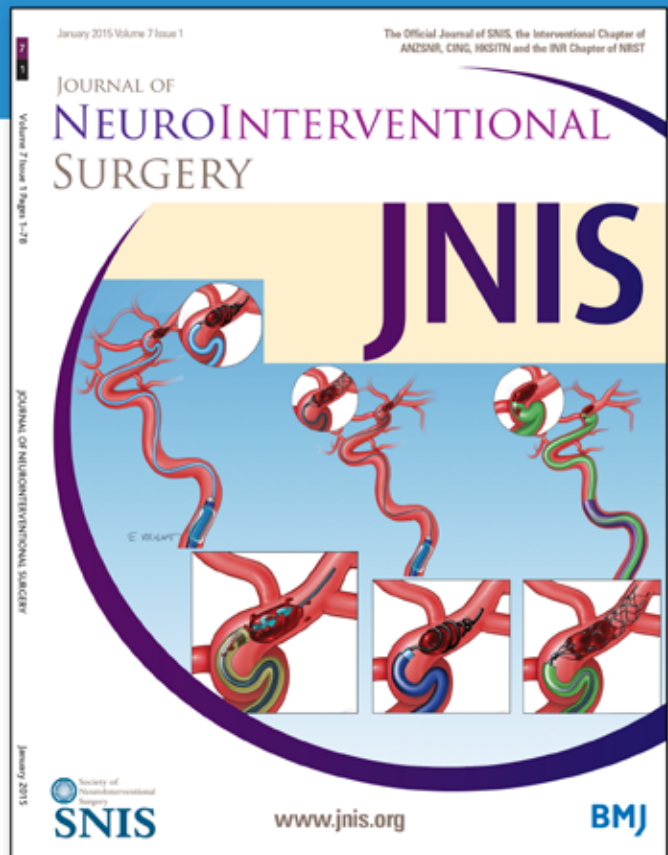
PUBLICATION AND COVER

The Journal of NeuroInterventional Surgery January 2015, Volume 7, Issue 1

Evolution of thrombectomy approaches and devices for acute stroke: a technical review

AUTHORS:

Alejandro M Spiotta, M Imran Chaudry,
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Ryan T Kellogg, Aquilla S Turk



Ovbiagele B, Smith EE, Schwamm LH, Grau-Sepulveda MV, Saver JL, Bhatt DL, Hernandez AF, Peterson ED, Fonarow GC. **Chronic Kidney Disease and Bleeding Complications After Intravenous Thrombolytic Therapy for Acute Ischemic Stroke.** *Circ Cardiovasc Qual Outcomes.* 2014 Sep 23. pii: CIRCOUTCOMES.114.001144.

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Alumni Profile



Daniel D. Truong, M.D.

NEUROLOGY RESIDENCY, 1982-1985

Dr. Daniel Truong, a native of Vietnam, studied engineering in Germany and earned his doctorate from Albert-Ludwigs University, followed by residency training in psychiatry, also in Germany. He joined the MUSC neurology residency in 1982, completing the program in 1985. Several members of our faculty recall that even as a resident he introduced them to the diagnosis and treatment of neuroleptic malignant syndrome, a clinical problem which was little known in the United States when he arrived.

Dr. Truong developed an interest in movement disorders, which took him to Columbia University for a three year fellowship under Dr. Stanley Fahn. He capped off his extensive training with an additional fellowship in England with the late Dr. David Marsden at the National Hospital for Neurological Disease, Queen's Square, London.

He joined the faculty at the University of California-Irvine, where he founded the Parkinson's and Movement Disorders Program. In 1997 he went on to found the Parkinson's and Movement Disorders Institute in Long Beach, CA, where he established and continues to direct highly successful patient care and research programs.

Dr. Truong's areas of special expertise include the early investigation and clinical use of botulinum toxin, myoclonus research, and dystonia. He pioneered in the use of botulinum toxin for spasmodic dysphonia. He developed an animal model for myoclonus which is now referred to as the Truong model, and he and Dr. Stanley Fahn developed a clinical scale for myoclonus.

An international outlook, as evidenced by his training in Germany, England, and the United States, has been an integral part of Dr. Truong's work, collaborations, and extensive publications, which include seven books and over 130 scientific publications.

