

Master's degree in reconstructive microsurgery (MRM)

In search of excellence in reconstructive microsurgery

ACADEMIC YEAR: 2024-26

LIFELONG LEARNING MASTER'S DEGREE

RESEARCH AND CLINICAL PART-TIME PROGRAMME

2-YEAR EDUCATIONAL PROGRAMME (120 ECTS)





EXCELLENCE IN MICROSURGERY

HEALTH CARE / EDUCATION / RESEARCH

INTERNATIONAL NETWORK

CONTINUING EDUCATION



WELCOME MESSAGE FROM THE PROGRAM DIRECTORS

We welcome your interest in the Reconstructive Microsurgery European

School. We have designed this International Master's Degree in Reconstructive Microsurgery to provide advanced quality training in microsurgery.

Delivered in a modular format (13 modules), this degree in reconstructive microsurgery allows you to study reconstructive microsurgery with highly qualified faculty who have the expertise to provide you with the training needed to be competitive in the field you have chosen.

Face-to-face modules take place at highly recognized European hospitals.

With training locations around the world, you will have the opportunity to learn through clinical immersion and interaction with some of the bests microsurgery departments with whom have collaboration agreements.

As you read this brochure we trust you will share our enthusiasm and we invite you to consider joining us on this exciting journey.



Prof. Jaume Masià Academic co-director



Prof. Sinikka Suominen Academic co-director

MASTER'S DEGREE OVERVIEW

Microsurgery has become a standard part of all tissue transfer techniques and is an essential component in the most advanced reconstructive procedures, such as vascular anastomosis, lymphatic microsuture and neurorrhaphies. The exponential growth in the use of microsurgical techniques, over the last ten years, especially in plastic surgery, clearly indicates that a skilled microsurgical team is indispensable in all major hospitals.

This International Master's Degree in Reconstructive Microsurgery offers comprehensive, specific training in fields such as breast surgery, brachial plexus, hand surgery, head and neck reconstruction, limb salvage, genitourinary and supermicro- surgery. widen their range of competences and learn new skills. It is officially recognized by the Universitat Autònoma de Catalunya and it is orga- nized in association with a faculty of international renowned experts.

It is addressed to plastic surgeons, surgical specialists without experience in microsurgery, and experienced microsurgeons who want to widen their range of competences and learn new skills.



The program includes specific training modules that cover both theoretical and practical aspects. If trainees complete the program and pass final exams, the acquisition of high level skills is guaranteed. The training program will be individually tailored to the needs of each student. A high level of performance is expected, and quality instruction is guaranteed.

The training centers are state-of-the-art learning facilities, designed and commissioned to meet the need of the modern healthcare professional and to provide excellence as a facility for advanced surgical training.

The clinical immersion program (modules 10,11 and 12) are designed for surgeons who wish to increase their knowledge of a particular procedure in a specialized area such as head and neck, breast, limb and genitourinary microsurgical reconstruction in a more warm and supportive environment.

The majority of time is spent in the operating theatre observing and working with an expert in the chosen specialist area. New techniques and procedures are demonstrated and students are coached through complex dissections on a one-to-one basis.

An on-line campus has been established, and articles, videos, formative evaluation tests, study cases and cross-fire debates are presented. This campus is designed to promote debate among the faculty of world renowned experts and the students, and to provide a platform to discuss key subjects within each surgical specialty.

An update master meeting will be held every 5 years to discuss complex and challenging clinical cases and new developments. It will support and encourage close. The aim of this update meeting is to develop a wide clinical and scientific network that constantly promotes excellence in education and training in institutions throughout Europe.



OBJECTIVES AND COMPETENCES

The course provides learning tools designed to address the key aspects of the reconstructive microsurgery.

- Provide an environment where a qualified, motivated student can gain advanced training in reconstructive microsurgery.
- To promote scientific and critical thinking.
- Perform microsurgical techniques in all major fields: breast reconstruction, head and neck surgery, limb salvage, lymphedema surgery, genitourinary reconstruction and supermicrosurgery.
- Learn and implement supermicrosurgery techniques.
- Analyze and determine the most suitable microsurgical technique for a particular case.
- Analyze needs and indications for transplantation.

- Preoperatively plan all types of microsurgical flaps: myocutaneous flaps, muscular flaps, bone flaps, axial-cutaneous flaps and perforator flaps.
- Master and apply suture techniques in microvascular surgery, lymphatic and anostomosis neurorrhaphy.
- Plan and perform limb replantation procedures.
- Avoid complications and sequelae of reconstructive procedures.
- Approach and perform microsurgical flap salvage techniques.
- Carry out postoperative follow up of microsurgical flaps: monitoring techniques.

