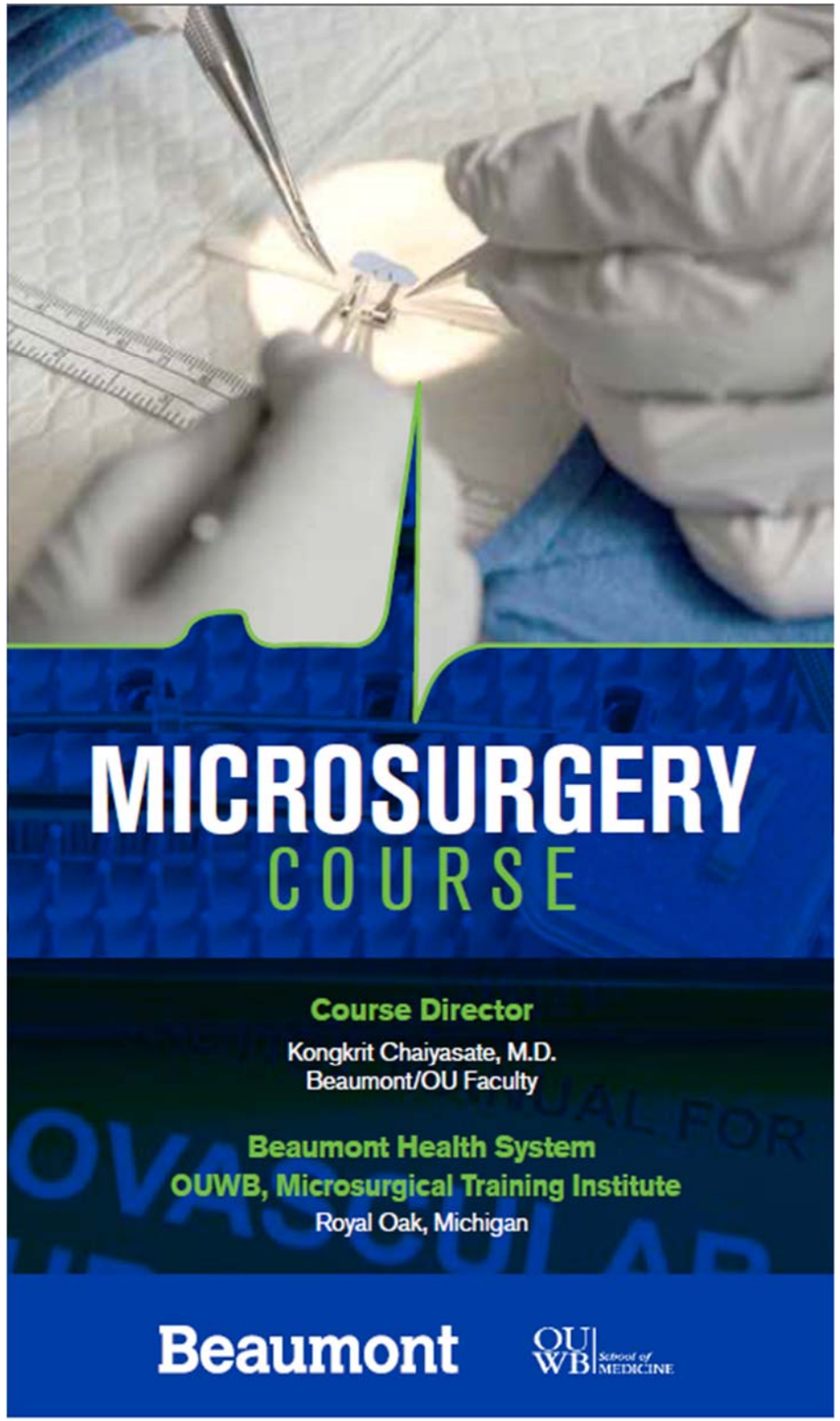


Course Description

Beaumont's Microvascular Surgery Skills Training Courses focus on skill development in the use of microvascular surgical techniques. Limited to four attendees per session, the courses allow each attendee to receive extensive, individualized training. Instruction incorporates demonstrations, microvascular skills practice and detailed handouts. Choose from the **Basics Microsurgery Course**, which introduces the fundamental skills and techniques required for microsurgical dissection, anastomosis and neurovascular repair, or the **Advanced Microsurgery Course**, which builds on the skills learned in the basic workshop and incorporates more difficult scenarios in the day-to-day training.