He has held multiple positions of leadership with the World Federation of Neurology and the International Committee of the American Academy of Neurology. He will serve as the program chair for the XXII World Congress on Parkinson's Disease and Related Disorders in 2017.

Dr. Truong looks back on his MUSC training with fondness. He indicated his gratitude for the mentorship and knowledge he was accorded by MUSC faculty in the Department of Neurology.

Events

4th Annual Spring Neurosciences Symposium & Annual Neurology Update - [MARCH 20-21, 2015](#)

cme

Neurosurgery Research Day and Vera Lecture - [APRIL 23, 2015](#)

Neurology Resident Research Reunion Day and Dr. Robert J. Adams Visiting Professorship Lecture - [MAY 21, 2015](#)

For more Alumni News and Events please visit:

www.musc.edu/neurosciences



Employee Spotlight: Kelly Krajeck

Meet employee Kelly Krajeck. She has been with MUSC for three years. She currently works as administrative specialist for Dr. Abhay Varma.

WORK

How are you changing what's possible?

Taking care of patients needs during a stressful time, and make sure things run smoothly for the doctors I work for so that they can deliver the best care possible

What do you enjoy most about your job at MUSC?

Helping patients, and all of the wonderful people I work with

TELL US MORE!

Where are you originally from, and can you tell us a fun fact about the city?

I am from Canton, Ohio. Like most people in Charleston I got smart and left the state to come south. But it is home to the Foot Ball Hall of Fame which is our only, and a stretch at that, claim to fame. Yet I have never set foot inside the building.

What do you like to do in your free time?

Running, volleyball in the summer. Lift stuff, shoot stuff. Hang out with friends, go to yoga, walk my dog. Read. I really like to live on the edge.

What is your favorite type of food?

I've never met a food I didn't like. Except maybe onions, never been much of a fan.

What one food do you wish had zero calories?

That is easy, cookies, or any sort of baked good!

What tv show/movie are you ashamed to admit you love?

The Wendy Williams Show and the Heart of Dixie, shameful, I know.

Welcome New Employees

Dr. Joseph Krainin
 Dr. Sujai "Ron" Nath
 Ashley Jolliff
 Becky Hamrick
 Todd LeMatty
 Mark Apple
 Janet Boggs
 John DelGaizo
 Dr. Ana Roldan
 Dr. Jenna Renfroe
 Susan Nease, NP
 Reshil Duker

Chun Li
 Nancy Feracco, RN
 Rong Chen, MD, MS
 Elizabeth Boessneck, NP
 Chad Swiler, MHA
 Maria Podbielska, PhD
 Jared Nix, PA
 Emmy Lou Dickinson, PA
 Ashton Schwartz, CMA
 Abbie Ensor, RN
 Meena Munshi, MD
 Ellie Rogers, PA

EMPLOYEE UPDATE & SOCIAL NEWS



STARTING FROM **TOP LEFT** (GOING CLOCKWISE)

HOCKEY HEROES FOR EPILEPSY JERSEY REVEAL WITH **DR. PRITCHARD · KAREN AND ERICK ST. MARIE** AT THE HOCKEY HEROES FOR EPILEPSY JERSEY REVEAL · NEW FACULTY RECEPTION · **WOMEN IN NEUROLOGY** PUMPKIN CARVING EVENT · NEW FACULTY RECEPTION · **WOMEN IN NEUROLOGY GROUP** PUMPKIN CARVING EVENT

Clinical Trials

Clinical trials, also called research studies, are managed by government agencies, educational institutions, private not-for-profit organizations, or commercial businesses, to develop, produce, and evaluate the effectiveness of new treatments and therapies for diseases. New trials are added on a routine basis, and many clinical trials accept only a limited number of participants. The following is a list of TRU clinical trials that are actively enrolling patients.

