



MEDICAL UNIVERSITY OF SOUTH CAROLINA

musc.edu | musc.edu/research | muschealth.org

musckids.org | hollingscancercenter.org



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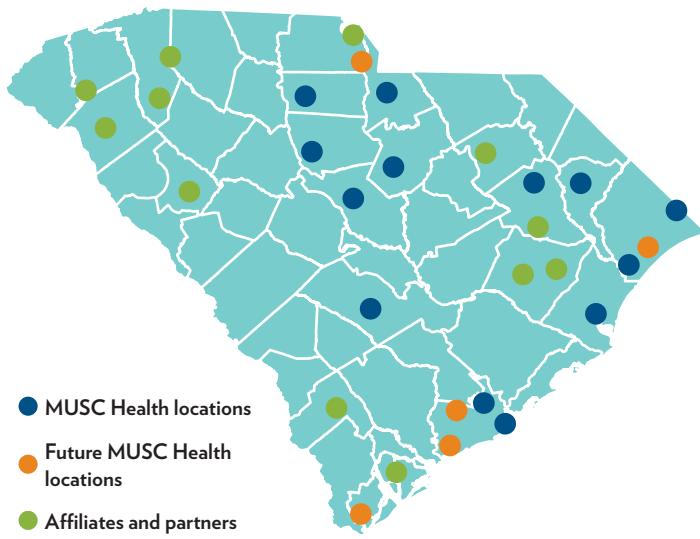
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Lisa K. Saladin, PT, Ph.D.
Executive Vice President for
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GROWTH AND IMPACT



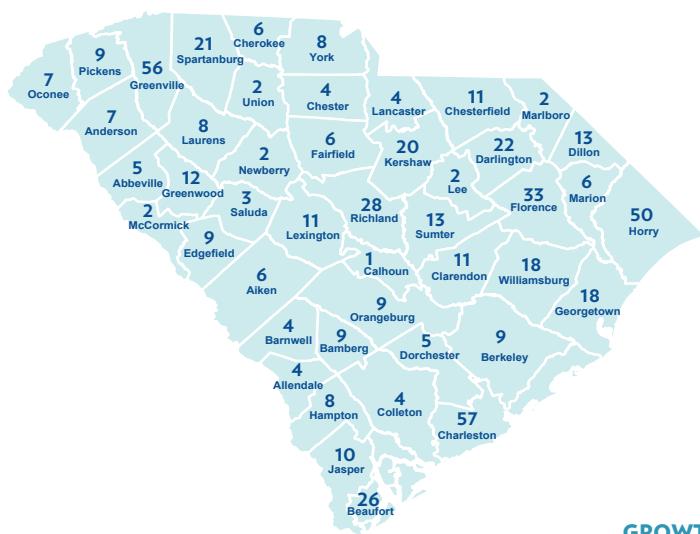
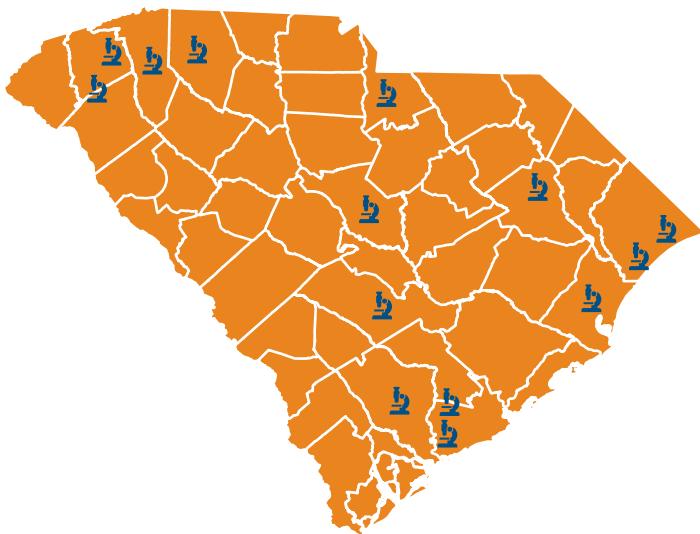
MUSC HEALTH NETWORK OF HOSPITALS, PARTNERS AND AFFILIATES

