

PROGRAM SCHEDULE

A typical schedule, which will vary dependent upon the experience of the individual participants, would consist of:

Day 1

The first day starts with three videos on the mental approach to microsurgery and an overview of the microscope and the handling of microsurgical instruments.

The videos will be followed by a practical session on forehand and backhand suturing on a glove and fresh chicken thigh 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 will be their first experience of operating under the microscope and it proves to be grueling, both mentally and physically.

Day 2

Day two starts with 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 in that 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

On day three, the students are forewarned to expect the technically most difficult task in the form of an interpositional vein graft using the femoral artery and epigastric vein.

Day 4

Day four follows the now familiar routine of video then practical session, this time 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.

Days 5

The fifth and final day comprise an open practice session followed by a skill evaluation, entailing completion of arterial and venous anastomoses within two hours. At the end of the course the students are given a certificate and a manual on microvascular and microtubular surgery to complement the program.

PROGRAM

Beaumont’s Basic Microsurgery Course is intended to provide participants with the necessary skills to perform vascular anastomoses of small blood vessels. Proper use of the operating microscope, microsurgical instruments and suture will be taught. All surgical procedures are performed in the laboratory on the rat femoral artery and vein model. Assessment of proper technique includes not only the critique and instruction provided by the instructor, but also direct observation of vessel patency after a 12-24 hour period. Records are kept of all surgical outcomes.

BASIC MICROSURGERY COURSE

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

COURSE DIRECTOR

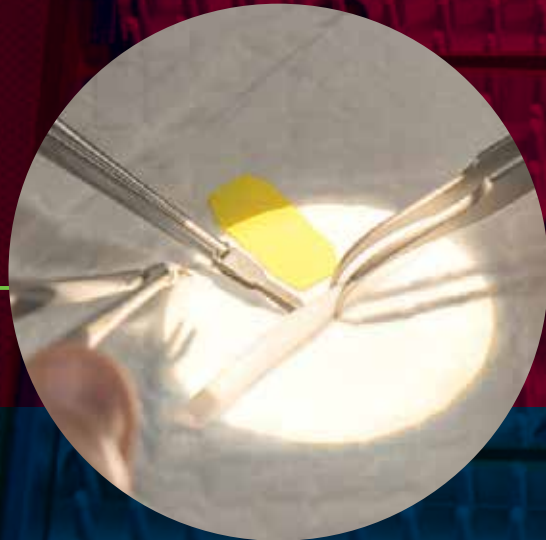
Kongkrit Chaiyasate, M.D.
Beaumont/OU Faculty

BEAUMONT HEALTH SYSTEM
APPLEBAUM SIMULATION LEARNING INSTITUTE

Royal Oak, Michigan

BASIC MICROSURGERY COURSE

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

COURSE DESCRIPTION

Beaumont's Microvascular Surgery Skills Training Course is a five-day program focused on skill development in the use of microvascular surgical techniques. Limited to four attendees per session, the course allows each attendee to receive extensive, individualized training. The instruction incorporates demonstrations, microvascular skills practice and detailed handouts.

INTENDED AUDIENCE

This course is designed for practicing surgeons, residents and fellows in surgical programs that utilize microvascular procedures. In addition, physician's assistants, research personnel and other members of the surgical team assisting in microvascular procedures will also benefit.

COURSE LEARNING OBJECTIVES

The aim of any basic microsurgery course is to introduce the fundamental skills and techniques required for microsurgical dissection, anastomosis, and neurovascular repair. The microsurgery training course is an intensive five day (40 hour) course utilizing anesthetized rats and held in a dedicated training laboratory in the Research Institute at Beaumont hospital. The instructor of the microsurgery laboratory is a veterinary technician who will be supervised by Kongkrit Chaiyasate, M.D. The teaching approach is to demonstrate key techniques and then to foster students independent skill development, but with assistance and appraisal being available whenever needed. Teaching is supplemented with video lectures before each practical session. Each day has specific objectives, goals, and practical tasks.



PROCEDURES TAUGHT

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

UPON CONCLUSION OF THIS PROGRAM, PARTICIPANTS SHOULD BE 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.
- Demonstrate skills necessary to complete nerve coaptation utilizing neurotubes.



COURSE DIRECTOR

Kongkrit Chaiyasate, M.D.
Beaumont/OU Faculty

CREDIT

William Beaumont Hospital is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

William Beaumont Hospital designates this live activity for a maximum of 26.0 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Other Healthcare Professionals

A certificate of attendance will be provided to other healthcare professionals requesting credits in accordance with state nursing boards, specialty societies or other professional associations.

LOCATION

This course will be held in the Oakland University William Beaumont Microsurgery Training Institute, located in the Research Building on the Beaumont Hospital Royal Oak campus.

TRAVEL

Detroit Metropolitan Wayne County Airport (DTW) is one of the busiest airports in the United States and among the world's largest air transportation hubs. As the second-largest hub and primary Asian gateway for Delta, the world's largest airline, DTW serves as the SkyTeam™ Alliance's major Midwestern hub. DTW is also a major base of operations for ultra-low cost carrier Spirit Airlines. Together with 14 additional passenger airlines – including four foreign flag carriers – Detroit's airlines and their regional partners offer service to more than 160 non-stop destinations around the globe.

To register visit Meded.beaumont.edu/microsurgery

REGISTRATION

To schedule your week of instruction, please visit our website at Meded.beaumont.edu/microsurgery and register for the week that best fits your schedule.

The registration fee for Attendings, Residents, Staff and Medical Students within Beaumont is \$1,000; outside Beaumont is \$1,500. The registration fee includes tuition and training materials. Accommodations will be made for lunch. Space is limited to four attendees per course. A letter of confirmation will be sent upon receipt of payment and completed registration forms.

CANCELLATION POLICY

If you cancel your registration, your registration fee, less a \$275 administrative fee, will be refunded when written notification is received by Beaumont 7 days prior to the course. You may email Diane Schuch-Miller, Director of the Microsurgery Training Institute, at diane.schuch-miller@beaumont.edu or fax (248-898-2516). 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/lodging agencies.