



Banner Good Samaritan Medical Center



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Neurosciences

Outstanding capabilities in surgery, research, patient care and specialized services are the hallmarks of one of Arizona's leading Neurosciences programs, located at Banner Good Samaritan Medical Center.

Neurologists and neurosurgeons at Banner Good Samaritan have been an invaluable resource to referring physicians throughout the state for decades. Recently, Banner Good Samaritan strengthened its Neuroscience programs with the addition of a Comprehensive Neuroservices Program and being designated as a "Primary Stroke Center" by The Joint Commission.

Further, neuroscience researchers in Alzheimer's disease and spinal cord injury at Banner Good Samaritan have caught the attention of the national medical community and the national press with breakthrough research.

Banner Good Samaritan is one of a few hospitals in the nation that served as a neurosurgical teaching site for Activa Parkinson's Control Therapy. This therapy involves placing an electronic device in the brain to eliminate or diminish the effects of severe tremors and rigidity, which are associated with Parkinson's disease and Essential Tremor disease. Early in 2003, neurologists at Banner Good Samaritan became some of the first in the nation to conduct movement disorder exams through Telemedicine.



Banner Good Samaritan is a leader in the treatment and care of stroke, Parkinson's disease, ALS, neuropathy, essential tremor, spinal cord injury and other neurological conditions.

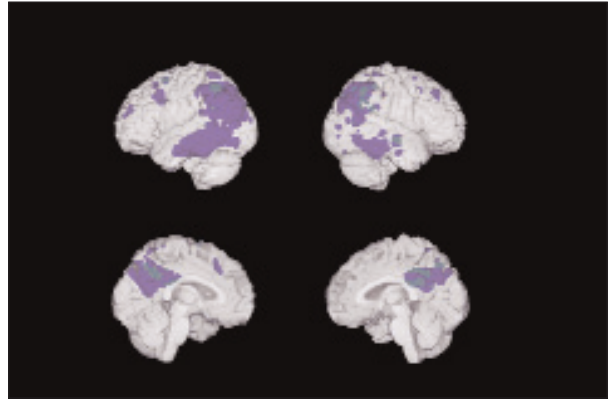
Neurosurgery is an essential element of Banner Good Samaritan's Level I Trauma program, which is one of the busiest in the state. Neurosurgery is supported by two neuro intensive care units, which are staffed by nurses highly experienced and trained in the most complex neuro cases. This neuro ICU service was established more than 30 years ago.

The Banner Good Samaritan Stroke Center in the Main Tower offers specialized care that can minimize the damage caused by a stroke. Stroke patients, as well as head injured and spinal cord injured patients, rely on the Banner Good Samaritan Rehabilitation Institute for a variety of therapies and programs designed to return patients to their full potential for independent living.

Movement disorders, such as Parkinson's disease, Essential Tremor, Muscular Dystrophy and ALS (Lou Gehrig's disease) are among the leading causes of neurological disability in the United States. The Comprehensive NeuroServices Program inside the Banner Good Samaritan Rehabilitation Institute was established to care for persons with neurological disorders that affect a person's ability to speak, eat, move, and complete simple daily tasks. Our excellent therapy team is able to assist patients who have specialized seating/mobility needs, and augmentative communication needs.

The goal of this program is to provide excellent patient care with special emphasis in meeting the needs of persons with neurological disorders, their families, and caregivers with the resources to live well with the disease by optimizing the medical, surgical and therapeutic treatments. The program is available Monday-Friday. For more information, please call (602) 839-6533.

Neuroscience research in Alzheimer's disease and spinal cord injury has brought international attention to Banner Good Samaritan. Recently, research conducted in the Banner Good Samaritan PET Center has detected the earliest known brain changes in people at risk for Alzheimer's disease.



Research conducted at Banner Good Samaritan indicates that young adult carriers of a common Alzheimer's susceptibility gene have reduced brain activity (in blue) in the same locations as elderly patients with the disease (in purple).

Brain abnormalities were detected in healthy young adults carrying a common susceptibility gene for Alzheimer's, more than four decades before the possible onset of memory and thinking problems. Research directed by Richard Herman, MD, and conducted at Banner Good Samaritan has led to two paralyzed individuals regaining the ability to walk through a combination of partial weight-bearing therapy and the electrical stimulation of the spinal cord.

In Focus

Banner Good Samaritan Receives "Primary Stroke Center" Designation

Stroke is the leading cause of adult disability and the third leading cause of death in the United States. Also called "brain attack," stroke occurs when a blood vessel in the brain develops a clot or bursts.

Because time is an important factor in the treatment of stroke, The Joint Commission has designated eight Arizona hospitals, including Banner Good Samaritan, as "Primary Stroke Centers." By instituting stroke protocols, stroke patients can receive accurate diagnoses and efficient care, crucial for time-sensitive treatment. This is particularly important in cases of ischemic stroke, which is caused by a blocked artery in the brain. Treatment with tPA, a clot-busting drug, increases recovery after ischemic stroke, but the drug must be administered within three hours of the onset of symptoms. Cooperation and quick diagnosis by the emergency workers now results in faster recognition, transport and treatment of stroke patients.

The Banner Good Samaritan Stroke Center offers the latest in medical care, including lytic (clot dissolving) therapy, neuroprotective medication and other new drugs. These treatments may minimize damage that occurs as a result of the attack and maximize rehabilitation in the later stages of care. We also regularly participate in national research trials in order to offer our patients the latest options in the treatment of stroke.

Our multidisciplinary team consists of emergency physicians, neurologists, radiologists, physiatrists, and specially-trained nursing and rehabilitation staff that allows for continuous care during the diagnosis, treatment, recovery and rehabilitation process. Coordination of services is important because the best recovery may be dependent on rapid identification and medical intervention.