About the Microsurgery Core

- The Microsurgery Core is located at 300 E. Superior Street, Tarry Bldg 11th Floor, Chicago, IL 60611. It is a component of the Comprehensive Transplant Center (CTC) under the direction of Dr. Jenny Zhang who has twenty years of experience in microsurgery and transplant immunology. There are three other microsurgeons with expertise in microsurgical techniques and a senior technologist with extensive experience in animal care and handling in the team.

- The Microsurgery Core is dedicated to assisting investigators with a central resource for creating mouse and rat models of tissue and organ transplantation. It provides a valuable and unique research opportunity for translational research from animal studies to human diseases.

- We offer a wide variety of complex surgical procedures in rats and mice that may otherwise be difficult or time-consuming for those investigators without specialized skills, personnel and proper equipment. In addition to the microsurgery service, we offer microsurgery training and technique assistance for faculty, staff, fellows and students whose work requires microsurgical manipulations in live animals.

Mission

1. To provide high quality microsurgical services to all investigators in the Feinberg School of Medicine and larger Northwestern University research community.

2. To develop innovative animal models that advance ongoing studies or to enhance investigators exploration of novel ways to test their hypotheses in vivo.

3. To provide technical training and consultation on issues pertaining to microsurgical techniques.

Services

The Microsurgery Core currently provides the following services to the investigators of the CTC as well as other investigators in Northwestern University. Investigators will be responsible for the costs incurred for their projects and prior animal protocol approval.

- Small Animal pre-clinical transplant models:
  - Kidney transplantation
  - Small Intestinal transplantation
  - Pancreatic transplantation
  - Ovarian transplantation
  - Skin transplantation
  - Aortic transplantation
  - Cardiac transplantation (abdominal or cervical)

- Non-transplant surgical procedures:
  - Intestine resection – model of short bowel syndrome
  - Liver/kidney ischemic/reperfusion or resection models
  - Thymectomy
  - Cavopulmonary anastomosis – model of arterial malformation

We are always interested in developing new models and collaborations, and will attempt to accommodate any proposed project, large or small.

Getting Started

Initiating a project with the Core is simple and easy.

- Just contact Dr. Jenny Zhang at zjzhang@northwestern.edu or 312-503-1682

- For additional information, please email CTC@northwestern.edu or visit the CTC’s web site by going to www.feinberg.northwestern.edu/transplant/cores/microsurg.html

Facts about the Core

- Located on Tarry Building 11th Floor In Northwestern University Feinberg School of Medicine, the facility contains state-of-the-art operating microscopes including two Zeiss OPMI® operating microscopes with dual binocular heads, along with an animal intensive care unit. Other separate areas designated as animal prep, animal autopsy and tissue sampling areas.

- Served all interested investigators in Northwestern University community for years, performed more than 2000 small animal surgical procedures with high success rate. Helped Principal Investigators to secure funding support from various funding agencies including the National Institutes of Health.

- Provides training for students and fellows at all levels in Northwestern University Feinberg School of Medicine, as well as trainees from other institutions.