THE MRM PROGRAM IS MORE THAN AN ACADEMIC CHALLENGE; IT IS A ONCE-IN-A-LIFETIME EXPERIENCE OF PERSONAL AND PROFESSIONAL DEVELOPMENT

Because Microsurgery techniques are essential in the most advanced reconstructive procedures

SOME OF THE BEST MICROSURGERY UNITS IN THE WORLD HAVE

TEAMED UP To make the **MRM PROGRAM**

AN EXCELLENT OPPORTUNITY TO ADVANCE FOR YOUR CAREER *" Each module of the MRM program provides theoretical and practical knowledge and skills by offering participants a rich set of opportunities to apply their learning in their clinical practice"*

 Highly specialized surgical training promotes professional practice **Prof. Sinikka Suominen** Vice-Director and Adjunct Professor Department of Plastic and Reconstructive Surgery Helsinki University Hospital, Helsinki 5





Enhance your surgical skills and specialize in the field of microsurgery

Expand your career opportunities

Join a prestigious program that offers comprehensive training and mentorship from renowned microsurgical experts.

PROGRAM FORMAT

The program comprises 3 Hands-on modules held in 2 cities - Alicante and Cáceres, 7 on-line modules and the clinical immersion at one of 18 outstanding hospitals from around the world.



CONNECTING YOU TO THE WORLD

THIS MASTER'S DEGREE IS THE PERFECT FIT FOR THE GLOBAL WORLD WE ARE LIVING TODAY

8 MRM

INTENDED AUDIENCE OR PARTICIPANT PROFILE

This master's degree caters for diverse group of individuals from a variety of nationalities and backgrounds. It is especially designed for plastic surgeons and other surgical specialists for whom microsurgery has become an essential component of their practice.

Countries of origin, residence, or nationality of participants to date

- Argentina
 Egypt
 Italy
- Australia• Finland• Libya
- Austria
 France
 Mexico
- Brazil• Germany• Netherlands
- Canada India Norway
- Chile• Indonesia• Kuwait
- Colombia
 Iraq
 Peru
- Cyprus
 Ireland
 Portugal

- Russia
- Saudi Arabia
- South Korea
- Spain
- Sweden
- UK
- USA
- Venezuela

NRM

General class profile

Class size aprox	Average age	Male	Female
25	35	70%	30%

Number of students accepted

A maximum of 35 and a minimum of 9 students will be accepted to the Master's Degree program. The number of students admitted to the parallel Postgraduate Diplomas program will depend on the number of students enrolled in the Master's Degree.

The MRM program includes prominent international faculty and experts in all aspects of microsurgery

THE NETWORK



When you begin the MRM program, you will immediately join a unique group of accomplished professionals. You and your fellow students will learn creatively and critically together. You will develop a community of support and lasting professional relationships with your colleagues and professors, and you will find that the MRM program is more than an academic challenge; it is a once-in-a-lifetime experience of personal and professional development. A master update meeting will be held every 5 years to discuss new techniques and to present new developments. Close interaction between qualified master's degree students and faculty will be encouraged. The aim of this update meeting to create a wider clinical and scientific network that continues to engage in excellence in education and training in institutions throughout Europe.

The philosophy of these sessions is to establish a specialized working group with effective communication between former students and faculty.



ACADEMIC CO- DIRECTORS



" The MRM is a unique program tailored on the specifics of learning: the acquisition of knowledge, and the reframing of a practice. It is an unforgettable life experience. Students agree that there is a before and after MRM"

Chief and Professor of Plastic Surgery Department Hospital de la Santa Creu i Sant Pau (Universitat Autonoma de Barcelona).



"Students will have the opportunity to study the modules and the issues which they are interested in, depending on their wills and objectives in the future."

Vice-Director and Adjunct Professor Department of Plastic and Reconstructive Surgery Helsinki University Hospital, Helsinki



UCATIONAL BOARD



Claudio Angrigiani MD

Current Appointment

President MARKO FOUNDATION Buenos Aires Argentina • Member of the scientific committee GOLAM (latinoamerican group of oncoplastic surgery)

Medical Education

- Medical Doctor University of Buenos Aires School of Medicine
- Rotating Internship Lutheran Medical Center Brooklyn New York USA
- Surgical Resident Medical College of Ohio USA

Training in Plastic Surgery

- University of El Salvador Buenos Aires
- Microsurgery Fellow Tokyo Metropolitan Police Hospital. Tokyo Japan
- Royal Melbourne Hospital- Melbourne Australia
- Service Chirurgie Maxillofacial Hôpital Universitaire de Nancy. France
- Hopsital Universitario de Ljubliana. Eslovenia
- Hopsital Gea Gonzalez Mexico City. Mexico
- Institute of Plastic and Reconstructive Surgery New York University Hospital

Field of expertise

- Head and Neck Reconstruction Facial Palsy
- Breast Reconstruction Burn Sequelae Reconstruction



Current Appointment

Professor, Department of Plastic Surgery, Division of Surgery, The University of Texas MD Anderson Cancer Center, Houston, TX

Medical Education

- University of Pennsylvania, Philadelphia
- University of California, San Francisco

Training in Plastic Surgery

- University of Texas MD Anderson Cancer Center, Houston
- University of California, San Francisco
- Stanford University, Palo Alto

Field of expertise

Breast Reconstruction
 Head & Neck Reconstruction



Current Appointment

Professor and Director Department of Plastic Surgery. St Thomas' Hospital, London (UK). Partner Clinic Pyramide at the Lake, Zuerich (Switzerland).

