# Postdoctoral Fellow – Cardiovascular and corneal repair and regeneration

## **Research Description**

Our research approaches combine molecular and cellular biology, biochemistry, and animal studies to investigate **A.** the molecular pathways that improve survival of cardiac, muscular and corneal tissues following injury and **B.** the novel factors that promote tissue repair and regeneration. The long term goal of our research is to develop effective means for treatment of human diseases, such as corneal injury, myocardial infarction and muscular dystrophy.

The postdoc will drive the projects to make discoveries in above mentioned projects. Techniques include gene manipulation (CRISPR/Cas9 gene editing, subcloning, mutagenesis, etc), biochemical analysis, live cell imaging (iPSC derived cardiomyocytes, skeletal muscle cells and corneal epithelial cells), proteomic analysis and animal microsurgeries (stem cell transplantation, myocardial infarction, and other surgeries in genetic modified mouse models).

### Required Skills:

- Recent PhD or MD/PhD with strong motivation and background in molecular biology, biochemistry, imaging and animal handling.
- Publications in any 3 of the following: biochemistry, cell biology, molecular biology, and animal studies.
- Excellent verbal/written communication skills in fluent English.
- Independent self-starter, who thrives in a highly interactive, collaborative scientific environment.

#### Benefits:

- A competitive annual salary (NIH scale) will be available based on experiences
- Other benefits, including health insurance and retirement plan will be included

#### How to Apply:

Send a single PDF document that includes all of the following:

- Your current CV
- 3 recent reference contacts.

#### Email the PDF document to Dr. Hua Zhu at Hua.Zhu@osumc.edu

Hua Zhu
Professor
Department of Surgery
Davis Heart and Lung Research Institute
The Ohio State University Wexner Medical Center