

# Neurosciences

Affiliate Program Offerings



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# **ABOUT MUSC**

The Medical University of South Carolina (MUSC) is dedicated to the pursuit of changing what's possible in health care. Nationally recognized for its innovation, patient- and family-centered care, and quality outcomes, this integrated health care system is accessible through a robust health system network, clinical affiliations and a nationally recognized telehealth network. MUSC experiences more than one million patient encounters annually, and its specialized care teams consistently rank among the best in the country. MUSC delivers transformational care shaped by world-class clinicians, health scientists, and educators who provide leadingedge care while developing the next generation of innovative health care leaders.

# **MUSC AT A GLANCE**

- South Carolina's only comprehensive academic medical center
  - > Over 16,000 team members
  - \$2.6 billion annual operating budget
- Oldest medical school in the South; founded in 1824
  - Six colleges with 3,000 students in all areas of health professions. Colleges include Dental Medicine, Graduate Studies, Health Professions, Medicine, Nursing, and Pharmacy
- Member of the prestigious National Institutes of Health (NIH) Consortium, which includes only the 60 best biomedical research institutions in the U.S.
- South Carolina's most comprehensive clinical enterprise offerings:
  - > 1,428-bed health system and 100 outreach locations
  - > 1+ million patient encounters per year
  - One of only two National Centers for Excellence in Telehealth in the United States
  - > Hollings Cancer Center, one of only 70-National Cancer Institute NCI-Designated Cancer Centers in the U.S.

- South Carolina's only solid organ transplant program (kidney, liver, heart)
- > Extracorporeal Life Support Center
- SC's only nationally ranked children's hospital; that will open two new facilities in 2019
- MUSC surgeons perform nearly 10,000 pediatric surgeries annually
- Only pediatric Level 1 trauma center in the state;
   25,000 visits annually to the emergency room
- > South Carolina's only Pediatric Burn Center
- Advanced pediatric heart center with a 99% survival rate for complex surgeries

### MUSC HEALTH BY THE NUMBERS

50,745

58,028

Annual Patient Admissions

209,085 Annual Emergency Room Visits Combined number of patient beds

Average Daily Census **926** inpatients/day

1.6 Million

Annual Outpatient Visits

**1,500+** Total Medical Staff

675+ Total Physicians in Training

# **MUSC'S AFFILIATIONS PROGRAM**

To honor MUSC Health's Mission of preserving and optimizing human life in South Carolina and beyond through education, research and patient care, the Vision for the MUSC Affiliations Program states:

We extend MUSC Health's mission through the establishment of meaningful relationships locally, regionally and statewide.

# **KEY TENETS**

At MUSC, we believe that the following tenets drive a successful affiliation:

- Health care is best provided locally. To ensure that this is possible, we will work with Affiliates to capitalize on their strengths and grow their clinical capabilities.
- For care that cannot be provided locally, we commit to timely patient access and timely, personal communication with referring physicians, supported by technology where appropriate.
- Physician-to-physician relationships are essential to any affiliate relationship. They will be prioritized through regular communication and collaboration.
- Affiliate relationships will be coordinated by a single resource—a relationship manager—and the Integrated Center of Clinical Excellence (ICCE) Chiefs, MUSC's physician service line leaders, will be accountable for the delivery of clinical services in their respective areas.
- Affiliation agreements will contain clearly defined and documented benefits and requirements to ensure that alignment and accountability are established on both ends.

## **BENEFITS OF PARTNERING WITH MUSC**

MUSC provides opportunities for health care organizations to better serve their local communities and keep care in South Carolina, including the following:

- Support in the continual enhancement of clinical care and supplemental services for the community
- Assurance of continuity of care for patients that require tertiary or quaternary services
- VIP/expedited access to hospitals, clinics and health care providers throughout the MUSC system
- Greater leverage for contract negotiation and purchasing agreements (participation in a group purchasing organization [GPO])
- Guidance to enhance growth and operations of the program(s)
- Utilization of cobranding to leverage the recognition and reputation of MUSC within the community
- Access to educational and graduate medical education (GME) opportunities
- Support with physician and provider recruitment
- Support for population health initiatives, including clinically integrated networks (CINs), accountable care organizations (ACOs), etc.
- Physician-to-physician relationships
- Access to electronic health record resources, including MUSC's Epic CareLink platform

