



DALTON CARDIOVASCULAR RESEARCH CENTER

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**Focused on Understanding the Cardiovascular System
During Development, Aging, & Disease**

Through Interdisciplinary Collaboration in Research and Teaching with Academic and Industry Partners

Competencies in Cardiovascular Biology and Medicine

- In vivo and in vitro study of the circulation
- Microcirculation
- Cardiac development and pathology
- Neural and humoral control of the circulation
- Angiogenesis in cancer
- Disease models
- Live cell imaging
- Ion channels
- Cellular transport mechanisms
- Molecular modeling

Core Facilities and Experimental Approaches

- Fluorescence microscopy
- Confocal and multiphoton microscopy
- Atomic force microscopy
- 3D imaging and reconstruction
- In vivo microscopy
- High resolution ultrasound and photoacoustic imaging
- Brain slice imaging
- Neuronal tracking
- Patch clamp
- Molecular and cell biology