Medical Education

- University of Basel, Switzerland
- Hôpital de la Pitié-Salpétrière, Paris, France

Training in Plastic Surgery

- University Hospital Basel, Switzerland
- Yale University, New Haven, USA
- St Thomas' Hospital London, UK

Field of expertise

- Breast Reconstruction Perineal Reconstruction
- Lower Limb Reconstruction

Edward I.

MD, FACS

Chang

Jian Farhadi MD. FMH (Plast)



Cristina Garusi MD

Current Appointment Senior Vice Director Chirurgia Plastica, Instituto Europeo di Oncologia, Milano

Medical Education

• Università degli Studi di Verona

- Training in Plastic Surgery
- Università di Padova
- Università di Milano
- Canniesburn Hospital Glasgow
- Instituto Europeo di Oncologia

Field of expertise

- Breast reconstructive surgery
- Supermicrosurgery (lymphedema)



Innocenti MD

Marco

Current Appointment

Chairman and Professor of Plastic Surgery University of Bologna Director of Orthoplastic Surgery Dept. Rizzoli Institute, Bologna Italy

Medical Education

• University of Florence

Training in Plastic Surgery

- University of Brescia Microsurgery Center
- Louisville Hand and Microsurgery Centre (USA)
- Chinese University Prince of Wales Hospital (Hong Kong)

Field of expertise

- Reconstruction of extremities
- Microsurgical bone and soft tissue reconstruction
- Hand surgery
- Congenital
- Pediatric microsurgery
- Head and neck reconstruction



Frederic Kolb MD, PhD

Current Appointment Professor Director, Research

Division of Plastic surgery, UC San Diego

Medical Education

• Medical School Bichat. Paris VII

Training in Plastic Surgery

Institut Gustave Roussy

Field of expertise

- Head and neck reconstruction
- Skull base surgery
- Breast oncology and reconstruction
- Limb reconstruction
- Oncologic dermatology
- Bioengineering



Nicolas Leymarie, MD, MSc

Current Appointment

Chief of Plastic Surgery Department. Gustave Roussy, Cancer Campus Grand Paris

Medical Education

Field of expertise

- University Denis Diderot, Paris 7
- Training in Plastic Surgery

• Gustave Roussy, Cancer Campus Grand Paris

- Head and neck reconstruction
- Breast oncologic surgery
- Breast reconstruction
- Limb reconstruction
- Dermatologic surgery
- Soft tissue sarcoma



Jaume Masià MD, PhD

MRM

Current Appointment

Professor and Chief, Department of Plastic Surgery, Hospital de la Santa Creu I Sant Pau and Hospital del Mar (Universitat Autònoma de Barcelona). Barcelona, Spain. Chief of the Breast Reconstructive and Lymphedema Unit. Clinica Planas, Barcelona

Medical Education

• Universitat de Barcelona

Training in Plastic Surgery

- Radcliffe Infirmary, Oxford University, UK
- Hospital de la Santa Creu I Sant Pau, Barcelona, Spain
- Hospital de la Vall d'Hebrón, Barcelona, Spain
- Institut Kaplan, Barcelona, Spain
- Canniesburn Hospital, Glasgow, UK
- Queen Victoria Hospital, East Grinstead, UK

Field of expertise

- Breast reconstruction
- Supermicrosurgery (lymphedema)
- Genital reconstruction
- Head and Neck reconstruction



Gemma Pons MD, PhD

Current Appointment

Head of Microsurgery Unit. Department of Plastic and Reconstructive Surgery, Hospital de la Santa Creu i Sant Pau (Universitat Autònoma de Barcelona) Barcelona,

Medical Education

- Universitat de Barcelona
- Training in Plastic Surgery
- Hospital de la Santa Creu i Sant Pau, Barcelona, Spain
- Hospital de la Vall d'Hebrón, Barcelona, Spain
- Hospital Central de Asturias, Oviedo, Spain
- Universitair Ziekenhuis, Ghent, Belgium
- Charleston Memorial Hospital, Charleston, US

Field of expertise

- Breast reconstruction
- Supermicrosurgery (lymphedema)



Stefan O.P. Hofer MD

Current Appointment

Chief Division of Plastic Surgery at the Department of Surgery and Department of Surgical Oncology, University Health Network, Toronto, Ontario, Canada Wharton Chair in Reconstructive Plastic Surgery Professor of Surgery, University of Toronto

Medical Education

• University of Amsterdam, Amsterdam, The Netherlands

Training in Plastic Surgery

- University Medical Centre Groningen, Groningen, The Netherlands
- Erasmus University Medical Centre, Rotterdam, The Netherlands

• Bernard O'Brien Institute of Microsurgery at St. Vincent's Hospital, University of Melbourne, Melbourne, Victoria, Australia

Field of expertise

- Breast Reconstruction
- Soft Tissue and Bone Sarcoma (Extremities, Trunk, Pelvic) Reconstruction
- Facial and Head & Neck Reconstruction
- Gynaecology and Urology Cancer Reconstruction