Intended Audience

The microsurgery courses are designed for practicing surgeons, residents and fellows in surgical programs that utilize micro-vascular procedures. In addition, physician's assistants, research personnel and other members of the surgical team assisting in microvascular procedures will benefit.

Course Overview

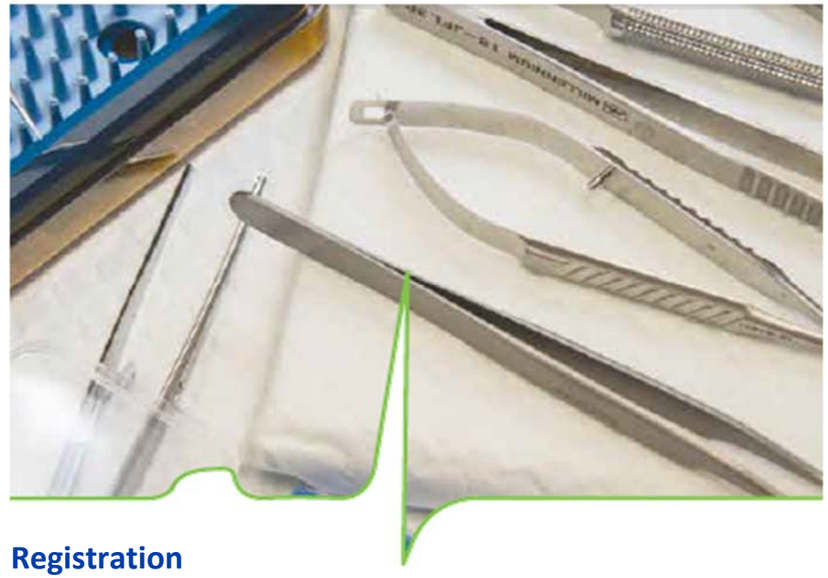
The microsurgery training courses utilize anesthetized rats and are held in a dedicated training laboratory in the Research Institute at Beaumont Hospital. The instructor of the microsurgery laboratory is a licensed veterinary technician supervised by Kongkrit Chaiyasate, M.D. The teaching approach is to demonstrate key techniques and then to foster students' independent skill development, with assistance and appraisal available whenever needed. Teaching is supplemented with video lectures before each practical session. Each day has specific objectives, goals, and practical tasks.

Location

Courses are held in the Oakland University William Beaumont Microsurgery Training Institute, located in the Research Building on the Beaumont, Royal Oak campus.

Questions?

Contact Natasha Conner (Natasha.conner@beaumont.org) or Brooke Taylor (brooke.taylor@beaumont.edu)



Registration

Basic Microsurgery Course $1,000

Advanced Microsurgery Course $1,500

The registration fee includes tuition, CME credits, and training materials. Space is limited to 4 attendees per course. A letter of confirmation will be sent upon receipt of payment and completed registration forms. Three (3) weeks prior to registration, a Beaumont Occupational Health form must be completed and submitted.

To schedule your week of instruction, visit
https://beaumont.cloud-cme.com
Click Live Conferences and search Microsurgery.

Cancellation Policy

Cancellations must be submitted in writing at least seven days prior to the course date; all cancellations will be assessed a $275 administrative fee. To cancel a registration, email Natasha Conner, Microsurgery Technician, at Natasha.conner@beaumont.org. No refunds will be given after that date. Beaumont reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Beaumont must cancel or postpone the course, Beaumont will refund the registration fee but is not responsible for any related costs, charges or expenses to participants, including fees assessed by airline, travel, or lodging agencies.

BASIC MICROSURGERY COURSE

Five-day program focused on skill development in the use of microvascular surgical techniques

Course Description

During the intensive five-day (40-hour) course, the fundamental skills and techniques required for microsurgical dissection, anastomosis, and neurovascular repair are introduced. Upon course completion, students should be better able to: explain how to properly use an operating microscope; demonstrate skills necessary to complete microvascular anastomoses, which include end-to-end arterial, end-to-end venous and end-to-side and interpositional vein grafts; and demonstrate skills necessary to complete nerve coaptation utilizing neurotubes.

