

Cardiology Service

Services We Offer

Diagnostic and Medical Management of Cardiovascular Disorders

Medical services include basic and advanced diagnostic procedures as well as intensive and state-of-the-art care for animals with heart disease.

- Electrocardiography (ECG), 24-hour ambulatory ECG (Holter) recording and event monitoring for long-term monitoring of cardiac rhythm disorders.
- Echocardiography, including two- and three-dimensional (3D) color flow and tissue Doppler echocardiography, contrast and strain echocardiography and both two- and three dimensional transesophageal echocardiography.
- Computed Tomography with three-dimensional rendering and cardiac gating for state-of-the-art evaluations of dogs and cats with pericardial disease, cardiac tumors, pulmonary hypertension, thromboembolic disease and other complex vascular and cardiac disorders.
- Angiography and Cardiac Catheterization performed either as a diagnostic procedure or to accomplish minimally invasive repair of congenital or acquired heart diseases.
- Treatment of acute and chronic heart failure in dogs and cats. Common diseases causing heart failure in dogs and cats include degenerative valve disease causing mitral and tricuspid valve insufficiency, cardiomyopathy, heartworms, and pericardial effusion.
- Management of pulmonary hypertension, heartworm disease, and pulmonary thromboembolism leading to right heart failure (cor pulmonale).
- Management of systemic hypertension (high blood pressure) which is particularly common in older cats.
- Management of chronic cardiac rhythm disorders including atrial fibrillation and ventricular arrhythmias.

Equine Cardiology

Virtually all of the diagnostic procedures used in dogs and cats are also available for the diagnosis of heart disease in horses. Management advice is available for horses with heart murmurs of uncertain cause, for horses with structural heart disease (congenital or acquired), and for horses with cardiac arrhythmias, including atrial fibrillation.

Interventional Cardiology

One of the highest priorities of our cardiology service is the performance of minimally-invasive procedures varying from the implantation of cardiac pacemakers to the repair of select congenital heart defects.

- Temporary and Permanent Transvenous Pacemaker Implantation - a variety of modern pacing modalities that are customized to the particular needs of individual patients. Common indications for pacemaker implantation in companion animals includes high-grade atrioventricular(AV) block and sick sinus syndrome.
- Balloon Dilation of Valvular Stenosis - most commonly pulmonic stenosis, one of the three most common congenital heart defects of dogs.
- Patent Ductus Arteriosus (PDA) Closure - using a variety of available closure devices chosen to meet the circumstances of the individual patient.
- Heartworm Extraction - for patients with large worm burdens or other medical conditions precluding the use of available heartworm adulticides.
- Vascular Foreign Body Retrieval - removal of intravenous catheters dislodging to the heart or pulmonary circulation.
- Vascular plug occlusion - of the arteries causing guttural pouch hemorrhages in horses with guttural pouch mycosis.

Cardiovascular Surgery

Cardiovascular surgical procedures available through our surgery service include:

- Closed-heart surgery - performed on the beating heart to correct acquired or congenital cardiac disorders. Some examples include partial and subtotal pericardiectomy, PDA ligation, and outflow tract patch grafting for pulmonic stenosis.
- Inflow occlusion - brief procedures performed during a short period of circulatory arrest for the removal of obstructing lesions and certain tumors.
- Thoracoscopic surgery - a minimally invasive surgical method useful for treating dogs and cats with certain pericardial diseases and other select disorders.

Faculty, Technicians and Residents in Training

Support Faculty: Dr. David Sisson (ACVIM-Cardiology), Dr. Katherine Scollan (ACVIM-Cardiology), Dr. Milan Milovancev (ACVS), Dr. Susan Stieger (ECVR)

Cardiology Service Technical Staff: Amy Berry (CVT), Robyn Panico (CVT, AIMVT -Cardiology)

Cardiology Residents in Training: Dr. Nicole LeBlanc, Dr. Courtney Smith