### MUSC HEALTH AFFILIATE PROGRAM OFFERINGS

Based upon extensive market research and years of conversations with current and prospective affiliate partners, we have refined and tailored specific program offerings. These clinical offerings include:



### AFFILIATE PARTNER MODEL

Affiliate partners invariably have unique combinations of strengths, weaknesses, capabilities and resources. Our goal is to design a program with our partners that capitalizes on strengths, mitigates weaknesses and utilizes resources in the community so as to deliver the highest value in a comprehensive community neurosurgery program. To this end, MUSC has developed two different partnership models to support the various needs of our Affiliates: Consultative and Comprehensive Services. Irrespective of what package chosen, every Affiliate organization will have a dedicated team focused on supporting the Affiliate's unique needs.

Each dedicated team will consist of a Relationship Manager, the Chief Medical Officer for the Affiliate Network, the respective ICCE Chief [Service Line specific Medical Director] at MUSC, and a Telehealth Liaison [as appropriate]. Typical roles/responsibilities for each of these individuals are outlined in the right column.

- Relationship Manager: serves as the day-today MUSC Affiliations Contact, often coming onsite to meet with key stakeholders at the Affiliate organization and helping coordinate and communicate between the two entities
- ICCE Chief: works closely with your Chief Physician/ Chair of Department [or equivalent roles] on clinical delivery components [staffing, tumor boards and chart rounds, clinical trials, etc.]
- CMO of Affiliate Network: partners with the Affiliate organization's Chief Medical Offer/Chief Quality Officer [or equivalent role] on all qualityrelated services
- Telehealth Liaison: works with the Affiliate organization to identify telehealth opportunities and implement MUSC telehealth programs at the Affiliate organization; acts as the day-to-day contact for all telehealth services and coordinates between the Affiliate organization and MUSC Health's Center for Telehealth

# MUSC NEUROSCIENCES PROGRAM

# OVERVIEW

MUSC Neurosciences has one of the nation's largest and most experienced teams of neuroscience specialists. As the state's only Academic Medical Center, MUSC has access to the most innovative, cutting-edge treatments and technologies.

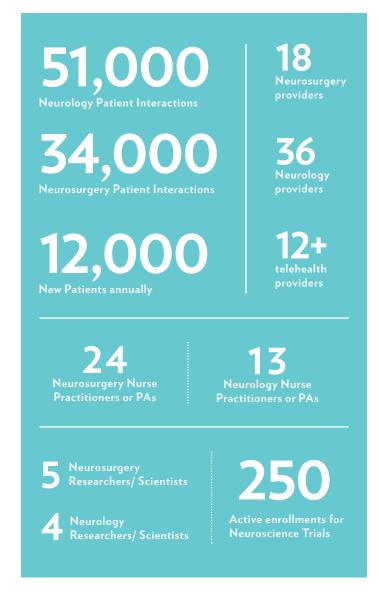
MUSC Health Neuroscience services comes with a depth of experience to deliver exceptional results for all levels of care. MUSC's internationally recognized neurology experts have access to the latest therapies and receive substantial research funding from the National Institutes of Health. To support such highvalue patient care, MUSC Health has organized our Neuroscience services into an integrated, patientcentered clinical delivery model: ICCE [Integrated Center(s) of Clinical Excellence]. We strive to enhance the quality and breadth of clinical services, research, teaching, and other specialty services to communities across South Carolina.

# QUALITY AND AWARDS

### ZIAN

Zucker Institute for applied Neurosciences (ZIAN) is an entity developed by the Neurosurgery/Neurology departments to encourage engineers and physicians to work closely together with the goal to bring new ideas to patients and directly impact patient care.

### Neurosciences Program by the Numbers









# LEADERSHIP

MUSC's Neuroscience Program is led by a team of renowned physicians, researchers and administrators who have trained and served in prominent positions at some of the country's top Neuroscience Centers and academic medical institutions. Listed below are the clinical and administrative leaders that support the program. See pages 15-16 for leadershop bios.