Procedures Taught

Use of the surgical microscope • Basic suturing techniques using a plastic model • End-to-end arterial anastomoses utilizing femoral artery of the rat (1mm diameter): forehand suturing technique, backhand suturing technique, one-way-up suturing • End-to-end venous anastomoses utilizing femoral vein of the rat (1.3 mm diameter) • Interpositional vein graft • Peripheral nerve repair (sciatic nerve) • End-to-side anastomosis: end of the femoral artery to the side of the femoral vein. • Practical test: arterial and venous anastomoses within 2 hours

Upon course completion, students receive a certificate and manual on microvascular and microtubular surgery to complement the program.

Program Schedule

Day 1 | Students view three videos on the mental approach to microsurgery and an overview of the microscope and the handling of microsurgical instruments. The videos are followed by a practical session on forehand and backhand suturing on a glove under the microscope in various orientations, using 10-0 nylon suture material. Once students are comfortable, they watch another video demonstrating a two-stay suture end-to-end arterial anastomosis technique. The practical session for the afternoon consists of dissecting out femoral vessels and an end-to-end arterial anastomosis of a femoral artery of 1 mm diameter. This is their first experience operating under the microscope, a grueling process, both mentally and physically.

Day 2 | Students view two videos on "one way up" arterial anastomosis and end-to-end venous anastomosis. The practical session that follows entails completing as many anastomoses as possible on this day; each completed segment is assessed for patency and critiqued on quality of repair. Moreover, as each microscope is connected to a large screen monitor, the instructor provides feedback and tips as students operate.

Day 3 | Students complete their most technically difficult task in the form of an inter-positional vein graft using the femoral artery and epigastric vein.

Day 4 | Students complete video observation then a practical session on end-to-side anastomosis of the femoral artery to the femoral vein and peripheral nerve (sciatic) repair. Varying levels of proficiency means a variable amount of free time is left during which the students are encouraged to practice as much as they want— with no limits placed on rats or materials. At this stage the students feel extremely comfortable operating under the microscope and handling tissue at a microscopic level.

Day 5 | The final day comprises an open practice session followed by a skill evaluation, entailing completion of arterial and venous anastomoses within two hours.

ADVANCED MICROVASCULAR SURGERY SKILLS TRAINING COURSE

Focused on skill development in the use of advanced microvascular surgical techniques

Course Description

The Advanced Microsurgery Course is focused on advanced skill development in the use of microvascular surgical techniques. Upon course completion, students should be better able to: refine skills with end-to-side anastomosis of sciatic nerve and fallopian tube; successfully raise a free flap and complete microvascular anastomosis with confirmed patency, complete microvascular repair of the sciatic nerve, and perform successful end-to-end anastomosis with confirmed patency.

Procedures Taught

Free muscle flap • Free tissue transfer • End-to-end anastomosis • End-to-side anastomosis

Questions?

Contact **Natasha Conner** (natasha.conner@beaumont.org) for questions regarding the course or scheduling or **Brooke Taylor** (brooke.taylor@beaumont.edu)

Program Schedule

Day 1 | Back to basics. Lifelike vessels (silicone) are utilized to perform anastomosis. Advancement to use of the rat for end-to-end femoral arterial anastomosis and, end-to-end femoral vein anastomosis, culminates with euthanization of the rat at the end of the course.

Day 2 | Utilizing the rat, we progress toward end-to-end carotid artery anastomosis and end-to-end bypass using arterial graft. The rat is euthanized at the end of the course.

Day 3 | Utilizing the rat, practice is performed on creating a groin free tissue flap. The rat is euthanized at the end of the course.

Day 4 | Utilizing the rat's superficial epigastric artery and vein, a groin free tissue flap is created. The rat will be euthanized at the end of the course.

Day 5 | Students are required to successfully matriculate through testing using proficient return demonstration of one of the procedures outlined during the course of this program. Students are provided 2.5 hours to complete anastomosis. Once complete, students are free to continue to practice anastomosis. Varying levels of proficiency allows for various amounts of free time. Students are encouraged to practice during this time with no limits placed on rats or materials.