in Columbia. Affiliated hospitals are the Byrnes Center for Geriatric Medicine, Education, and Research, the Dorn VA Medical Center, the Greenville Hospital System, the William S. Hall Psychiatric Institute; Moncrief Army Hospital; and Palmetto Richland Memorial Hospital. The school also collaborates closely with state agencies involved in health service delivery.

The University of South Carolina School of Medicine emphasizes research partnerships with affiliated hospitals and agencies to direct investigations to areas of greatest potential health benefit. The Centers of Research Excellence, a joint interdisciplinary venture with Palmetto Richland Memorial Hospital, includes research centers focused on cancer, cardiovascular disease and stroke, biomedical ethics, and primary health care. The Rural Primary Care Education Projects in Winnsboro, Kershaw, and Bennettsville, S.C., serve as centers for research on rural health care delivery, including telemedicine.

Innovative research on geriatric health care and child and community mental health issues is under way in cooperation with the Byrnes Center for Geriatric Medicine, Education, and Research and the William S. Hall Psychiatric Institute. Other areas of research strength include developmental disabilities, neuroscience, infectious diseases and immunology, inflammation, cardiovascular disease, cancer, tissue engineering and reproductive biology and endocrinology.

Degree Programs

**Ph.D. and MS, Biomedical Science**

Designed to train students for careers in teaching and research, the doctoral program in biomedical science is an interdisciplinary program with participation of the basic medical science Departments of Pharmacology, Physiology, and Neuroscience; Cell and Developmental Biology and Anatomy; and Pathology, Microbiology and Immunology.

The Biomedical Science PhD program at the School of Medicine is a component of the Integrated Biomedical Science Graduate Program at the University. This is a cooperation between the graduate programs of the Schools of Medicine and Public Health (Exercise Science), the Departments of Biology, Chemistry (Biochemistry) and Psychology and the South Carolina College of Pharmacy (Basic Pharmaceutical Science). Doctoral students are admitted to the integrated program and pursue required common core courses. They also carry out up to three laboratory rotations from a choice of more than 80 laboratories in the participating departments.

Students who choose to work with a mentor from the School of Medicine transfer to the School's Biomedical Science Graduate Program for the remainder of their graduate studies. The curriculum includes elective courses and seminars as well as supervised laboratory research. The program's size of approximately 40 students provides extensive student/faculty interaction.

The purpose of the MS program is to provide broadly based interdisciplinary training in biomedical science to individuals who wish to expand or change their educational background and training to fulfill personal, pre-professional, or other career advancement goals. This two year program consists of one year of core courses with a heavy emphasis on biochemistry and molecular and cellular biology and one year of research which can either be laboratory- or library-based.

**Certificate of Graduate Study in Biomedical Studies**

This one-year certificate program offers advanced graduate level training in a number of areas of biomedical sciences. It is designed for
individuals seeking to enhance further their background in the basic health sciences prior to entry into professional schools including medical, dental, veterinary and osteopathic medicine schools. This program is not intended to provide undergraduate-level training in pre-medical course work needed to get admission into medical or professional schools. Instead, the program is designed to make postbaccalaureate students more competitive for admission through extensive graduate-level course work in the areas of physiology, pharmacology, biochemistry, cell and molecular biology, and neuroscience along with several other elective courses in the biomedical sciences. In addition, students will take courses in the ethics of medical science, MCAT (or similar) preparation and the preparation of a professional school application. Completion of the certificate requires 18 credit hours at the graduate level with required courses and additional electives.

Master of Science, Genetic Counseling
The master's program in genetic counseling prepares genetic counselors to work with families at risk for genetic disease or birth defects. Graduates are also involved in teaching, research, and administrative aspects of this growing field. The curriculum includes course work and internship opportunities at the University of South Carolina, the Medical University of South Carolina, the Medical College of Georgia, the Greenwood Genetic Center, the Carolinas Medical Center in Charlotte, Savannah Perinatology Associates, UNC-Chapel Hill, Fullerton Genetic Center, the Duke University Medical Center, and Emory University. The first of its kind in the Southeast and one of only 32 in the United States, the genetic counseling master's program is accredited by the American Board of Genetic Counseling.

Master of Nurse Anesthesia
The master's program in nurse anesthesia trains registered nurses to develop, implement, and evaluate the anesthetic care of patients. Cosponsored with Palmetto Richland Memorial Hospital and Greenville Hospital System University Medical Center, the program includes both course work and clinical experience. The master's program in nurse anesthesia is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs. Graduates are eligible for certification by the Council on Certification of Nurse Anesthetists.

Master of Rehabilitation Counseling with a specialization in Clinical Rehabilitation Counseling
The master's program in Counseling and Rehabilitation with a specialization in Clinical Rehabilitation Counseling provides professional training that prepares counselors to assist individuals with physical, psychiatric, developmental, and cognitive disabilities, those with substance use disorders, as well as persons from other disadvantaged groups. The curriculum includes both classroom and field-based experiences. Most graduates pursue careers with the S.C. Departments of Vocational Rehabilitation and Mental Health, as well as community agencies, various substance abuse programs, and private practice. The program is accredited by the Council for Accreditation of Counseling and Related Educational Programs.

Certificate of Graduate Study in Psychiatric Rehabilitation
This cross-disciplinary program provides focused training in the area of psychiatric rehabilitation to meet a need for trained professionals with specialized knowledge and skills in assisting individuals with severe, long-term mental illnesses in securing and maintaining employment. Individuals with training in vocational rehabilitation have not typically been trained in working with mental illness, and individuals with expertise in mental health issues are not typically trained in vocational rehabilitation. This program presents a unique opportunity to address this need for professionals who are cross-trained to work with both mental health issues and vocational concerns. Key content areas of study in the certificate program include the characteristics of severe long-term mental illnesses, assessment, treatment, rehabilitation methods, and the recovery process. All course work is available on campus or online in distance education format.

Programs
- Biomedical Sciences, M.S.
- Biomedical Sciences, Ph.D.
- Biomedical Studies, Certificate
- Counseling and Rehabilitation, M.A.
- Genetic Counseling, M.S.
- Medicine, M.D.
- Nurse Anesthesia, M.N.A.
- Nursing Anesthesia, D.N.P.
- Physician Assistant Studies M.S.P.A.S.
- Psychiatric Rehabilitation, Certificate