Jonathan Edwards, M.D. Chief, Neurosciences Integrated Center of Clinical Excellence [ICCE], Interim Chair, Department of Neurology



Sunil J. Patel, M.D. Chair, Department of Neurosurgery



**Steve Rublee, MHA** Administrator, Neurosciences Integrated Center of Clinical Excellence [ICCE]



Susanne A. Van Weelden, MS, PhD. Vice Chair, Finance & Administration, Department of Neurosurgery



David Chandler, MBA Vice Chair, Finance & Administration, Department of Neurology

# TREATMENT PROGRAMS

As the only academic medical center in South Carolina, MUSC offers more Neuroscience specialists and treatment options than any other hospital in the state. With a comprehensive suite of services, MUSC is able to diagnose and treat the full spectrum of neurological conditions for all patients, from infants to those with advanced disease. The following Centers and Programs are included in MUSC's Neurosciences Program. See pages 11-13 for a comprehensive description of these treatment programs.

### **TREATMENT PROGRAMS**

- Brain & Spine Tumor Program
- Comprehensive Epilepsy Center
- Comprehensive Stroke Center, Neuroendovascular, and Cerebrovascular Surgery
- Deep Brain Stimulation Program
- Gamma Knife Center
- Head Pain Clinic
- Memory Disorders Clinic
- Movement Disorders Program
- Multiple Sclerosis Clinic
- Neuromuscular Services
- Neuropsychology Services
- Neurophysiology Lab
- Skull Base Center
- Spine Center

# **SERVICE OFFERINGS**

High-level details of each partnership model are included in the matrix below. More detailed descriptions around the specific service offerings included can be found in the subsequent pages.

Neurosciences Service Offerings	Neurosciences Service Line Affiliations Partnership Models		
	Consultative Services Model	Comprehensive Services Model	
Price*	\$60,000 per quarter*	\$60,000 per quarter*	
Branding	Neuro Brand MUSC Health Affiliate	System Brand MUSC Health Medical University of South Carolina	
Quality Oversight	✓	✓	
Peer Review	✓	✓	
M&M	✓	✓	
Clinical Access	✓	✓	
Consultative Offering Options – at Additional Cost			
Clinical Program Review	~	<ul> <li></li> </ul>	
Departmental Support Services	~	<ul> <li>✓</li> </ul>	
Clinical Staffing Options – at Additional Cost			
Neurosurgery	N/A	<ul> <li>✓</li> </ul>	
General Neurology	N/A	✓	
Shared Equity/Joint Venture	N/A	<ul> <li></li> </ul>	

\*This price represents the base Affiliation quarterly fees. Any additional fees and expenses related to optional service elements are excluded. The final fee structure will be dependent upon the services selected and will be delineated as a component of the Affiliation agreement.

# **CONSULTATIVE SERVICES MODEL**

MUSC created this model to serve the needs of Affiliate organizations who have their own programs and clinical staff, however, wish to have MUSC help provide quality oversight and programmatic support.

# **BRANDING OPPORTUNITIES**

MUSC Health is excited to share our brand with those who broaden our commitment to high-quality, patientcentered care. The extent of the opportunity within this model is limited and is pursuant upon MUSC oversight and management of a comprehensive quality program. MUSC Health will work with affiliate organizations to understand branding requests and assist with determining the most appropriate usage.

# QUALITY OVERSIGHT

In today's healthcare environment, a robust quality program is essential for healthcare delivery systems to ensure the system is delivering the very best care to their patients; care which is safe, timely, efficient, effective, equitable, and patient centered. In addition, healthcare payment models are moving rapidly from fee-for-service to value-based payments, making high quality care a prerequisite to financial performance. To this end, MUSC will work collaboratively with the Affiliate organization to develop a comprehensive quality program and if appropriate, implement a fullscaled QAPI [Quality Assurance and Performance Improvement] program – a systematic, comprehensive, and data-driven approach to improving safety and quality in a healthcare system.

For our Neurosciences Affiliates, MUSC will provide the following Neuro-specific quality offerings:

### **Peer Review**

Affiliates will have the opportunity to have their complex cases reviewed by MUSC's Neurosciences faculty members. Peer review assures that patients are receiving the most appropriate care plan and have the greatest likelihood of successful treatment. MUSC will work closely with the Affiliate organization to establish a system for submitting and reviewing cases.

#### M&M

Affiliates will have access to attend MUSC's Neurosurgery and Neurology Morbidity & Mortality Conferences either in-person or virtually. M&M Conferences provide a forum for physicians to identify areas of improvement for patient treatment and care. MUSC will work closely with the Affiliate to ensure that they have access to these M&M conferences or help them design and establish an M&M Conference within their organization.

