Scripps Clinic and Scripps Green Hospital are committed to offering the highest quality of treatment and care to our community. Our team of expert physicians aims to restore the health and wellness of our patients, working together from diagnosis to recovery.

To enhance their efforts and improve patient care, Scripps Clinic and Scripps Green Hospital will invest in a new biplane angiography suite. This innovative equipment will significantly impact patient care across several fields of medicine, including interventional radiology, neurosurgery, neurology, peripheral vascular diseases, and oncology.

The sophisticated system provides simultaneous high-resolution, X-ray images from two different angles, allowing physicians to see minute details of the brain or other parts of the body and assess damaged or abnormal blood vessels. This capability is especially important when treating critical conditions, such as a stroke or brain aneurysm.

The biplane technology also allows physicians to visualize abnormalities in three dimensions, enabling complex and unpredictable conditions to be treated with minimally invasive procedures. For our patients, this means less risk of damage to adjacent tissue, as well as a quicker recovery.
Navigating Unpredictable Territory
Advanced Technology Guides Physicians through Difficult Procedures

Imagine taking a winding drive along the Pacific Coast Highway without any signs to direct your trip or warn you about narrow passes, steep hills and curving cliffs. You could appreciate the views, but may find your travels to be extremely difficult. Your experience would be dramatically different if you had a global positioning system (GPS) to guide your journey.

In the field of medicine, biplane angiography equipment offers physicians a similar transformational experience. Biplane is like a navigation system for the body, leading physicians and surgeons through difficult procedures by allowing them to visualize abnormalities, such as vascular malformations or tumors, in three dimensions.

The biplane angiography suite at and Scripps Clinic and Scripps Green Hospital will provide our renowned specialists with vital information to help navigate the tiniest blood vessels in the brain, heart, abdomen, or extremities. Featuring two, moveable X-ray arms, it generates enhanced images from separate angles, instantly projecting X-ray movies for physicians to view during diagnostic, vascular and surgical procedures.

“The biplane technology will enable our physicians to repair aneurysms, open clogged arteries, or restore blood flow during a stroke and stop blood supply to a tumor – quickly, using minimally invasive techniques and without open surgery,” says Richard H. Walker, M.D., Chairman of the Department of Surgery at Scripps Clinic and former Chief of Staff at Scripps Green Hospital.

“Using the X-ray images like a GPS, physicians can maneuver delicate catheters through small, thin blood vessels to problems areas in the brain and heart,” says Richard H. Walker, M.D., Chairman of the Department of Surgery at Scripps Clinic and former Chief of Staff at Scripps Green Hospital.
Room with a View
Biplane Angiography Suite Offers Surgeons a Window into the Brain

Providing two, simultaneous X-ray images, the biplane angiography suite at Scripps Clinic and Scripps Green Hospital will enable our neurosurgeons to view the fine details of the brain. This is extremely beneficial to patients with life-threatening conditions, such as arteriovenous malformation, or AVM.

AVM is a tangle of unnecessary arteries and veins located in the brain. For some people, the condition results only in headaches. But for others, it causes bleeding into the brain.

Conventional neurosurgical treatment has required opening the skull and controlling the blood flow into the cluster of arteries and veins. This procedure is extremely complex and dangerous, given the sensitivity of the brain.

However, treatment of AVM has been made safer, quicker, and more widely applicable with biplane technology. Using biplane angiography, our specially trained neurosurgeons are better able to perform a minimally invasive procedure to remove the AVM. Watching biplane X-ray movies, the surgeons can guide a catheter to the malformation in the brain, visualize it in three dimensions and block the blood flow to the AVM.

Enhancing Lifesaving Care

In many cases, the biplane system allows physicians to provide faster, less invasive treatment for many life-threatening conditions, such as:

**Aneurysms:** The exact location of an aneurysm, or balloon-like bulge in a blood vessel, can be pinpointed and repaired by inserting multiple, tiny metal coils to the area through a small catheter in the leg. Physicians can also dissolve or retrieve clots that cause brain aneurysms – without opening the skull.

**Clogged Arteries:** Physicians can more quickly and precisely position a stent to open a blocked artery.

**Strokes:** Advanced imagery can guide physicians as they thread a fine catheter through blood vessels to break up stroke-causing clots and restore blood flow in the brain.

**Tumors:** A delicate needle can be directed to drain fluid or take a biopsy for diagnostic examination. Chemotherapy can be delivered through a catheter to precisely target a cancerous tumor.

With the biplane angiography suite at Scripps Clinic and Scripps Green Hospital, diagnostic and surgical procedures can be performed more quickly and with an even greater degree of safety for our patients.
How You Can Help

A biplane angiography suite at Scripps Clinic and Scripps Green Hospital will enable our physicians to assess and treat life-threatening conditions, often without open surgery. The speed of equipment’s dual X-ray capabilities reduces the length of many procedures by nearly 50 percent. It also significantly reduces patient exposure to radiographic dye during imaging.

Additionally, the advanced technology will attract renowned physicians to practice their specialties at our hospital.

“Many leading surgeons are trained to perform innovative treatments using the biplane, and recruitment can be difficult without the technology,” says Richard H. Walker, M.D. “It’s like trying to attract the best violinist without having an orchestra.”

Built on a foundation of philanthropy, Scripps Clinic and Scripps Green Hospital rely on the dedication of generous people like you to help us provide the latest medical advancements, state-of-the-art technology and lifesaving care to our community. With your partnership, our legacy of excellence will continue.

Together with your support, Scripps Clinic and Scripps Green Hospital will invest in a new biplane angiography suite and expand our scope of services in interventional neurology, cardiology, radiology, and oncology. The estimated cost to develop the suite is $5 million.

For more information about how you can make a gift to benefit the biplane angiography suite for Scripps Clinic and Scripps Green Hospital, please call 858-554-3046.