A Message From Our Chairs

To all the Neurosciences faculty and staff, this message comes to you in appreciation for simply hanging in there. Both Dr. Kalivas and I would like to take this moment to appreciate the efforts of all in the Neurosciences department. As the never ending news of economic challenges surrounds us, it is clearly visible that optimistic determination, dedication and team spirit have kept the department alive and our mission on track. We have not and will not falter in our resolve to achieve excellence in teaching, discovery and caring for our patients, as you will read in this newsletter.

We would like to welcome back William ‘Alex’ Vandergrift, the newest addition to our faculty. Alex, after completing his residency in Neurosurgery, acquired additional skills through fellowship training in Los Angelos, CA and Australia. He brings to our cutting edge team in Neuro-oncology an expertise in endoscopic and minimally invasive brain and skull base surgery. Our excellence mission in teaching has kept us busy this past quarter with three annual symposia (Pediatric Neurosciences Update, Frontiers in Neurosciences and Stroke and Cerebrovascular Update). Dr Robert (Rusty) Turner was nominated for the Humanitarian Award. Our faculty continues to win accolades from medical students. Our growth in clinical services continues with the addition of 9 East and expansion to 6th floor in the Rutledge Towers. All our ‘big bets’ programs (Neuro-oncology, Spine, Cerebrovascular and Epilepsy) in the Neurosciences Service line have successfully initiated Task Forces to strategize and plan for growth in these services and to build clinical research. Our basic research group has maintained it’s strength with funding and kudos to Prakash Kara for a landmark Nature article on 3-D visual cortical circuitry that now lays the groundwork for our quest to understand childhood brain development and disorders. As this year rolls forward, there is much more to be done. We are confident that the tough will keep going and while bearing the burden of our times, we will strive to be focused on what needs to be done with a smile and fueled with infectious positive attitudes. -Sunil Patel, M.D.

Welcome New Employees!!!

We would like to extend a warm welcome to all of our new Employees:

Neurosurgeon
Dr. Alex Vandergrift

RN
Kim MacDonnell

Post Docs
Stephen Mahler
Carmela Reichel
Matt Riedy

Visiting Scholar
Alessandra Bitto

Grad Students
Zackary Cope
Bok Soon Go
**Goodbye and Good Luck!!!**

We would like to thank these former employees for all their hard work and wish them continued success in the future:

- **Post Docs**
  - Lakshmi Thirumangalakudi
  - Ran Zhang

- **Administrative Specialists—Neurosurgery**
  - Elise Manning
  - Shani Hamilton

- **Grad Assistant**
  - Ahmad Ramadan

- **Administrative Assistant—Neurosurgery**
  - Amanda Reasoner

- **Administrative Specialists—**
  - Elise Manning
  - Shani Hamilton

- **Administrative Assistant—**
  - Amanda Reasoner

**What’s Happening?!?!**

**They Got Married!!!**

Congratulations to our Neurosurgery Resident, Tanya Jones!!! She married Justin Quinn in Westbrook, CT, on December 31st, 2008.

**New Sleep Medicine Clinics in North Charleston Office**

Dr. Paola Tumminello and Dr. Saima Athar are now seeing Sleep Medicine patients at our MUSC Specialty Care Office in North Charleston.

**MUSC Excellence Exemplified!**

In February 2009, Dr. Patel and Dr. Kalivas received an email from Rhonda Weichsel, the Associate Director of Clinical Operations and Marketing for the Department of Neurosciences and Alzheimer’s Research and Clinical Programs. In this email, Mrs. Weichsel informed the physicians that her daughter is a Rotary Foreign Exchange Student who is currently living in a very remote village of Tinogasta, Argentina. She is living with Dr. Felipe Almada and his family during her time there. Mrs. Weichsel and her husband went to visit their daughter in March and asked our Chairs if we could possibly donate a few medical items needed by Dr. Almada that are very difficult for his village to obtain.

Dr. Patel then enlisted the help of Greg Leichner, a Neurosurgery charge nurse in the OR, to help search for supplies to be donated. Within just two days of this request, we were able give Mrs. Weichsel a box filled with gloves, sutures, vessel loops, dressings, staples, and a few instruments to take with her to Argentina.

“Thank you everyone! I’m so grateful and proud that MUSC can do this for another country in need.”