### **CLINICAL ACCESS**

Providing timely clinical access is paramount in ensuring the highest level of patient care. To ensure that our Affiliates have access to the care they need, MUSC is prepared to offer the following services:

#### Expedited Admission and Scheduling

MUSC believes that the best care is provided locally. However, when an Affiliate provider wishes to have one of their patients seen by an MUSC specialist in Charleston, or desires to have a quick consult with an Neurosciences sub-specialist, MUSC wants the process to be easy to navigate and efficient. To this end, MUSC has established a specialized team that will take calls and help expedite the request.

# **Clinical Trials**

Through our process of Peer Review, patients being treated by our Affiliate partners will be considered for applicable clinical trials and offered participation. This opens access to treatment options that are not available anywhere else in the state and assures patients that they are getting the most up to date, appropriate treatments, ensuring the best chance of long-term survival.

# **Advanced Testing**

MUSC Health offers an extensive laboratory test menu to support the diagnostic needs of affiliate partners. MUSC has testing and clinician expertise in a variety of specialties including, but not limited to:

- Clinical chemistry
- Immunology
- Cytogenetics
- Microbiology

Molecular genetics

Molecular pathology

- Flow cytometry
- Genomics
- Hematology
- HLA

- Toxicology
- Transfusion medicine

# **Advanced Imaging**

MUSC's Neuroradiology Division provides stateof-the-art neuroradiology CT and MR imaging, and performs image guided-procedures. Our program utilizes high quality CT and MRI equipment to deliver safely outstanding patient care to both adult and pediatric patients. Some of the advanced techniques and procedures that support our clinical work include:

- High resolution MRI
- Lumbar puncture

Facet injections

spine

Facet cyst aspiration

CT-guided biopsy of

Epidural blood patch

- Perfusion MRI
- MRI spectroscopy
- CSF flow study
- Diffusion MRI
- Tractography
- Myelography

**CONSULTATIVE OFFERINGS** 

Building a strong community neurosciences program can be challenging. To help our Affiliates develop and grow successfully, MUSC is offering a full suite of hands-on consultative services:

### **Clinical Program Review**

As a component of the relationship, MUSC will partner with the Affiliate to conduct a thorough programmatic review of neurology and neurosurgery clinical and operational workflows and processes, staffing models, support service capabilities, and quality outcomes. The work will commence early in the relationship and envision it taking place as a multi-day, on-site visit. The onsite review would be followed up with a detailed report outlining opportunities for optimization and MUSC best-practice recommendations. We would then establish goals to optimize improvements and would offer quarterly check-ins to help drive progress and instill accountability.

### **Departmental Support Services**

MUSC wishes its Affiliates to be as successful as possible and is pleased to offer additional departmental consulting services upon request. These could include, but are not limited to, projects related to service line development, CON support, revenue cycle. Similar to the Clinical Program Review, these assessments will result in a detailed report with identified opportunities for optimization and MUSC best-practice recommendations.

# **COMPREHENSIVE SERVICES MODEL**

MUSC created this model to serve the needs of Affiliate organizations who need complete operational and clinical support to serve their Neurology and Neurosurgery patient populations. Think of this offering as 'MUSC On-site' in your local community. To accomplish this, MUSC will offer all the services of the Consultative Services Model as well as provide the staff, equipment and processes to manage and operationalize your community neurosciences program.

### **BRANDING OPPORTUNITIES**

At MUSC Health, we have invested in building South Carolina's most nationally recognized health system brand. We believe that even greater brand value can be achieved by working collaboratively with the best strategic partners to improve safety scores, quality ratings, patient perception and awareness. Leveraging strong brand names through cobranding brings greater value to both parties.

### **STAFFING**

Finding highly-trained, neurosciences staff is challenging – even more so if the community is small or the Affiliate organization is still nascent in its neurosciences program development. MUSC is prepared to provide appropriate staffing for our Affiliate's programmatic needs:

#### **Provider Staffing**

Regardless if the Affiliate needs to have one additional surgeon to help with demand and balance the call rotation or needs to secure a complete neuroscience provider team, MUSC stands ready to meet the needs for each program [Neurosurgery and Neurology].

