

## **MOUSE AORTIC SMOOTH MUSCLE CELL ISOLATION**

The Redox Molecular Signaling Core utilizes a matrigel invasion and two-step purification protocol to isolate mouse aortic endothelial cells. To initiate Mouse Aortic Endothelial Isolation, contact the Redox Molecular Signaling core facility at [RedoxMolSignalCore@lsuhsc.edu](mailto:RedoxMolSignalCore@lsuhsc.edu) and schedule a meeting with Core Leaders to discuss the project timeline and deliverables.

### To be provided by investigator:

- A completed Work Order Form brought to the meeting with Core Leaders.
- The investigator will schedule a 2 hour block of time to facilitate smooth muscle isolation by transferring freshly euthanized mice (3-4 mice, <10 weeks of age) to the Redox Molecular Signaling Core technicians.
- The investigator will determine whether transformation will be performed in addition to the cell isolation service. Due to limited population doublings for primary mouse smooth muscle cells (10-12 passages), transformation is recommended (See VASCULAR CELL TRANSFORMATION SOP).

### To be generated by the core:

- The core facility will return one 60 mm cell culture dish (p2) of isolated mouse aortic smooth muscle cells at >90% purity based on staining for endothelial (ICAM1, VE-cadherin, CD31) and smooth muscle marker genes (SMA).

Timeline: 2-3 weeks primary; 3-4 weeks with transformation