– Rhonda Weichsel
On Wednesday, March 11, 2009, Dr. Dilan Ellegala was featured in the Post and Courier, highlighting the Physician’s Training Partnership, a program that he has worked hard to develop over the past few years.

Dr. Dilan Ellegala, who joined the Department of Neurosciences here at MUSC in 2008, organized the Physician’s Training Partnership (PTP). PTP is a program that allows African neurosurgeons to visit the United States to observe techniques and procedures, and it allows Americans to go to Africa to observe and share their knowledge in this field.

Aside from MUSC, Dr. Ellegala has also gained the support of Brigham (part of Harvard Medical School), Cornell, University of Colorado, and Bayer Neurological Institute for PTP.

The goal of PTP is to train African surgeons who want to stay in their homelands and help train other African surgeons, in hopes that eventually they will be able to offer their patients the kind of care/surgery that is available here in the United States.

It has been estimated by the World Health Organization that one neurosurgeon is needed for every 100,000 people. In east and central Africa, the average is one per every 10 million people. Thanks to the Physician’s Training Partnership, ten doctors in four African countries have already been trained within just a few years of its start.

*For the full story from the Post and Courier, please visit: http://www.charleston.net/news/2009/mar/11/musc_doctors_brainchildneurosurgeons_par74723/

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**Recent Conferences in The Department of Neurosciences:**

(for a list of upcoming seminars/events—http://neurosciences.musc.edu/new/new.html)

**The 8th Annual Pediatric Neuroscience Update: with a Mini-Symposium on Cerebral Palsy:** this conference was held on March 20-21, 2009 at the Kiawah Island Resort, and was designed for practitioners who are responsible for treating children with neurological, neurodevelopmental, and neurobehavioral disorders. Topics included the latest research evidence, interventions, and management of disorders such as autism, epilepsy, headaches, brain tumors, VP shunt management, muscle and mitochondrial disorders, sleep disorders, tics and Tourette’s, and neuroimaging.

Co-Directors: Kenton R. Holden, MD, Professor of Neurosciences and Pediatrics and Gigi Smith, MSN, APRN, CPNP, Assistant Professor of Nursing and Pediatrics in the Department of Neurosciences. (http://cme.musc.edu/brochures/Peds%20Neuro%202009.pdf)

**The Integrated Stroke and Cerebrovascular Conference:** this conference was held on March 12-14, 2009 at the Wild Dunes Resort near Charleston, SC. For the past 50 years, the “heart of the U.S. Stroke Belt” has been located in South Carolina. Advances are being made in stroke care and there is a need to provide this information for providers caring for patients with stroke in the state and the region. Advanced treatment and care of patients with cerebrovascular disease such as aneurysms and AVMs requires the collaboration of multiple specialists and subspecialists. There are few centers currently providing this level of care in this state. This conference aims to educate institutions and doctors as to the state of the art comprehensive cerebrovascular care available. Conference Directors: Robert J. Adams, MS, MD, Director MUSC Stroke Center & Co-Director, Comprehensive Cerebrovascular Program; Dilantha Ellegala, MD, Director Cerebrovascular Neurosurgery & Co-Director Comprehensive Cerebrovascular Program; Aquilla S. Turk, III, DO, Director Interventional Neuroradiology. (http://cme.musc.edu/brochures/Stroke%202009.pdf)

**10th Annual Frontiers in Neuroscience Research Day:** this conference was held on March 20, 2009 at the Inn at Middleton Place in Charleston, SC. Plenary Speakers were Edward Oldfield (NIH), who discussed “Convention-Enhanced Drug Delivery into CNS: New Clinical Applications” and Bryan Roth from UNC, who presented “Evolved GPCRs As Molecular Switches to Modulate Neuronal Signaling in VIVO.” Conference organizer was Gary Aston-Jones, Ph.D., Co-Director of the Neurosciences Institute at MUSC. (http://www.musc.edu/neuroscienceinstitute/flyer.pdf)
We pay close attention to weather maps during hurricane season. The weather reporters on television attempt to bedazzle us with animated and superimposed maps for wind direction, wind velocity, and temperature. It turns out that the brain also has maps that are superimposed on top of one another, and they can change or fail to develop depending on our experiences during critical periods of postnatal development.

Within one brain region like the cerebral cortex that processes visual information, multiple aspects of the visual scene have to be interpreted simultaneously, for example, to determine the direction, distance, and speed of a moving car coming toward us.

