A Postdoctoral Research Fellow position is open in the laboratories of Drs. William Chilian and Liya Yin in the Heart and Blood Vessel Disease Group at Northeast Ohio Medical University. The research topic broadly addresses the role that bone marrow stem cells play in the growth of coronary collaterals. The studies include the creation of chimeric rats, survival surgeries to produce a model of coronary collateral growth, echocardiographic analyses of cardiac function and myocardial perfusion, confocal and 2-photon imaging to track stem cell homing, molecular analyses, laser capture microscopy (with single cell transcriptional analyses) and 3-dimensional cryo-micro-tomography. A background with in vivo measurements and molecular analyses is preferred.

DUTIES: The specific project will be finalized to the fellows expertise as well as considerations for career advancement and professional development. The fellow is given flexibility to refine and improve the experimental approaches. Developing the ability to analyze molecular pathways that underlie both the role and the fate of the stem cells in the coronary vasculature is central to the goals of the projection. It is expected that the postdoctoral fellow will interact in a with the other members of the laboratory and will be engaged in other projects in the laboratories.

QUALIFICATIONS: Highly motivated applicants with a PhD degree in physiology, pharmacology, molecular biology, or bioengineering, and a strong interest in coronary collateral growth (arteriogenesis) and angiogenesis are invited to apply.

Annual Salary: $43,000

Start Date: February 1, 2019

NEOMED is an Equal Opportunity Employer