- Anderson
 - Bluffton
 - Beaufort
 - Camden
 - Carolina Bays
 - Charleston
 - Chester
 - Clemson
 - Columbia
 - Florence
 - Fort Mill
 - Georgetown
 - Greenwood
 - Greenville
 - Greer
 - Hampton
 - Hartsville
 - Indian Land
 - Kiawah/Seabrook
 - Kingstree
 - Lake City
 - Lancaster
 - Marion
 - Murrells Inlet
 - Myrtle Beach
 - North Charleston
 - Orangeburg
 - Summerville
 - Williamsburg
 - Winnsboro

RESEARCH LOCATIONS

Locations where MUSC has an active sub-award or subcontract in place from an extramurally funded sponsored project in FY 2022.

- Charleston
 - Clemson
 - Columbia
 - Conway
 - Florence
 - Georgetown
 - Greenville
 - Lancaster
 - Myrtle Beach
 - North Charleston
 - Orangeburg
 - Pickens
 - Spartanburg
 - Walterboro



TELEHEALTH LOCATIONS BY COUNTY

The map on the left indicates the number of connected endpoints per county in the South Carolina Telehealth Alliance equipped for telehealth services. In calendar year 2022, there were 581 practices receiving SCTA-supported telehealth equipment and/or software.



Sarandeep Huja, D.D.S., Ph.D.
Dean, James B. Edwards College of Dental Medicine



Zoher Kapasi, PT, Ph.D.
Dean, College of Health Professions



Linda S. Weglicki, Ph.D., R.N.
Dean, College of Nursing

Paula Traktman, Ph.D.
Dean, College of Graduate Studies



Terrence Steyer, M.D.
Interim Dean, College of Medicine



Philip Hall, Pharm.D.
Dean, College of Pharmacy



SIX COLLEGES – ONE UNIVERSITY

In calendar year 2021, 984 students earned MUSC health care degrees. Since MUSC's founding in 1824, approximately 40,000 degrees have been conferred. MUSC is home to six colleges, more than 3,000 students, more than 850 residents and a diverse student body, staff and faculty. The colleges of Dental Medicine, Graduate Studies, Health Professions, Medicine, Nursing and Pharmacy comprise the education arm of MUSC. Students earn degrees at the baccalaureate, master's, doctoral and other professional levels.



9,645

Applications
processed



1,316

Full-time
faculty members

532

Part-time
faculty members



850

Residency training
opportunities for graduate-
level health professionals



13,863

Hours of student-
volunteer service to
local organizations

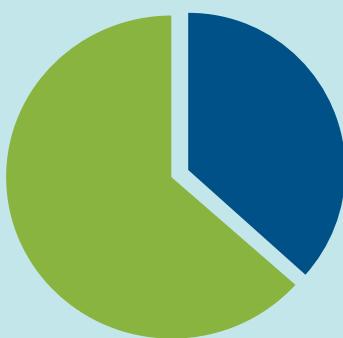


59%

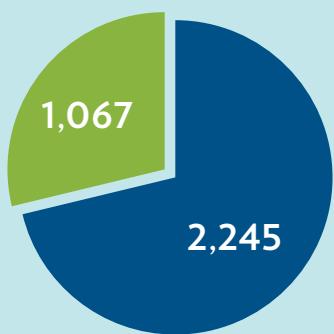
Of all living alumni remain
in state and contribute to
the state's economy