If you are interested in viewing additional clinical trials, not included in the list below, please visit the site links below:

South Carolina Clinical Trials - <http://scresearch.org/>

MUSC Hollings Cancer Center Clinical Trials -

<http://prc.hcc.musc.edu/portal/cto/ClinicalTrials/tabid/488/Default.aspx>

NEURO-ONCOLOGY:
<p>A Phase II Clinical Trial Evaluating DCVax-Brain, Autologous Dendritic Cells (DC) Pulsed with Tumor Lysate Antigen for the Treatment for Glioblastoma Investigator: Scott Lindhorst, M.D. Coordinator: Michele DeCandio, RN, OCN, CCRP Contact: 843-792-9016, decandio@musc.edu</p>
<p>An International, Randomized, Double-Blind, Controlled Study of Rindopepimut/GM-CSF with Adjuvant TMZ in Patients with Newly Diagnosed, Surgically Resected EGFRvIII-positive Glioblastoma Investigator: Bruce Frankel, M.D. Coordinator: Michele DeCandio, RN, OCN, CCRP Contact: 843-792-9016, decandio@musc.edu</p>
<p>A Phase I-II Trial of Everolimus and Sorafenib in Patients with Recurrent High-Grade Gliomas Investigator: Scott Lindhorst, M.D. Coordinator: Michele DeCandio, RN, OCN, CCRP Contact: 843-792-9016, decandio@musc.edu</p>
<p>Randomized, Double-Blind, Placebo-Controlled Trial of Lacosamide for Seizure Prophylaxis in Patients with High-Grade Gliomas Investigator: Scott Lindhorst, M.D. Coordinator: Michele DeCandio, RN, OCN, CCRP Contact: 843-792-9016, decandio@musc.edu</p>
<p>Phase III Intergroup Study of Temozolomide Alone Versus Radiotherapy with Concomitant and Adjuvant Temozolomide Versus Radiotherapy with Adjuvant PCV Chemotherapy in Patients 1p/19q Co-Deleted Anaplastic Glioma Investigator: Scott Lindhorst, M.D. Coordinator: Susan Shannon Contact: 843-792-9251, shannsu@musc.edu</p>

<p>Phase III Trial on Concurrent and Adjuvant Temozolomide Chemotherapy in Non-1p/19q Deleted Anaplastic Glioma: The CATNON Intergroup Trial Investigator: Scott Lindhorst, M.D. Coordinator: Susan Shannon Contact: 843-792-9251, shannsu@musc.edu</p>
<p>Imaging Biomarkers of Tissue Microstructure and Vasculature as Predictors of Glioblastoma Multiforme Response to Treatment with Bevacizumab for Progressive Disease Investigator: Scott Lindhorst, M.D. Coordinator: Susan Shannon Contact: 843-792-9251, shannsu@musc.edu</p>
<p>Phase I/II Adaptive Randomized Trial of Bevacizumab Versus Bevacizumab plus Vorinostat in Adults with Recurrent Glioblastoma Investigator: Scott Lindhorst, M.D. Coordinator: Susan Shannon Contact: 843-792-9251, shannsu@musc.edu</p>
<p>Phase II Trial of Oral Pazopanib Plus Oral Topotecan Metronomic Antiangiogenic Therapy for Recurrent Glioblastoma Multiforme (A) Without Prior Bevacizumab Exposure and (B) After Failing Prior Bevacizumab Investigator: Scott Lindhorst, M.D. Coordinator: Susan Shannon Contact: 843-792-9251, shannsu@musc.edu</p>
<p>A Randomized Phase 3 Open Label Study of Nivolumab versus Bevacizumab and a Safety Study of Nivolumab or Nivolumab in Combination with Ipilimumab in Adult Subjects with Recurrent Glioblastoma (GBM) Investigator: Scott Lindhorst, M.D. Coordinator: Michele DeCandio, RN, OCN, CCRP (843-792-9016, decandio@musc.edu)</p>
<p>A Phase 1/2 Study of SL-701, a Subcutaneously Injected Multivalent Glioma-Associated Antigen Vaccine, in Adults with Recurrent Glioblastoma Multiforme Investigator: Scott Lindhorst, M.D. Coordinator: Michele DeCandio, RN, OCN, CCRP (843-792-9016, decandio@musc.edu)</p>