#### **Programmatic Staffing & Recruiting**

MUSC appreciates the importance of staff recruitment and retention and has established a designated team within our Neurosciences ICCE who will partner with Affiliates to understand job requirements, staffing counts, necessary credentials, etc. and will create a plan to fill the gap – be it deploying MUSC resources as interim staff, placing MUSC staff onsite as FTEs, or partnering to create a dynamic recruiting and onboarding programs.

# APPENDIX

# **TREATMENT PROGRAMS**

### Brain & Spine Tumor Program

MUSC Health's Brain & Spine Tumor Program offers the highest level of neuro-oncology care through an experienced team with state-of-the-art facilities, cutting-edge technology, and breakthrough laboratory research. Over the years, our Brain & Spine Tumor Program has expanded the types of tumors treated through advances in medical and surgical therapies and a broadened array of clinical trials. Additionally, our team hosts weekly multidisciplinary tumor boards to ensure that patients are receiving the best treatment possible. As a result, patients throughout the Southeast have access to extraordinary neuro-oncology services close to home.

### **Comprehensive Epilepsy Center**

At the MUSC Health Comprehensive Epilepsy Center, our doctors work to eliminate or reduce seizures to help patients live life to the fullest. MUSC Health is the only level 4 epilepsy center in South Carolina. This top-level designation from the National Association of Epilepsy Centers recognizes our doctors' extensive knowledge and comprehensive treatment of patients with seizure disorders. Here, patients and families will receive the highest level of care. Our Comprehensive Epilepsy Center features the most advanced brain mapping technology such as Stereoelectroencephalogram (SSEG) and High-Density Electroencephalogram (HD-EEG). MUSC is one of a select few medical centers nationwide with these capabilities.

# Comprehensive Stroke Center, Neuroendovascular, and Cerebrovascular Surgery

The Comprehensive Stroke Center at MUSC Health is one of the nation's leading stroke-certified programs. Our specialists are internationally recognized as being among the best in the field. With response times lower than the national average, cutting edge technologies and great depth of experience, MUSC Health's treatment of stroke and cerebrovascular disorders is unparalleled. As a nationally recognized stroke-certified hospital, we are able to treat up to 5 times as many patients as most hospitals and have one of the largest aneurysm programs in the country. The center is involved in numerous national trials and is one of the most published centers in the country. MUSC also features state of the art Neuroendovascular Suites for minimally invasive treatment of aneurysm & AVMs.

### **Deep Brain Stimulation Program**

Movement Disorder specialists and functional neurosurgeons at MUSC Health were the first in South Carolina to offer deep brain stimulation, or DBS, as a treatment for Parkinson's disease, dystonia, and essential tremor. Our doctors have been performing DBS for more than a decade, providing the experience needed to perform this complex brain surgery, enabling us to provide a safe, and effective procedure. After DBS, a patient can receive comprehensive care from our Movement Disorders Program, receiving follow-up care from the same specialists who performed their surgery to aid in recovery. In addition, MUSC Health is the only DBS center in the region to offer clinical trial for novel DBS therapies including current steering and independent current control. Team members for this program include movement disorder neurologists. functional neurosurgeons, neuropsychologists, DBS nurse practitioners, physician assistants, nurses, and rehabilitation specialists.

# **TREATMENT PROGRAMS (continued)**

### Gamma Knife Center

Brain surgery is extremely complex. At MUSC Health, patients are in the exceptionally capable hands of highly skilled surgeons. Our internationally renowned doctors use the most sophisticated technology, Gamma Knife<sup>™</sup> radiosurgery, to safely and effectively destroy many types of brain lesions. MUSC Health is one of only 300 centers worldwide with this surgical capability. With Gamma Knife, our doctors can treat tumors once considered inoperable.

### Head Pain Clinic

Headache disorders, such as migraines, tension headaches, and cluster headaches, are one of the most common nervous system disorders. If severe head pain is interfering with quality of life, our experts can help. MUSC Health's head pain specialists are fellowship trained, meaning we have advanced training in diagnosing and treating neurological disorders and head pain.

#### Memory Disorders Clinic

Living with, or caring for someone with, a memory disorder such as Alzheimer's disease or dementia is challenging. The memory disorder specialists at MUSC Health work diligently to ensure that you or your loved one receives the proper diagnosis and appropriate care plan. We provide compassionate care to help you enjoy life to the fullest.