Eric Santamaria MD

Current Appointment

Professor in Reconstructive Microsurgery, Universidad Nacional Autónoma de México Plastic and Reconstructive Surgery Department Hospital General Dr. Manuel Gea Gonzalez and Instuto Nacional de Cancerologia

Medical Education

• Medical School. Anahuac University (Incorporated to the National University of Mexico. Mexico City)

Training in Plastic Surgery

- Dr. Manuel Gea Gonzalez General Hospital Mexico City
- Memorial Sloan-Kettering Cancer Center. New York, N.Y
- Microsurgery and Upper Extremity Clinical Fellowship. Chang Gung Memorial Hospital Taipei, Taiwan

Field of expertise

- Breast reconstruction
- Head and Neck surgery
- Limb reconstruction
- Facial palsy



Sinikka Suominen MD. PhD

Current Appointment

Vice-Director and Adjunct Professor Department of Plastic and Reconstructive Surgery

Medical Education

Helsinki University

Training in Plastic Surgery

- Helsinki University Central Hospital
- Chang-Gung Memorial Hospital, Taipei, Taiwan

Field of expertise

- Breast reconstruction
- Head and neck reconstruction
- Genital reconstruction
- Supermicrosurgery (lymphedema)
- Facial Palsy

LD

MRN



Current Appointment

Plastic and Reconstructive Surgeon. Queen Victoria Hospital. East Grinstead, United Kingdom

Medical Education

• Aberdeen University, Scotland

Training in Plastic Surgery

TC Teo MB, ChB, MD (Hons), FRCS (Ed), FRCS (Plast)

- Harvard University, Boston, USA
- Chang Gung Memorial Hospital, Taipei, Taiwan
- Royal North Shore Hospital, Sidney, Australia
- Bradford University Hospital
- Aberdeen Teaching Hospitals
- Queen Victoria Hospital, East Grinstead, UK

Field of expertise

- Limb reconstruction
- Supermicrosurgery
- Hand surgery



Koenraad Van Landuyt MD,

PhD

Current Appointment

Director Department of Plastic and Reconstructive Surgery. Hospital St Joan, Reus, Spain

Medical Education

• Ghent University Hospital

Training in Plastic Surgery

- Villain XIV Hospital, Maasmechelen&Sint-Jacobus
- Hospital, Tongerem. Belgium
- Ghent University Hospital
- H.Hart Hospital, Oostende, Belgium
- Dijkzigt Hospital, Rotterdam, The Netherlands
- Med. Höchschu-le Hannover, Germany

Field of expertise

- Breast reconstruction
- Pediatric surgery
- Lower limb reconstruction
- Supermicrosurgery (lymphedema)



Carmen Vega MD, PhD

UNDERGRADUATE / POSTGRADUATE EDUCATIONAL COORDINATOR

Current Appointment

Consultant and associate profesor Plastic Surgery Department Hospital de la Santa Creu i Sant Pau.

Medical Education

Medical School – Oviedo University (Spain)

Training in Plastic Surgery

- University Hospital of Asturias (Spain)
- Field of expertise
- Head & Neck reconstruction
- Limb reconstruction
- Soft tissue sarcoma reconstruction
- Oncologic dermatology

MRM













FACE TO FACE MODULES

Residency modules take place at Hospital de Sant Pau and Fundació Puigvert in Barcelona, Institut Gustave Roussy in Paris, Universitat de Barcelona in Barcelona, Jesús Usón Minimally Invasive Surgery Centre in Caceres, Rizzoli Institute in Bologna and University Hospital in Helsinki. Participants will undertake nine face-to- face modules stretching from September through June, However, if you are unable travel, some modules will be delivered on-line.



Jesús Usón Minimally Invasive Surgery Centre

Carretera N-521, km 41,8 10071 Cáceres, Spain



School Of Medicine. Universidad Miguel Hernández

Ed. Severo Ochoa, nº4 - Sector Sup 10, 33-47. Campus San Juan - Km 322, Cta Alicante. Alicante, Spain



A GLOBAL CURRICULUM PROGRAM



Essential concepts in clinical microsurgery: cadaver workshop on flap dissection

Theoretical introduction to the basic concepts of microsurgery

- History of microsurgery
- Microscope and microsurgical instruments
- Selection of suture material for microsurgical procedures
- Basic skills in microsurgery
- Advanced skills in microsurgery
- Preoperative microsurgical planning
- Microsurgical flap monitoring
- Selection of right flap
- Microsurgical flap salvage
- Refinements in microsurgical reconstruction
- Fundamentals in research metodology for microsurgery

Flap dissection training using a fresh cadaver model

Head and neck:

- Submental flap
- Temporo-parietal flap
- Supraclavicular flap
- Free Helix Flap

Upper limb and shoulder:

- Lateral arm flap
- Radial forearm flap

Lower limb and pelvis:

- PAP
- Lumbar perforator flap (LPF)
- Inferior gluteal artery perforator flap (IGAP)
- Superior gluteal artery perforator flap (SGAP)
- Thigh: anterolateral thigh flap (ALTF), medial thigh flap
- Gracilis (ATMG)
- Osteocutaneous peroneal artery perforator flap
- Propeller flaps based on peroneal and tibial perforators
- Medial plantar flap