Student Demographics

Male	1,002
Female	2,310

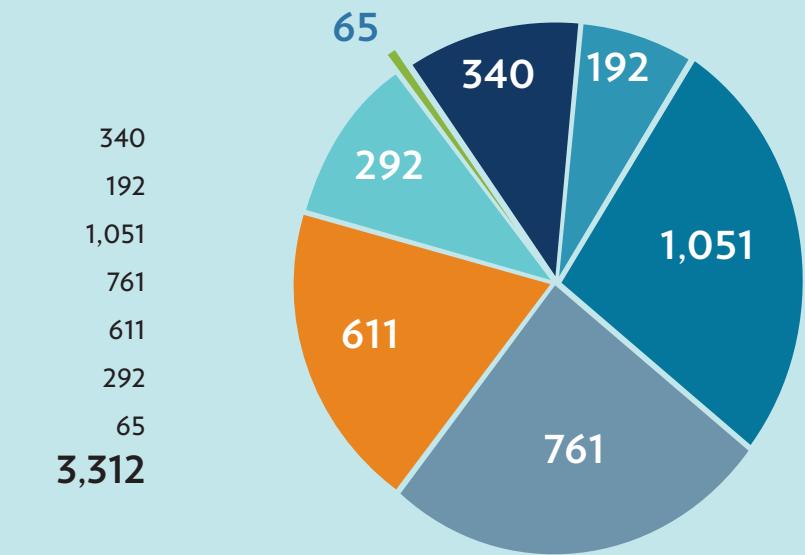


In state	2,245
Out of state	1,067



Enrollment by College

College of Dental Medicine	340
College of Graduate Studies	192
College of Health Professions	1,051
College of Medicine	761
College of Nursing	611
College of Pharmacy	292
Non-degree	65
TOTAL STUDENTS	3,312



James B. Edwards College of Dental Medicine

- Founded in 1967, this is the state's only college of dental medicine. Students are trained in oral health sciences, oral rehabilitation, oral and maxillofacial surgery, pediatric dentistry, orthodontics and stomatology.
- Residency programs are offered in endodontics, orthodontics, oral surgery, periodontics and general, pediatric and digital dentistry.
- Due to being a national leader in digital dentistry, a digital dentistry residency program was created in 2020.
- The National Institutes of Health (NIH) and the National Institute of Dental and Craniofacial Research supported the MUSC Dental Research training grant to facilitate oral health research training and a training program with a dual D.M.D./Ph.D. component. MUSC is one of 15 dental schools to offer this program.
- Students may participate in training and clinical programs throughout the state and provide care in outreach clinics across S.C.



1,347

Applications submitted

127

Students accepted



2,739

College of Dental Medicine living alumni

College of Graduate Studies

- Founded in 1965, the College of Graduate Studies educates highly sought-after biomedical and behavioral scientists at master's, doctoral and postdoctoral levels.
- Students are exposed to innovative research through collaborative programs including MS or Ph.D. degrees in biomedical sciences, an NIH-funded Medical Scientist Training Program M.D./Ph.D. with the College of Medicine, a D.M.D./Ph.D. program with the College of Dental Medicine and a Pharm.D./Ph.D. program with the College of Pharmacy.
- The Summer Undergraduate Research Program (SURP) offers undergraduate students the opportunity to work closely with faculty members on biomedical research projects.
- Students underrepresented in the sciences may participate in research opportunities such as the NIH-funded Post-baccalaureate Research Education Program (PREP).
- The certificate course, Entrepreneurship in the Biomedical Space, helps researchers to learn how to put into action the knowledge arising from scientific discoveries.



1,813

**College of Graduate Studies
alumni utilizing advanced
degrees as leaders in academia,
government and research**

College of Health Professions

- Founded in 1966, the College of Health Professions offers 12 programs that are top ranked in the U.S. for residential and online/hybrid formats.
- The following programs are highly ranked by U.S. News & World Report: Occupational Therapy – 13th, Health Administration – 20th, Physical Therapy – 20th, Nurse Anesthesia – 29th.
- In 2021, the college opened the Neurologic Rehabilitation Institute. The multidisciplinary facility, offering occupational, physical and speech therapy, is a joint operation with MUSC Health.
- The school is ranked 4th in NIH funding among U.S. colleges of health professions.



18.1%

**Underrepresented
minority students in
the current student
body.**

College of Medicine

- Founded in 1824, the College of Medicine was the first medical school in the southern U.S. and the 10th medical school in the nation. It is the largest medical school in South Carolina.
- The college was awarded more than \$263 million through more than 998 awards for extramural research funding in FY 2021 and is ranked 23rd among public institutions for NIH funding.



