History

There have been a large number of significant clinical research accomplishments carried out by the faculty of Tulane. The world's first repair of an aortic aneurysm was performed at Charity by Tulane's renowned surgery chairman, Dr. Rudolph Matas. Lethion or sulfuric ether was first introduced at Charity in 1848 as an anesthetic, and the South's first blood transfusion was given at Charity in 1854 using one of its physicians as a donor. X-rays or skiagraphs were initially introduced at Charity less than a year after Roentgen's discovery in 1895. Members of the medical faculty such as Dr. Aristes Agramonte and Rudolph Matas, were members of the famed Reed Commission that paved the way for final acceptance and proof of the mosquito transmission theory of yellow fever in 1905. Dr. George Burch, Chairman of Medicine at Tulane University made several discoveries related to the beneficial role of climate and bed rest on myocardial infarction and of the deleterious effects of alcohol and viruses on the production of cardiomyopathy. Other important advances in cardiology were made by Drs. Edgar Hull and Richard Ashman with regard to their correlation of electrocardiographic changes in myocardial infarction with left ventricular hypertrophy based on autopsy findings of patients at Charity Hospital. Perhaps some of the more internationally known advances were made by Dr. Gerald Berenson at Tulane who initiated long-term studies on the natural history and development of atherosclerosis. These studies helped identify a large number of risk factors for myocardial infarction and showed that atherosclerosis was a disease that made its first appearance in very young individuals. Indeed, large numbers of patients both at Charity Hospital and in the small town of Bogalusa, Louisiana, are still being followed as part of Dr. Berenson's renowned NIH-funded "Bogalusa Heart Study." Dr. Berenson is a member of the CRCA Internal Advisory Committee. A large number of chemotherapeutic and antifungal agents used in major invasive fungal diseases such as Histoplasmosis and Blastomycosis were also first tested clinically on special Charity Hospital infectious disease wards by Drs. Harry Dascomb and John Seabury. This special infectious disease service was initiated by the famed Dr. Lewis Thomas when he was Head of Infectious Diseases Unit at Tulane Medical Center in the 1940's. Bagassosis, an important form of hypersensitivity pneumonitis of world-wide distribution, was first discovered and treated (and later prevented) by Drs. J. Salvaggio, J. Seabury, and H. Buechner of Tulane and LSU Medical Schools. Hundreds of these patients were
studied, many on the clinical and research wards of Charity Hospital. The first regional perfusion therapy to deliver chemotherapy intravenously to a localized area of tumor growth (malignant melanoma) was performed at Charity by Dr. Edward Krementz. Drs. Alton Ochsner and Michael DeBakey were the first to report an excess incidence of lung cancer in patients who were heavy cigarette smokers. These studies were based on patients studied during their tenures as head of Tulane's Department of Surgery. The earliest prototypic heterologous monkey kidney transplants were first performed at Charity Hospital by Dr. Keith Reemtsa of Tulane's Department of Surgery. These rudimentary transplants pioneered the later successful human kidney transplants by this group and others. Blood from sickle cell patients at Charity Hospital was used by Dr. Linus Pauling, in cooperation with Dr. George Burch, in making the famed discovery of the amino acid differences between SS and AA hemoglobin in this disease. The environmental form of asthma, known as New Orleans Epidemic Asthma, which at one time was the most important public health respiratory problem in the United States was described by Dr. J. Salvaggio. Other important forms of occupational asthma caused by simple low molecular weight chemicals or host proteins altered by chemicals, such as isocyanates and anhydrides were first studied by Dr. Salvaggio.

Clearly the most important research done at Tulane was that of Dr. Andrew Schally of Tulane University, who received the Nobel Prize in 1977 for his discoveries relating to the synthesis and biologic function of hypothalamic releasing hormones. Other Tulane physicians who played an important role in this research were Drs. Cyril Bowers, Abba Kastin, Akira Arimura and David Coy. These individuals, all of whom continue to be active at Tulane, have also made internationally acclaimed discoveries in the broad area of sequencing and biologic activity of various polypeptide neurohormones that affect the physiology of multiple organ systems, especially the brain, pancreas and reproductive organs. More recently, with the recruitment of Dr. Paul Whelton from Johns Hopkins to Tulane, where Dr. Whelton is the Senior Vice-President for the Health Sciences, an internationally recognized program of clinical research in hypertension has been established. Dr. Whelton is also very experienced in clinical research training. While at Johns Hopkins, he was the director of the Welch Center for Prevention, Epidemiology and Clinical Research, the Outpatient General Clinical research Center, and the community-based PRO-Health Research Center at the Johns Hopkins Medical Institutions in Baltimore. More recently, Dr. Darwin Prockop, an internationally recognized leader in gene therapy and stem cell research and a member of the National Academy of Science, has been recruited to Tulane and is the Director of the Tulane Gene Therapy Program.