Trunk:

- Internal mammary fascio-cutaneous flaps
- Intercostal flaps
- Scapulo-dorsal flaps: latissimus dorsi,

thoracodorsal artery perforator flap (TDAP), scapular flap, parascapular flap and chimeric flaps

• Internal Iliac crest: Groin flap, superficial circumflex inguinal perforator flap (SCIP), iliac crest flap

• Abdominal wall flaps: musculo-cutaneous rectus abdominis flap (TRAM), deep inferior epigastric perforator flap (DIEP) and Taylor, superficial inferior epigastric artery flap (SIEA)

Free lymphonode transfer



21

Workshop. Microvascular surgery training using a small animal model (rats).



Workshop. Dissection Workshop. Dis techniques of perforator flap perforator flaps and supermicrosurgery using a live animal model (pig).

Intensive training course on basic microsurgical skills using a small animal model (rat)

- Basic management of experimental animal, microscope and instrumentation
- Microsurgical suture practice on surgical gloves
- Epineural and perineural suture of the sciatic nerve
- End-to-end suture of the carotid artery and femoral artery
- End-to-end suture of the jugular vein and femoral vein
- Aorto-iliac end-to-end suture
- End-to-side suture between femoral artery and vein
- Jugular vein graft to carotid artery
- "In situ" groin flap
- Distant groin flap to the neck

Intensive course on dissection of perforator flaps in live animals (pig) and basic supermicrosurgical skills training

- Perforator flap anatomy
- Preoperative planning of perforator flaps
- Dissection technique of perforator flaps
- Fundamentals of microsurgical techniques
- Head and Neck Reconstruction with **Microsurgical Flaps**
- Perforator Flaps in Breast Reconstruction
- Perforator Flaps in Limb reconstruction
- Perforator Flaps in Trunk Reconstruction
- "Hands on" Dissection Session:
- · Gluteal and dorsal perforator flaps
- · Free style perforator flaps · Transferring the flaps to the recipient vessels
- · Super microsurgical flaps
- · Lymphatic channel dissection
- · Lymph node transfer



Clinical training in head and neck microsurgical reconstruction

Head and neck microsurgical reconstruction procedures will be performed. The program will include live webcast surgery and students interactive participation will be encouraged

- Oncological criteria in head and neck tumors
- Reconstructive alternatives in head and neck surgery: form, function and aesthetics
- Evaluation and indications for pedicled flap versus free flap
- Selection of the right flap and recipient vessels
- Anterolateral thigh perforator flap (ALTF)
- Thoracodorsal artery perforator flap (TAP) with scapula
- Deep inferior epigastric perforator flap (DIEP) with Taylor extension
- Free fibula flap and free osteocutaneous peroneal flap for bone reconstruction
- Deep circumflex iliac artery perforator flap with iliac crest for bone reconstruction
- Radial forearm flap
- Facial reanimation



Clinical training in breast microsurgical reconstruction



Clinical training in microsurgical reconstruction of the lower limb

Live webcast surgery will also be shown and students' interactive participation will be encouraged

- Oncological management in breast tumors
- Reconstructive planning in breast tumors
- Breast reconstruction with implant vs autologous tissue reconstruction
- Immediate and delayed reconstruction
- Oncoplastic breast surgery: glandular and perforator flap techniques
- Breast reconstruction:
- · DIEP flap
 - · SIEA flap
 - · TAP flap
 - · SGAP flap
 - · IGAP flap
 - fat grafting
 - transverse myocutaneous gracilis flap (TMG)
 - · extended TAP
 - · PAP
 - · lumbar perforator flap
 - · latissimus Dorsi
 - Partial breast reconstruction: oncoplastic and perforator flap techniques
 - Autologus flap reconstruction with fat grafting
 - Thoracic wall reconstruction

Small groups of students will have the opportunity to observe live microsurgical reconstruction of the lower limb. Live webcast surgery will beshown and interactive participation will be facilitated

- Oncological management of limb tumors
- Reconstructive alternatives in lower limb surgery: form, function and aesthetics
- Reconstruction following high energy lower limb trauma
- Reconstructive approaches in chronic osteomyelitis of the lower limb
- Reconstruction of lower limb defects:
- · Latissimus dorsi flap
- · ALT flap
- · TAP flap
- · Radial forearm flap
- · Osteocutaneus fibular flap
- · SCIP flap
- Lower limb nonunion. Microsurgical bone reconstruction
- Avoiding complications in lower limb
- reconstruction
- Reconstruction with epiphyseal flaps and joint transfer



Clinical Training in microsurgical reconstruction of the upper limb

Small groups of students will have the opportunity to observe live microsurgical reconstruction of the upper limb. Live webcast surgery will be shown and interactive participation will be facilitated

- Brachial plexus. Introduction and surgical anatomy
- Reconstructive alternatives in brachial plexus injuries. Neurotizations. Nerve grafts. Nerve transfers
- Obstetric plexus
- Surgical approach of the peripheral nerves injuries
- Reconstructive options in upper limb surgery: form, function and aesthetics
- Upper limb nonunion. Microsurgical bone reconstruction. Special locations: humerus, scaphoid