850

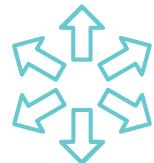
**College of Medicine
residents and fellows**

- The college's clinical faculty members support MUSC's clinical operations through MUSC Health. By way of the 18 clinical departments, faculty members and other clinical staff provide inpatient and outpatient care at MUSC's downtown campus and satellite locations.
- A national leader on many fronts, the college boasts a diverse student body – 20% versus the 15% national average. The American Association of Medical Colleges ranks the college in the 96th percentile for the percentage of graduates who are Black/African American.
- The M.D. curriculum incorporates a sequence of interprofessional education experiences to prepare students for real-world practice and includes a community-service thread that teaches students about social determinants and disparities.
- There are more than 9,400 alumni throughout the state, country and beyond.



740

Medical students



100%

Residency match
rate in 2022

College of Nursing

- The second oldest nursing education program in the U.S., the College of Nursing matriculates more DNP and Ph.D. students than any other nursing school in S.C.
- Nearly half of the college's students receive their educations and trainings through academically and technologically advanced online programs.
- In 2022, U.S. News & World Report listed the Accelerated Bachelor of Science program No. 1 in S.C. and No. 23 in the country, and the RN-BSN program No. 3 in Best Online Bachelor's Programs.
- The college currently ranks 28th in NIH funding among U.S. colleges of nursing.
- Faculty members are leaders in palliative care education, and all students complete End-of-Life Nursing Education Consortium training. The college launched the nation's first DNP in Lifespan Palliative Care in 2020 and in 2022 launched MUSC's first digital badge in Palliative Care.



600+

Students educated
by the College of
Nursing each year

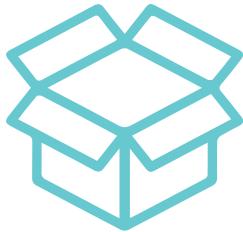
College of Pharmacy

- Founded in 1881, the College of Pharmacy is home to two research centers with renowned endowed chairs.
- The most recent U.S. News & World Report rankings listed the MUSC College of Pharmacy in the top 25% - 31st out of the 134 schools listed, 144 total in the U.S.
- In 2022, the College of Pharmacy opens a new state-of-the-art facility located on the MUSC Horseshoe in the heart of campus.



2%

Five of the college's
research faculty rank
in the top two% of
researchers worldwide



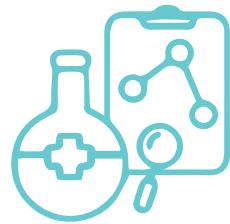
35

Startup
companies



2,790

Articles published by MUSC
researchers in calendar year 2021



875

Ongoing
clinical trials



534

Domestic and
international patents



~\$328 M

Research funding
in FY 2021

MUSC RESEARCH

MUSC leads the state in biomedical research funding with a record \$328+ million in extramural grant funding, with some \$93+ million in NIH grant funding and \$69 million in grant funding related to COVID-19. The Medical University is home to one of only 60 Clinical and Translational Science Award (CTSA) hubs in the nation and the state's only NCI-designated cancer center.

The CTSA program supports the university's ability to translate scientific discovery into innovative and beneficial health care treatments, medicines and devices and is a catalyst in reshaping biomedical research in South Carolina.

Key areas of research at MUSC include cancer, addiction sciences, drug discovery, health disparities, inflammation and fibrosis, neuroscience, oral health, rehabilitation and stroke.



Recent Research Highlights

- MUSC received \$69 million in total funding for COVID-19-related grants and contracts. This includes funds from federal and corporate sponsors; IQVIA phase III AstraZeneca vaccine trial; ICON clinical research; PPD development; and state-federal Coronavirus Aid, Relief, and Economic Security (CARES) Act flow down.
- As a national emerging leader in digestive and liver disease, MUSC was awarded \$16.5 million in NIH funding to open two new integrated centers: the Digestive Disease Research Core Center, supporting the research of established scholars, and the Center for Biomedical Research Excellence in Digestive and Liver Disease, which mentors early-career investigators working to become independent scholars.
- An \$8 million 5-year grant was awarded from the National Institute of Minority Health and Health Disparities to establish the Transdisciplinary Collaborative Center in Precision Medicine and Minority Men's Health at MUSC. Doctors select treatments that are most likely to help patients based on a genetic understanding of their diseases.
- The NCI awarded a \$3 million grant to Hollings Cancer Center's immunotherapy research team to advance work on a novel immunotherapy combination to treat lung cancer.
- Researchers are collaborating with the MUSC Health islet cell transplant program to solve a major challenge of the transplant procedure – the most potent Type 1 diabetes therapy. The program, which is home to one of 20 clean labs in the U.S. and performs the second most islet cell transplants in the world, is currently challenged by an insufficient number of islets and islet apoptosis after transplantation.
- MUSC researchers have identified a gene mutation associated with Hypermobility Ehlers-Danlos Syndrome (hEDS), paving the way for the discovery of therapeutic strategies for the improved identification and treatment of the disorder. hEDS is thought to affect one in 1,000 people, causing hypermobile joints, joint dislocations, easy bruising, internal bleeding, heart valve problems and more. Mutations in some 20 genes have been found to be responsible for some of the 13 subtypes of EDS, but the gene associated with the most common subtype, hEDS, has remained unknown until now.