With grant support from the National Institutes of Health, the Dana Foundation, and the Whitehall Foundation, the Kara lab is using high-resolution optical imaging methods to study how populations of neurons in the developing brain jointly encode various features of objects.

When optical imaging methods are used to map a single feature of an object, e.g., as the object moves in different directions, individual neurons in the brain have specific preferences for the direction of motion of the object that they will respond to. We have shown that clusters of neurons form an exquisitely ordered map for preferred direction of object motion. The map is precise on the scale of individual cells in the brain, rather than hundreds or thousands of cells. Other features of an object (its depth, orientation, and location) in the environment are also mapped in a highly ordered manner across the same population of neurons in the cerebral cortex. In the April 2nd issue of the journal *Nature*, we published a study that describes how various feature maps in the brain align optimally with one another.

The unique arrangement of multiple feature maps in the healthy brain provides an important benchmark for tracking changes in the wiring and firing of brain circuits in various childhood disorders.
Furthermore, she frequently volunteers her time to the community and is on several committees that help further the goals of our department and the hospital. Kelly is a devoted supporter of the National and Local Chapters of the Epilepsy Foundation. You will see her rounding up her colleagues for numerous functions and walks; the most recent is “Walk in the Park for Epilepsy” on Saturday, April 25, 2009.

At the heart of it, Kelly truly exemplifies excellence in everything that she does and we are very proud to have Kelly as a member of our team. -Adam Kornegay, Manager, Clinical Neurophysiology Services

The MUSC Department of Clinical Neurophysiology is proud to announce the 2008 Employee of The Year: Epilepsy Nurse, Ms. Kelly Cavins, RN!!! She is an amazing example of MUSC Excellence at its finest: keeping, the needs, wants, and dreams at the forefront of her care at all times.

Kelly is constantly setting the bar higher for her teammates by modeling all standards of behavior and her focus toward education and service in epilepsy. We have received numerous compliments from faculty and the patients that she humbly serves. She does this by paying attention to all of the little details and will go out of her way to make sure that the patient and family needs are met.

MUSC has received the 2008 Action Registry —Get With The Guidelines (GWTG) Program Silver Performance Achievement Award from the American College of Cardiology Foundation and the American Heart Association (AHA) for its success in implementing a higher standard of care for stroke patients, heart failure, and coronary artery disease. This award recognizes hospitals that demonstrate at least 85% compliance in each of the seven stroke achievement measures. Last year, MUSC received the Bronze Award, and our goal for the year is to reach the Gold Award, which recognizes performance for 24 consecutive months. The full implementation of acute and secondary prevention guideline-recommended therapy is a critical step in saving the lives and improving outcomes of stroke patients.

We would like to thank Beth Grannell, RN, BSN, Manager of the Stroke Program and Edward C. Jauch, MD MS, Associate Professor, Division of Emergency Medicine & Department of Neurosciences, for representing MUSC at the Annual AHA
Our Neurosciences Intensive Care Unit (NSICU) has received the American Association of Critical Care Nurses (AACN) Beacon Award for Excellence.

The Beacon Award for Critical Care Excellence recognizes the nation's top adult critical care, pediatric critical care, and progressive care units. Because it provides units a way to measure their systems, outcomes, and environment, this award is increasingly linked to patient safety initiatives. AACN launched the Beacon Award in the fall of 2003. The first recipients of the Beacon Award were announced in the Spring of 2004. There are an estimated 6,000 Intensive Care Units in the United States, and 130 of those units have been recognized for excellence by this award.

The MUSC NSICU is the first ICU in the state of South Carolina to receive this award. We would like to congratulate our amazing nursing staff for their demonstrated excellence in patient care!

Robert P. Turner, M.D., associate professor in the departments of Neurology, Pediatrics, Neurological Surgery and Biostatistics, Bioinformatics & Epidemiology, and pediatric neurologist, was honored among 44 national physician-finalists for the 2008 Association of American Medical Colleges (AAMC) Humanism in Medicine Award.

This is an award that honors medical school faculty who possess the qualities of a caring and compassionate mentor, teacher, and advisor to their medical students. Those who know Dr. Turner know that he is well deserving of such an award. As stated by Annie Leylek (a 3rd year COM student and AAMC Organization of Student Representative who prepared Turner’s nomination) in the March 20th, 2009, release of The Catalyst: “Dr. Turner is renowned for the quality of his teaching, enthusiasm, compassion, service, and humility. These qualities and the overwhelming endorsement received on behalf of him from students at all levels made his nomination stand out from the rest.”