APHASIA
<p>Transcranial Direct Current Stimulation and Aphasia Treatment Outcomes Investigator: David Bachman, M.D. Coordinator: Sheri Davis Contact: 843-792-2845, davshe@musc.edu</p>
MOVEMENT DISORDERS:
<p>Istradefylline study for people with dyskinesias and off time from Parkinson's Disease: Evaluates the safety and efficacy of istradefylline, a new medication aimed at treating symptom Fluctuations in moderate to advanced PD. Coordinator: Shonna Jenkins Contact: 843-792-9115, jenkisho@musc.edu</p>
<p>Tele-Neurology: Remote assessments of patients with PD in South Carolina via tele-neurology: Validation of the new Movement Disorder Society (MDS)-Unified Parkinson's Disease Rating Scale. Coordinator: Shonna Jenkins Contact: 843-792-9115, jenkisho@musc.edu</p>
<p>Steady PD: This study will start enrollment in a medication called isradipine can slow down the progression of PD in people with early, untreated disease. Coordinator: Shonna Jenkins Contact: 843-792-9115, jenkisho@musc.edu</p>
<p>Eagle Eye: Evaluates whether computer analysis of eye movements can help us in the understanding and measurement of cognitive thinking problems in PD. Coordinator: Dr. Jenna Renfroe Contact: 843-792-6096, renfroe@musc.edu)</p>
<p>Dutetrabenazine: A study of SD-809 (Dutetrabenazine) for the treatment of moderate to severe tardive dyskinesia (drug-induced movement disorder). Coordinator: Nancy Feracco Contact: 843-792-7859, feracco@musc.edu)</p>
<p>A Pilot Study to Assess the Effects of pre-SMA LF-TMS for the Treatment of Essential Tremor Coordinator: Shonna Jenkins Contact: 843-792-9115, jenkisho@musc.edu)</p>

EPILEPSY:
<p>The Human Epilepsy Project Investigator: Jonathan Halford, M.D. Coordinator: Sheri Davis Contact: 843-792-3855, schnabel@musc.edu</p>
<p>A Pivotal, Phase III Trial of Detecting Generalized Tonic-Clonic Seizures with a Seizure Detection and Warning System in Epilepsy Patients Investigator: Jonathan Halford, M.D. Coordinator: Sheri Davis Contact: 843-792-3855, schnabel@musc.edu</p>
<p>fMRI in Anterior Temporal Epilepsy Surgery Investigator: Leo Bonhila, M.D. Coordinator: Sheri Davis Contact: 843-792-2845, davshe@musc.edu</p>
<p>Location of Seizures with Post Ictal MRI Investigator: Leo Bonhila, M.D. Coordinator: Sheri Davis Contact: 843-792-2845, davshe@musc.edu</p>
<p>Histological Analysis Epilepsy Surgery Tissue Investigator: Leo Bonhila, M.D. Coordinator: Sheri Davis Contact: 843-792-2845, davshe@musc.edu</p>
<p>Advance Brain Imaging Investigator: Leo Bonhila, M.D. Coordinator: Sheri Davis Contact: 843-792-2845, davshe@musc.edu</p>
<p>Neuropsychological Evaluation During Routine Intracranial Recording Investigator: Leo Bonhila, M.D. Coordinator: Sheri Davis Contact: 843-792-2845, davshe@musc.edu</p>
SPINE:
<p>A Prospective, Post-Market Assessment of Nanoss Bioactive 3D in the Posterolateral Spine Investigator: Abhay Varma, M.D. Coordinator: Angela Robinson Contact: 843-792-7118, robia@musc.edu</p>

Clinical trials
 are the primary way **breakthroughs**
 in treating diseases are made.

Grants (July - September 2014)