• Oncological management of upper limb tumors

- Reconstruction of upper limb defects:
- · Latissimus dorsi flap
- · ALT flap
- · TAP flap
- · Radial forearm flap
- · Osteocutaneus fibular flap
- · SCIP flap
- Replantation and revascularization in upper limb
- Toe-to-hand transfer
- Congenital hand
- Allotransplantation



M8

Clinical training in genitourinary reconstruction

Clinical training in supermicrosurgery

The students will attend live microsurgical reconstruction of external genitalia and functional bladder reconstruction

- Anatomy and physiology of genitourinary system
- Gender reassignment approach
- Microsurgical techniques in penile reconstruction
- Reconstruction of penile defects:
- · radial forearm flap
- \cdot groin flap
- \cdot sensate osteocutaneous fibula flap
- \cdot ALT flap
- · functional phalloplasty
- \cdot combined flaps: phalloplasty
- Refinements and resolution of complications after total phallopasty
- Penile prosthesis implantation after total phalloplasty
- Bladder functional reconstruction
- Reconstruction after perineopelvic oncological resections
- · Abdominoperineal
- · Gynecological
- \cdot Urological recections
- Functional pelvic floor reconstruction.
- · Reverse vasectomy (vaso-vasostomosy) anastomosis
- Microsurgery of the seminal tract
- Perineum disease repair
- Abdominal wall and gluteal reconstruction

Small groups of students will have the opportunity to observe live microsurgical techniques in lymphedema treatment. Live webcast surgery will be shown and interactive participation will be facilitated

• Acritical evaluation of results conservative

treatment of Lymphedema

- Anatomy and physiology of the lymphatic c system
- Assessment and surgical treatment of
- lymphedema
- Vascularised lymphatic node transfer
- Lympho-venous anastomosis
- Combined surgical treatment for lymhedema
- Lymphangiogenesis and the role of growth factors in lymphedema
- Free vascularised nerve flaps
- Microsurgical nanoflaps
- Patient selection to different methods
- Perforator to perforator flap surgery

MRM

M10/11/12 Clinical immersion programme

The program includes a practical training module with feedback from facilitators. During this period, students will be involved in clinical cases focused on reconstructive microsurgery and assist in surgery, following preoperative and postoperative clinics. They will present cases to the other students and faculty to clarify doubts and evaluate the surgery

- Joint review of the microsurgical technique
- Presentation and discussion of complex clinical cases
- Resolution of immediate and delayed postsurgical complications involving the flaps
- Optimization of technique tailored to each student

M13

Introductory course on the methodology of clinical research Master Final Thesis / Research Work

Introductory course on the methodology of clinical research. On-line

We need to investigate to produce knowledge that allows us to reduce the impact of health problems, which involves diagnosing and treating diseases better. The clinical research is this inescapable filter where the hypotheses that come from basic research, technological innovation or clinical practices must be tested. But for this applied research activity to be sufficiently valid and useful, we must adequately master the essential conceptual and methodological aspects related to the methodology of clinical research. Making it possible is the objective of this module.

At the end of the module, students will be able to:

- Understand and know how to apply the most important concepts related to clinical research.
- Know how to ask clinical questions of different types and in a structured way.

- Promote the design of the most appropriate clinical studies to answer the clinical questions of interest.
- Conduct searches on scientific publications in a structured, comprehensive and efficient manner.
- Carry out an adequate critical appraisal to identify the strengths and weaknesses of each study.
- Understand and apply the most basic statistical concepts to calculate the different measures of association and effect.

Master Thesis

Preparation of a comprehensive written research report is an essential part of a valid research experience, and the student should be aware of this requirement at the outset of the project. Interim reports may also be required. Sufficient time should be allowed for satisfactory completion of reports, taking into account that initial drafts should be supervised and corrected by your tutor.

ACADEMIC CALENDAR

MASTER'S DEGREE (2 YEARS)

First academic year: September to June (Modules 1 to 10)

Second academic year: September to June of the following year (Modules 10 to 13 + Final exam)

Module

Location

M1	Essential concepts in clinical microsurgery: cadaver workshop on flap dissection	School of Medicine San Juan Campus, UMH, Alicante (Spain)		
М2	Workshop: Microvascular surgery training using a small animal model (rats)	Centro de Cirugía de Mínima Invasión Jesús Usón (CCMIJU) - Cáceres (Spain)		
М3	Workshop: Dissection techniques of perforator flaps and supermicrosurgery using a live animal model (pig)	Centro de Cirugía de Mínima Invasión Jesús Usón (CCMIJU) - Cáceres (Spain)		
M4	Clinical training in head and neck microsurgical reconstruction	On-line		
М5	Clinical training in breast microsurgical reconstruction	On-line .		
М6	Clinical training in microsurgical reconstruction of the lower limb	On-line		
М7	Clinical training in microsurgical reconstruction of the upper limb	On-line		
M8	Clinical training in genitourinary reconstruction	On-line		
M9	Clinical training in supermicrosurgery	Asan Medical Hospital (Seoul- Korea) / On-line		
M10	Clinical immersion programme			
M11 M12	Amsterdam - The Netherlands / Barcelona - Spain / Basel - Switzerland / Brussels - Belgium / Coimbatore - India / Florence - Italy / Ghent - Belgium / Helsinki - Finland / Hiroshima - Japan / London - UK / Mexico DF - Mexico / Milan - Italy / München - Germany / Seoul - Korea / Taipei - Taiwan / Toronto - Canada / Villejuif cedex - France			
M13	Introductory course on the methodology of clinical research. Master thesis / Final work	Online		