9 East Neurosciences Adds 26 Beds!!!

MUHA’s Stuart Smith, June Darby, Dr. Nikolaos Papamitsakis, Dr. David Bachman, Dr. Marilyn Schaffner, and Angela Ohnesorge cut the ribbon to signify the opening of the new 9E Neuro Intermediate Unit and Stroke Center. 9E staff will care for patients with stroke, epilepsy, brain tumors, & other neurological conditions.

Dr. Robert Turner—Humanism in Medicine Award!!!

Charles Peyton (left) & Dr. Jeff Wong, associate dean for medical education, College of Medicine (right), present Dr. Robert Turner (center) with his award.
The Medical University of South Carolina Hollings Cancer Center (HCC) has earned National Cancer Institute (NCI) designation!!! This distinction is held by only 63 other cancer centers in the United States. The Hollings Cancer Center is the only institution in South Carolina to reach this status.

As described by the National Cancer Institute, “NCI designated Cancer Centers are recognized for their scientific excellence and extensive resources that are focused on cancer and cancer-related problems. These Cancer Centers are a major source of discovery of the nature of cancer and the development of more effective approaches to cancer prevention, diagnosis, and therapy. They also deliver medical advances to patients and their families, educate health-care professionals and the public, and reach out to underserved populations.”

The NCI designation is accompanied by more than $7 million in funding to sustain and grow research efforts at MUSC. The NCI awarded designation to Hollings Cancer Center based on its outstanding facilities, commitment to research, leadership, and vision.

The Hollings Cancer Center is the largest academic-based cancer program in South Carolina. It has more than $35 Million in cancer research funding. To expand patient access to clinical trials, Hollings Cancer Center has established the Clinical Trials Network (CTN). With nine cancer programs in South Carolina banding together, the CTN broadens the reach of new research that may one day be the new standards of care.

Hollings Cancer Center offers state of the art diagnostic capabilities, therapies and surgical techniques and has multidisciplinary clinics that involve surgeons, medical oncologists, radiation therapists, radiologists, pathologists, psychologists, and many other specialists seeing patients under one roof.

HCC Outpatient Clinics Tie for Patient Satisfaction Banner!!!

Congratulations to the Hollings Cancer Center Neurosciences Outpatient Clinic!!! Our percentile ranks in patient satisfaction for the second quarter 2009 (Oct-Dec 2008) are final, and we achieved a rank in the 99th percentile!!!

The Hollings Cancer Center Thoracic Surgery Clinic and HCC Chemo/Infusion Clinic also achieved the 99th percentile, so all 3 clinics share a banner that is hanging in HCC to acknowledge this outstanding achievement!!!

We would like to congratulate and recognize all of our Hollings team members who are responsible for this outstanding achievement: Dr. Sunil Patel; Dr. Pierre Giglio; Dr. Bruce Frankel; Christa Lizzi, RN; Eve Balows, RN; Christine Graham, RN; Monique Jenkins; and Rachel Beard.
Congratulations to our newest Employee of the Quarter:

Stephanie Willingham!!!(Administrative Coordinator to Sunil Patel, MD)

As we can see from the nomination submitted by Cheri Kubalak, Stephanie Willingham exemplifies MUSC Excellence: “We are fortunate to have Stephanie in our department/office. She's always eager to assist whenever and wherever needed. She's currently filling in until a replacement is in place to fill Amanda Reasoner's position as Dr. Patel's assistant. She continues to work her BSB desk in addition to assisting in CSB....always with a smile and great attitude. She's an exceptional employee and a fantastic person.”

Stephanie will receive $200 in appreciation for all her hard work for the Department of Neurosciences.

***We would also like to congratulate all of the nominees for this Employee of the Quarter:

Ashlee Brown, Administrative Assistant, Translational Research Unit

Ellen Debenham, Nurse manager, Stroke Center

Bonnie Muntz-Pope, Translational Research Unit

*REMINDER: Now is the time to nominate your co-workers for the next Employee of the Quarter!!!

Winner will be announced mid-July 2009.

If you have information you would like to include in our next quarterly newsletter, please contact Rachel Beard at beadr@musc.edu.

**Please have your requests for inclusion sent in NO LATER THAN Friday, July 3, 2009**

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New Grant $$$ Awarded in Neurosciences!!!

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