

Cardiovascular Pathophysiology Core (with Cardiovascular Medicine)

MMPC - Cardiovascular Pathophysiology Core

Keywords: [cardio complications](#) [cardiovascular disease](#) [cardio](#) [Core](#) [disease](#) [blood pressure](#) [complications](#) [phenotypes](#)
[echo](#) [telemetry](#) [injury](#) [myocardial](#)

[Expand](#)

The objective of the Cardiovascular Pathophysiology Core (CPC) is to provide investigators at Vanderbilt and outside institutions a cost-effective means to accurately assess cardiovascular phenotypes in mouse models of diabetes and metabolic disease. The CPC uses validated approaches and state-of-the-art instrumentation that allow for sensitive screening of phenotypic variations. For many studies, multiple measurements can be coordinated with the other Cores of the MMPC: for example, non-invasive serial echocardiographic and blood pressure determinations during a period of high-fat feeding or other environmental stress, measuring the metabolic response to exercise on a subset of mice, and histologic evaluation on sacrifice. The CPC also offers several surgical techniques to induce myocardial injury (infarction, aortic banding, and ischemia/reperfusion injury).

Contact information:

Richard Gumina, Ph.D., Director

2220 Pierce Avenue, PRB 383

Vanderbilt University Medical Center Nashville, TN 37232

Office: 615-936-586.

Email: richard.gumina@vanderbilt.edu

Cardio Lab: Preston Research Building, Room 383

Staff:

[Lin Zhong, Ph.D.](#)

Services

[Cost for Investigator-initiated research](#)

[Cost for Industry-initiated research](#)