MRM

OPTIONAL DOCTORAL THESIS DEGREE (PhD)

Promoting research in microsurgery is also a major priority for the European School of Reconstructive Microsurgery. This objective has been translated into action through a focus on doctoral programs.

Masters' students participants can become researchers and work in a framework on the development of doctoral programs for European higher education and research. They can join in different research projects and get the International Doctorate or 'Doctor International' mention.

To qualify for a International Doctorate, the candidate must fulfil certain criteria upon presentation of their thesis: 1. The PhD thesis defence will be accorded if at least two professors from two higher education institutions of two European countries, other than the one where the thesis is defended, have given their review of the manuscript;

2. At least one member of the jury should come from a higher education institution in another European country, other than the one, where the thesis is defended;

3. A part of the defence must take place in one of the official languages, other than the one(s) of the country, where the thesis is defended;

4. The thesis must partly have been prepared as a result of a research period of at least one trimester (or three months) spent in another European Country

EDUCATIONAL PROGRAM MASTER'S DEGREE

Candidates who successfully complete the full course will be awarded a Master's Degree recognised by the Universitat Autònoma de Barcelona. This degree is a 120 ECTS Master (ECTS: European Credits Transfer System) (1ECTS = 25 hour is in student's work). To be awarded this Master's Degree, trainees must complete all the modules, pass the practical assessment, do the minimal period of clinical immersion and present a research project.

Trainees who complete a single module will receive a Certificate.

Master's Degree in Reconstructive Microsurgery				
	M1 + M2 + M3 + M4 + M5 + M6 + M7 + M8 + M9 + M10 + M11 + M12+M13			
120 EUTS	ECTS/MODULE: 9 + 6 + 6 + 9 + 9 + 9 + 9 + 9 + 6 + 6 +			

METHODOLOGY

The on-line part of this Master's Degree is given in nine modules, held throughout the first year. The specific clinical immersion program is held in set hospitals. However, it can be undertaken at the participant's own centre, and assessed by the faculty member directing

the student educational itinerary. It is mandatory to carry out a clinical or experimental research project. This will facilitate participation in research projects at several hospitals even can do a doctoral thesis. Emphasis will be given to practical skills in microsurgical techniques, but will include diagnosis, therapeutic options, decision-making concerning techniques, and recognition and management of risks and complications.

Our educational program delivers comprehensive professional development opportunities for every level of surgical experience. It puts world class training directly into the hands of those who strive for excellence.



ONLINE CAMPUS

This e-learning area provides quality peer-reviewed information in a dynamic and interactive format

- Case review
- Forum discussion to receive feedback from the faculty
- Video surgery
- Evaluation tests
- Second opinion from experts
- Journal club
- Log book of clinical immersion



EVALUATION

Clinical and practical assessments will be carried out

Minimal requirements to be awarded the Master's Degree are:

• Attendance of 100% in scheduled Hands-on sessions.

• of 80% in scheduled tutoring sessions.

• A grade of at least 50% in multiple choice exam for each module

• Achieve a minimum abilities in microvascular surgery training in a small animal model evaluated at the end of Module 2.

• Surgical efficiency and efficacy of at least 80 % through log book and portfolio review during clinical immersion

• A grade of at least 50% in the final exam involving a presentation of clinical cases

• Research skills: clinical or experimental research projects and literature reviews will be encouraged to be published in a peer reviewed journal

• The final mark (overall mark) for each Master

Course is determined by a combination of the MCQS (40%), final assessment (40%) and research work and Master's Final Thesis (20%)

Clinical immersion program will be assessed during the face-to-face clinical immersion in module M10 + M11 +M12. Faculty will assess the therapeutic approach, the suitability of the chosen procedure and the quality of the oral presentation of clinical cases.