#### **Movement Disorders Program**

At MUSC Health's Movement Disorders Program, our doctors understand the daily challenges of living with movement disorders, such as Parkinson's disease and dystonia. As the first Parkinson's Foundation Center of Excellence in South Carolina, MUSC Health offers the only comprehensive movement disorders program in the state with a greater number of treatment options to improve your quality of life, including deep brain stimulation.

#### **Multiple Sclerosis Clinic**

Our multiple sclerosis experts at MUSC Health ensure that patients receive the proper diagnosis and care. Our program offers more treatment options than any other medical center in South Carolina. At MUSC Health, patients can expect comprehensive care and treatment through advanced diagnostic testing and services, customized treatment plans, and innovative therapies from medications to rehabilitation services.

### **Neuromuscular Services**

Living with a neuromuscular disease that hinders mobility and communication can be challenging. MUSC patients benefit from patient-centered care and access to specialty clinics such as our Muscular Dystrophy Association Care Center, ALS Clinic, Neuromuscular Clinic, and Spasticity Clinic.

### **Neuropsychology Services**

The Neuropsychology program at MUSC Health is dedicated to understanding and treating the cognitive and behavioral symptoms that frequently accompany brain diseases and injuries though clinical services (both in-person or telehealth neuropsychological evaluations), research, education, and community outreach. Our neuropsychologists perform a variety of cognitive tests to assess how different brain conditions impact behavior and everyday functioning, providing more information to develop a diagnosis, determine cognitive strengths and weaknesses, establish baseline functioning, and help plan treatments or other interventions.

### Neurophysiology Lab

At the MUSC Health Neurophysiology Lab, our specialists perform diagnostic services for a range of neurological disorders in a comfortable setting. We use advanced diagnostic technology to obtain the most accurate diagnosis possible, so patients can get the treatment they need. MUSC Health is one of a select few medical centers in the country with five different accredited diagnostic laboratories for the testing and treatment of neurological disorders

# **Skull Base Center**

MUSC Health's Skull Base Center is among a select few centers in the country that exclusively treats problems of the skull base, or cranium floor. People with skull base disorders face special challenges because the treatment area is so difficult to access. At MUSC Health, we have the largest team of exceptionally skilled skull base experts in the Southeast region, providing compassionate care for the most complicated conditions.

#### **Spine Center**

The specialists at our MUSC Health Spine Center first perform a comprehensive evaluation, using the most advanced diagnostic equipment available. We then work with patients to develop a treatment plan that eliminates or reduces pain so they can return to an active lifestyle. Our team has minimally invasive, endoscopic spine surgery expertise.

# **RESEARCH & CLINICAL TRIALS**

### RESEARCH

Research at MUSC Neurosciences includes basic, translational, and investigator initiated clinical studies. Broad research themes include, addiction, aging (Alzheimer's disease), cortical physiology/cognitive disorders (Schizophrenia), demyelinating disorders (Multiple Sclerosis), movement disorders (Parkinson's disease), neurodegeneration, retinal physiology, and stroke. MUSC Neurosciences has also established internationally recognized research teams in addiction, aging, movement disorders, neurodegeneration, and schizophrenia. In addition, our faculty strongly augment other neuroscience research groups on campus in vision and hearing physiology, spinal cord damage, and stroke. This rapid influx of research talent from around the world has created an environment of high positive energy, with scientists who are eager to collaborate with other laboratories.

# **CLINICAL TRIALS**

Clinical trials are the foundation for advancement in neurological treatments. As an Academic Medical Center, MUSC is committed to offering the best treatments available today while searching for even better ones for the future. As South Carolina's only medical research and training institution, MUSC is able to offer patients the chance to participate in clinical research projects, including those in movement disorders (Parkinson's disease), stroke, epilepsy, Alzheimer's, neuro-oncology, and neuromuscular. Clinical trials for our affiliate partners will be offered on a case by case basis.

# **LEADERSHIP BIOS**

# David Chandler, MBA

Vice Chair, Finance & Administration, Department of Neurology

David Chandler joined MUSC in 2010 working in the Department of Anesthesia, quickly progressing through the ranks into healthcare management. He joined Neurosciences in October of 2016 as the Vice-Chair for the Department of Neurology. David holds a Master's in Business Administration with a focus on Healthcare Management, completing both his undergraduate and graduate degree from The Citadel. He has spent nearly 10 years working in an academic department in both the surgical and outpatient setting. He has also worked in the private sector as a consultant providing research administration oversight and support. David has a passion for working with physician workgroups, and is dedicated to improving clinical access and the further development of Neurosciences at MUSC.