MUSC HEALTH

MUSC Health, the clinical enterprise of the Medical University of South Carolina, is dedicated to the pursuit of changing what's possible in health care.

This innovative integrated health care system includes four hospitals in downtown Charleston, more than 750 outreach locations, clinical affiliations with other hospitals and health systems and a robust telehealth network.

The MUSC Health University Medical Center has been named South Carolina's #1 hospital by U.S. News & World Report for seven years in a row and most preferred hospital by the National Research Corporation.

In 2021, U.S. News & World Report ranked three MUSC Health specialties among the best in the country: ear, nose and throat; gynecology; and cancer. Seventeen other programs are considered "high performing" specialties, procedures or conditions. MUSC Health Florence Medical Center was designated "high performing" in four specialties or programs.



South Carolina's only
transplant program



Patients from outside
the Tri-county area



751
Care locations



1,300+
Attending physicians



2,500
Beds throughout
the health system



581
South Carolina Telehealth
Association supported sites



1 Million+
Patient encounters
each year



54,000+
Annual patient
admissions

MUSC Health – Charleston Division

The MUSC Health – Charleston Division has worked to provide better community access and local care in the greater Tri-county region as well as coastal communities to the north and south of Charleston. This enables better capacity at the flagship, specialized and complex-care facilities downtown while enhancing overall accessibility and continuity of care for patients and families. This includes adding four new multispecialty ambulatory care platforms in West Ashley, North Charleston and Mount Pleasant since 2019. In addition, a new community hospital is planned.

MUSC Health – Florence Division

MUSC Health Florence Medical Center is a leading regional acute-care facility providing care in all major specialties. It is home to the first chest pain center in the region to have been accredited by the Society of Cardiovascular Patient Care and a primary stroke center that is recognized by the Joint Commission.

MUSC Health Marion Medical Center provides inpatient, outpatient, diagnostic, medical, surgical and emergency care. It is Joint Commission accredited and includes Mullins Nursing Center.

MUSC Health – Lancaster Division

MUSC Health Lancaster Medical Center is an Accredited Chest Pain Center, as designated by the American College of Cardiology, and a Joint Commission-designated Primary Stroke Center. These accreditations demonstrate the center's commitment to achieving the country's highest standards in cardiac care and stroke.

As the only hospital in Chester County, MUSC Health Chester Medical Center offers an intimate experience where close-knit teams serve their local community.

MUSC Health – Midlands Division

MUSC Health added the Midlands Division in August of 2021. This division includes locations in downtown Columbia, Northeast Columbia, Fairfield County and Kershaw. The addition of these locations provides greater connectivity throughout the state, strengthens preexisting relationships, increases training opportunities and brings clinical trial opportunities and critical care to the heart of South Carolina.

