



## ECHOCARDIOGRAPHY

Echocardiography is the study of the heart using ultrasound technology. It is a non-invasive test that allows for a real time evaluation of cardiac structure and function. To perform this test the patient is laying on their side on a specially designed table that allows the heart to be imaged from below the patient. Usually the patient does not need to be shaved for this study. Alcohol and conducting gel are used to create adequate contact with the chest wall. An ultrasound probe is used to acquire these real time images. The veterinary cardiologist acquires the images, interprets the images, allowing for immediate results for the owners. Many of our medical management recommendations are based on this non-invasive imaging modality. We routinely perform 2 dimensional imaging, m-mode measurements, color and spectral Doppler on all of our patients.

Color and spectral Doppler are imaging modalities used during an echocardiographic study of the heart. Color Doppler color encodes the red blood cells allowing us to detect direction and velocity of blood flow. This allows us to determine abnormal flow patterns in the heart (like a leakage of blood through a valve). Spectral Doppler measures the velocity of blood flow. This has many applications in determining if the blood flow is moving at an appropriate velocity. It also assists in determining the severity of some lesions.

