The Molecular Cardiology Research Institute (MCRI) of Tufts Medical Center seeks a highly motivated researcher with experience working with rodents, to coordinate and perform experimental studies of pharmacologic treatments for heart failure. The successful applicant will work closely with the Principal Investigators on a variety of research projects using state of the art mouse models of cardiac hypertrophy and failure, as well as biochemical, molecular, and cell-biologic assays, and to address clinically relevant questions in cardiovascular biology. The research team’s goal is to identify new therapeutic targets to prevent or treat cardiovascular diseases in humans. As needed, the individual will be required to develop protocols independently and establish new methodologies in the laboratory. Competitive applicants will ideally hold an advanced scientific degree (M.S., or above) and able to commit to a long-term position.

PRINCIPAL DUTIES AND RESPONSIBILITIES INCLUDE:

• Work as part of one or more project teams, and remain proficient in designing, managing and performing experiments.
• Perform cardiac function studies including echocardiography in mice.
• Drug administration to mice by oral gavage and intraperitoneal injection.
• May perform model mouse surgery in collaboration with the MCRI animal surgeon.
• Collect and analyze data, and deliver experimental research reports when necessary with guidance from the PIs for collaborative research projects.
• With guidance from the PIs, produce scientific manuscripts for publication in peer-reviewed journals, and present research data in house and in scientific conferences.
• Write as well as assist in the preparation of applications for external grants for research and fellowships.
• Assist in general lab organization and maintenance, supply ordering and liaising with infrastructure departments.
• Learn new skills such as vascular function studies in mouse models using wire and pressure myography.

KNOWLEDGE, SKILLS AND ABILITIES:

1. Minimum of M.S. in biochemistry, cell biology, microbiology, or bioscience degree program.
2. Experience in molecular biology techniques and animal research experience is desired.
3. Excellent organizational and communication skills are essential.
4. Desire and ability to learn new procedural skills in mouse such as ex vivo vascular function studies and cardiac myocyte isolation.
5. Ability to coordinate and organize in vivo protocols and studies with large numbers of mice.

The Molecular Cardiology Research Institute (MCRI) is an internationally known institute with several principal investigators studying diverse topics of molecular medicine. Please visit our website at: www.tuftsmedicalcenter.org/mcri.