Affiliates and partners

The MUSC Health Affiliate Network extends MUSC Health's mission locally, regionally and globally. This network continues to expand and currently includes:

- › AnMed Health
- › Bayada Home Health
- › Beaufort Memorial
- › Carolina Pines
- › Clemson University
- › College of Charleston
- › Doctors Care
- › Encompass Health
- › Fetter Health Care Network
- › Greenwood Genetic Center
- › Hampton Regional
- › Regional Medical Center of Orangeburg
- › Self Regional Healthcare
- › Tidelands Health
- › Towns of Kiawah and Seabrook
- › Tribe513
- › University of South Carolina and Francis Marion University

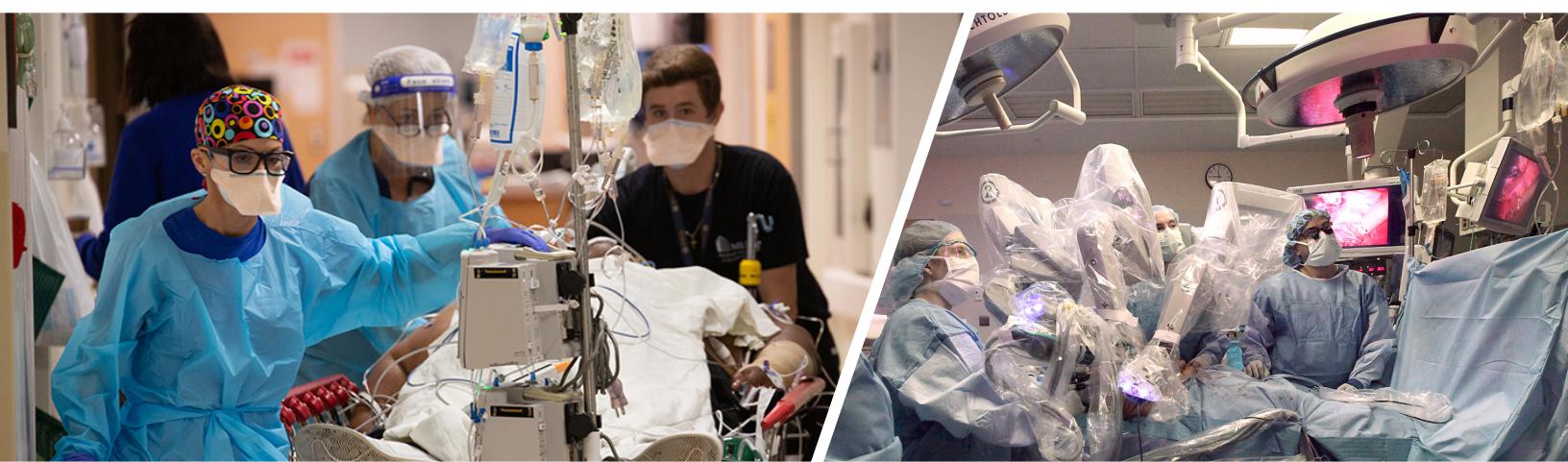


MUSC Children's Health

- MUSC Children's Health is South Carolina's most comprehensive system of preventive and clinical care, delivering evidence-based pediatric health services from the fetal stage through the teen years.
- Four pediatric specialties – cardiology and heart surgery, cancer, nephrology and gastroenterology and GI surgery – are ranked in the top 50 in the country by U.S. News & World Report for 2021-2022.
- With the state's only nationally recognized children's hospital, MUSC Children's Health is expanding access to specialized pediatric care through a growing network of outreach locations across the state as well as through the South Carolina Telehealth Alliance.
- In 2020, the MUSC Shawn Jenkins Children's Hospital and Pearl Tourville Women's Pavilion opened. This state-of-the-art building transforms how care is delivered, seamlessly integrating pediatric care with obstetrical services by combining the latest technological advances, patient- and family-centered design and excellence in medicine.
- The MUSC Shawn Jenkins Children's Hospital has 250 licensed beds. More than 80 of these are found in the neonatal intensive care unit, the largest in the state.

MUSC Hollings Cancer Center (HCC)

- HCC is one of 71 National Cancer Institute (NCI)-designated cancer centers, and the only one in South Carolina, and the largest academic-based cancer research program in the state.
- HCC comprises more than 120 faculty cancer scientists with an annual research funding portfolio of more than \$44 million targeted at reducing the cancer burden in our state and beyond.
- An interprofessional team of more than 60 specialists offers state-of-the-art diagnostic capabilities, surgical techniques and therapies, including more than 200 clinical trials.
- Hollings is expanding its reach across the state, particularly to medically underserved communities, through more clinical care sites, and has a team dedicated to providing statewide prevention and screening initiatives, including a mobile health cancer screening unit and a mini-mobile HPV van.
- In 2021, U.S. News & World Report ranked Hollings one of the top 40 cancer care providers in the country.