PI	TITLE; AGENCY	TOTAL
July 2014		
Adams, R	SMARTSTATE Stroke Endowed Chair MUSC Fdn. (016579)	\$144,562
Chimowitz, M	SmartState Stroke Countess Paolozzi Endowed Chair MUSC Fdn.	\$108,422
Halford, J	The Human Epilepsy Project (HEP)The Epilepsy Study Consortium	\$4,670
Hinson, V	Atomoxetine Treatment for Cognitive Impairment in Parkinson's Disease Michael J. Fox Fdn.	\$155,919
Revuelta, G	Creatine Safety, Tolerability, and Efficacy in Huntington's Disease: CREST-E Massachusetts General Hospital	\$95,452
Vaughan, C	A Randomized, Double-Blind, Placebo-Controlled Study of SD-809 (Dutetrabenazine) For the Treatment of Moderate to Severe Tardive Dyskinesia -Protocol Number:SD-809-C-18, INNO Clinical Outcomes, LLC, SD-809-C-20 (018417)	\$191,905
Banik, N	Regulation of Inflammatory T Cells and Neuroprotection by Calpain Inhibitor in MS, VAMC, BX002349 (018430)	\$243,200
Varma, A	A Prospective, Post-Market Assessment of Nanoss Bioactive 3D in the Posterolateral, Spine, Pioneer Surgical, Inc. NB3D012012 (017395)	\$8,147
Woodward, J	Neural Actions of Toluene, NIH/NIDA, 2R01DA013951-11A1 (016298)	\$336,375
Lindhorst, S	Phase 1/2 Study of SL-701, a Subcutaneously Injected Multivalent Glioma- Associated, Antigen Vaccine, in Adult Patients with Recurrent Glioblastoma Multiforme, (GBM), INC Research, Inc., STML-701-0114 (018391)	\$148,202
August 2014		
Chimowitz, M	Biomarkers of Ischemic Outcomes in Symptomatic Intracranial Stenosis (BIOSIS) Emory Univ., R01NS064162/T235047 (016620)	\$9,543
Hinson, V	A Phase 3 Double-Blind, Placebo Controlled, Parallel Group Study of Isradipine as a Disease Modifying Agent in Subjects with Early Parkinson Disease, North- western Univ., U01NS080818/60036745 MUSC (018367)	\$37,375
Spiotta, A	POD Swine Study Penumbra, Inc., POD Swine Study (018480)	\$17,237

September 2014		
Feng, W	ASPIRE: Adult SPasticity International REgistry on BOTOX Treatment, Quintiles Pacific, Inc. GMA-BTX-SP-12-001 (018551)	\$99,090
Holmstedt, C	A Randomised, Double-Blind, Multinational Study to Prevent Major Vascular Events with Ticagrelor Compared to Aspirin (ASA) in Patients with Acute Ischaemic Stroke or TIA [SOCRATES], Astrazeneca, SOCRATES - D5134C00001 (018532)	\$85,667
Lindhorst, S	A Randomized Phase 3 Open Label Study of Nivolumab versus Bevacizumab and a Safety Study of Nivolumab or Nivolumab in Combination with Ipilimumab in Adult Subjects with Recurrent Glioblastoma (GBM), Bristol Myers Squibb, CA209-143-0023 (018287)	\$1,200
Robinson, C	The Role of Diet-induced Obesity in Cognitive Impairment, NIH/NINDS, 7K01NS079461-02 (018444)	\$192,379
Turan, T	Mechanisms of Early Recurrence in Intracranial Atherosclerotic Disease University of Miami, R01NS084288/662706 (018514)	\$9,757
Kalhorn, S	A Prospective Study of the VTI InterFuse TTM Patient Post Implant Follow Up Vertebral Technologies Inc. InterFuse TTM (018554)	\$86,199
Spiotta, A	Adjunctive Neurovascular Support for Wide-neck aneurysm Embolization and Reconstruction (ANSWER), PulseRider?? HDE Clinical Study, Johns Hopkins Univ., U01NS080824/2002274191 (018540)	\$127,357
October 2014		
Adams, R	TWITCH (Transcranial Doppler with Transfusions Changing to Hydroxyurea) Cincinnati Children's Hospital Medical Center, R01HL095647/132981 (017743)	\$343,532
Halford, J	To Evaluate the Effect of Perampanel on Objective and Subjective Sleep in Subjects with Insomnia and Partial Onset Seizures, Clinical Financial Services, LLC, E2007-A001-408 (018599)	\$233,816
Halford, J	A Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy and Safety of Cannabidiol (GWP42003-P) in Children and Young Adults with Dravet Syndrome, GW Pharmaceuticals, GWEP1424 (018586)	\$174,594
Holmstedt, C	A Randomized, Double-Blind, Multinational Study to Prevent Major Vascular Events with Ticagrelor Compared to Aspirin (ASA) in Patients with Acute Ischaemic Stroke or TIA [SOCRATES], Astrazeneca, SOCRATES - D5134C00001 (018532)	\$900
Banik, N	Hormonal Intervention Protects Axon-Myelin to Promote Functional Recovery in SCI, VAMC, BX001262 (017550)	\$244,500
Turner, R	WEB Intrasaccular Therapy Study (WEB-IT), Sequent Medical, Inc, Protocol CP13-001 (WEB-IT) (018560)	\$118,341

Thank you for your contributions.

For questions, comments or to make a submission please email:

vought@musc.edu



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