# Jonathan Edwards, M.D.

# Chief, Neurosciences Integrated Center of Clinical Excellence [ICCE], Interim Chair, Department of Neurology

As an epileptologist, Dr. Jonathan Edwards' clinical interests include epilepsy treatment, clinical neurophysiology, neurostimulation, epilepsy surgery, neurological education, and functional brain mapping. His research interests include new treatments for epilepsy, epilepsy imaging, and improving access to care for patients with epilepsy.

Dr. Edwards is a member of the South Carolina Neurological Association, the American Epilepsy Society, the American Academy of Neurology, and the American Clinical Neurophysiology Society. He has served on the scientific committee of several organizations, including the American Clinical Neurophysiology Society, and has been a board member and examiner for the American Board of Clinical Neurophysiology and for ABRET. He recently served as president of the American Clinical Neurophysiology Society. Dr. Edwards has won numerous awards for teaching, research, and patient advocacy.

# Sunil Patel, MD, FANNS

# Chair, Department of Neurosurgery

Dr. Sunil J. Patel, MD, FANNS is an experienced and accomplished Neurosurgeon with over 30 years in clinical practice. Dr. Patel specializes in Minimally Invasive Surgery for patients with BRAIN, SKULL BASE and SPINAL DISORDERS.

Dr. Patel earned his Medical Degree from the Medical University of South Carolina. He completed his Surgical Internship and Residency in Neurological Surgery at the Medical University of South Carolina and following that completed 3 additional Fellowships: Skull Base Surgery and Microvascular Surgery (University of Pittsburgh) and Micro-Neurosurgery (with world renowned Neurosurgeon Kenichiro Sugita, Nagoya University School of Medicine, Japan). He is board certified by the American Board of Neurological Surgery.

Dr. Patel has done NIH funded research and has been a participant in a multitude of Clinical Studies (over 60) and has been published extensively in peer-review publications. He has been an author in over 150 peer reviewed research articles.

Dr. Patel's special interests include Brain tumors, Trigeminal Neuralgia, Cranial nerve syndromes, Minimally Invasive Spinal Surgery, EDS related spinal disorders, Tethered cord syndrome.

# LEADERSHIP BIOS (continued)

#### Steve Rublee, MHA

#### Administrator, Neurosciences Integrated Center of Clinical Excellence [ICCE]

Steve has over 40 years of healthcare experience. He began his career as a psych tech following college and, after earning a Master's in Health Administration from the Medical College of Virginia, pursued a path in behavioral health management. Initially working in a large group practice, he has been in public and private non-profit settings, consulting, and the for-profit sector, having served as CEO for a number of free-standing psychiatric hospitals.

Steve came to MUSC in 2009 as administrator for the Mental Health Service Line. He also served as administrator for hospital-based ambulatory services and became administrator for the Neurosciences Service Line in 2014. With the health system's reorganization in 2017, he was named Administrator, Mental Health and Neurosciences Integrated Centers of Clinical Excellence, working closely with the respective ICCE Chiefs to foster the continued development of our services.

### Susanne Van Weelden, MS, PhD.

#### Vice Chair, Finance & Administration, Department of Neurosurgery

Susanne Van Weelden joined MUSC in July of 2018 as the Vice-Chair for the Department of Neurosurgery. Originally from Germany, she made El Paso, Texas her home for eleven years (2009-2016) before moving to Tampa, Florida. She holds a Bachelor of Science in Zoology from North Carolina State University and a Master of Science in Interdisciplinary Studies from the University of Texas at El Paso with a concentration in neuroscience. Susanne also holds a PhD in Human Services with a concentration in Healthcare Administration. Her specific research interests are reducing Health Disparities with particular focus on the Hispanic population, as well as Health Information Technology integration and patient engagement. In her career she was part of opening a new medical school, outfitting basic science and anatomy laboratories, building a campus research office, and integrating clinical trials into ambulatory patient care workflows. She was the Clinical Department Administrator at two Academic Medical Centers prior to her move to Charleston. She has established herself as a leader in improving financial performance and optimizing clinic capacity. Her dedication to academic medicine, patients, providers, and staff is strengthened by her ability to improve processes and workflows to optimize patient experience.



For additional information please contact

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Changing What's Possible