MUSC Neurosciences

- MUSC is the first Joint Commission-Certified Comprehensive Stroke Center in S.C. It has a dedicated Neurosciences intensive care unit; is the state's only Parkinson's Foundation Center of Excellence; is the first Level 4 Epilepsy Center in the state, the highest designation given by the National Association of Epilepsy Centers; and is recognized as an ALS-Certified Treatment Center of Excellence Program.
- The MUSC Health Teleneuroscience Program partners with 39 hospitals to offer teleneurology and telestroke care, placing 96% of South Carolinians within 30 minutes of 24/7 emergent stroke care.
- MUSC is a national leader in the use of revolutionary minimally invasive surgery technology that is quicker, requires less time under anesthesia and speeds recovery for brain and spine surgery patients.

MUSC Heart and Vascular Center (HVC)

- The MUSC HVC offers the most heart disease treatment options in S.C. It is a Blue Cross Center of Distinction for Heart Transplantation, an Optum Center of Excellence and a LifeTrac 'Select' Adult Heart Transplant Center.
- MUSC offers more than 50 clinical trials of new drugs, devices and approaches to heart disease.
- HVC cardiologists and heart surgeons provide the highest level of specialization for all types of heart problems, including heart failure, heart valve problems, arrhythmias and interventional and surgical procedures. They treat complex cases with lower rates of complications and readmissions than national averages.
- As a trusted partner of international device makers in testing new devices, MUSC pioneers more devices than any other heart center in South Carolina.

MUSC Health Center for Telehealth

- The MUSC Health Center for Telehealth is a National Telehealth Center of Excellence, one of two in the nation.
- The center provides over 100 telehealth services to 381 sites across South Carolina. Care settings include hospitals, schools, community clinics and other facilities.
- MUSC is the headquarters of the South Carolina Telehealth Alliance (SCTA), a network of organizations advancing telehealth throughout S.C.
- In 2020, MUSC Health redeployed equipment to monitor COVID-positive and suspected COVID-positive in-patients remotely, decreasing the number of times care team members needed to enter patients' rooms. This reduced health care worker exposure, preserved PPE resources and saved an estimated \$190,000 costs in PPE.

About MUSC

Founded in 1824 in Charleston, MUSC is the state's only comprehensive academic health system, with a unique mission to preserve and optimize human life in South Carolina through education, research and patient care. Each year, MUSC educates more than 3,000 students in six colleges – Dental Medicine, Graduate Studies, Health Professions, Medicine, Nursing and Pharmacy – and trains more than 850 residents and fellows in its health system. MUSC brought in more than \$327.6 million in research funds in fiscal year 2021, leading the state overall in research funding. MUSC also leads the state in federal and National Institutes of Health funding, with more than \$220 million.

For information on academic programs, visit musc.edu.

As the health care system of the Medical University of South Carolina, MUSC Health is dedicated to delivering the highest quality and safest patient care while educating and training generations of outstanding health care providers and leaders to serve the people of South Carolina and beyond. Patient care is provided at 14 hospitals with approximately 2,500 beds and five additional hospital locations in development, more than 350 telehealth sites and connectivity to patients' homes, and nearly 750 care locations situated in all regions of South Carolina. In 2021, for the seventh consecutive year, U.S. News & World Report named MUSC Health the No. 1 hospital in South Carolina.

To learn more about clinical patient services, visit muschealth.org.

MUSC and its affiliates have collective annual budgets of \$4.4 billion. The nearly 25,000 MUSC team members include world-class faculty, physicians, specialty providers, scientists, students, affiliates and care team members who deliver groundbreaking education, research, and patient care.

The Medical University of South Carolina (MUSC) is South Carolina's only comprehensive academic health system. Our purpose is to preserve and optimize human life in South Carolina and beyond. MUSC provides an interprofessional environment for learning, discovery and healing through (1) education of health care professionals and biomedical scientists, (2) research in the health sciences and (3) provision of comprehensive health care.

CONTACT US

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- Office of Diversity, Equity and Inclusion 843-792-1072