FACULTY



Joan Albanell Hospital del Mar, Barcelona - Spain



Christoph Andree Sana Kliniken Düsseldorf, Düsseldorf - Germany



Sühan Ayhan Gazi University Faculty of Medicine, Ankara - Turkey



Randy De Baerdemaeker Brussels University Hospital, Brussels - Belguim



Andrew Baildam St Bartholomew's Hospital, University of London, London - UK



Alberto Ballestín Fundación CCMIJU (Centro de Cirugía de Mínima Invasión Jesús Usón) Cáceres - Spain



Agustí Barnadas Hospital de Sant Pau, Barcelona - Spain



Helena Bascuñana Hospital de Sant Pau, Barcelona - Spain



Phillip Blondeel Gent University Hospital, Gent – Belgium



Bernardo Bonanni European Institute of Oncology, Milan - Italy



John Boorman Queen Victoria Hospital, East Grinstead - UK



<mark>Giovanni Botti</mark> Villa Bella Clinic, Salò - Italy



Karl Breuing

Rhode Island Hospital. Warren Alpert Medical School of Brown University in Providence, Rhode Island - USA



Ming-Huei Cheng A+ Surgery Clinic, Taipei - Taiwan



Krishna B. Clough Medical Director Paris Breast Center, Paris - France



Marco Colleoni Instituto Europeo Oncologico, Milan - Italy



Giuseppe Curigliano Instituto Europeo Oncologico, Milan - Italy



Suzette Delaloge Institut Gustave Roussy, Paris - France



Tine Margrethe Engberg Damsgaard

Institute of Clinical Medicine, University of Copenhagen. Copenhagen -Denmark



Jian Farhadi

St. Thomas Hospital, London - UK



Cristina Garusi European Institute of Oncology, Milan - Italy



Cedric George Klinik Pyramide, Zurich - Switzerland



Aaron Goldhirsch European Institute of Oncology, Milan - Italy



Mat Griffiths Broomfield Hospital in Chelmsford, Essex - UK



Moustapha Hamdi Brussels University Hospital, Brussels - Belguim



Dennis Von Heimburg Praxis Klinik, Frankfurt - Germany



Stefan O.P. Hofer UHN Toronto General Hospital, Toronto - Canada



Joon Pio Hong Asan Medical Center, University of Ulsan Seoul - Korea



Mattia Intra European Institute Oonfcology, Milan - Italy

Tan Bien Keem

Singapore General Hospital

Singapore - Republic of Singapore





Frederic Kolb UC San Diego Health San Diego - USA



Isao Koshima Tokyo University Hospital, Tokyo - Japan



Marjut H. Leidenius Helsinki University Hospital Helsinki - Finland



Nicolas Leymarie Institut Gustave Roussy, Paris - France



Patrick Mallucci The Royal Free and University College London Hospital, London - UK



Gabriel Manfro Santa Terezinha University Hospital. Joaçaba - SC, Brazil

Jaume Masià Hospital de Sant Pau,

Barcelona – Spain





Stephen McCulley Nottingham University Hospitals, Nottingham - UK



Antonio Moral Hospital de Sant Pau, Barcelona - Spain



Maurizio Nava Istituto nazionale dei tumori di Milan, Milan - Italy



Peter Neligan Center for Reconstructive Surgery at University of Washington, Seattle - USA



Alex Nistor Emergency Clinical County Hospital Timisoara, Timisoara - Romania



Roberto Orecchia European Institute of Oncology, Milan - Italy



Jean Yves Petit European Institute of Oncology, Milan - Italy







Gemma Pons Hospital de Sant Pau, Barcelona - Spain



Dick Rainsbury Royal Hampshire County Hospital, Hampshire - UK



Venkat Ramakrishnan Broomfield Hospital in Chelmsford, Essex - UK







Jorge Mario Rodríguez González

University of Buenos Aires,

Buenos Aires - Argentina

Alberto Rancati

Hospital San Vicente Fundación, Rionegro - Colombia



Isabel Rubio





José Salvador Hospital General Universitario de Alicante, Alicante - Spain



Eric Santamaria Hospital General "Dr. Manuel Gea Gonzalez", Mexico City - Mexico



Benjamin Sarfati Institut Gustave Roussy, Paris - France







Raphael Sinna Amiens University Hospital, Amiens - France



Sinikka Suominen Helsinki University Hospital, Helsinki - Finland



Jin Sup Eom

Asan Medical Center, Seoul - South Korea



Patrick L. Tonnard Coupure Centrum voor Plastische Chirurgie, Gent - Belgium



Erkki Tukiainen Helsinki University Hospital, Helsinki - Finland



Koenraad Van Landuyt Gent Univ. Hospital, Gent - Belgium



Roy De Vita Istituto dei Tumori Regina Elena, Roma - Italy



Eva Weiler-Mithoff Glasgow Royal Infirmary, Glasgow - UK



Juan Carlos Zambrano

Hospital Universitario San Ignacio Pontificia Universidad Javeriana, Bogotá DC - Colombia.



Paolo Veronesi Instituto Europeo Oncologico, Milan - Italy

35 MRN



TRAINING IMMERSION TUTORS



Elena Abellan

Fundación CCMIJU (Centro de Cirugía de Mínima Invasión Jesús Usón) Cáceres - Spain



Filip Stillaert UZ Gent Gent - Belgium



Isao Koshima Tokyo University

Hospital, Tokyo - Japan



Milomir Ninkovic Hospital Bogenhausen, Munich-Germany



Ming-Huei Cheng A+ Surgery Clinic, Taipei - Taiwan



Jian Farhadi Plastic surgery Group Zurich -Switzerland



Cristina Garusi European Institute of Oncology, Milan - Italy



Moustapha Hamdi **Brussels University** Hospital, Brussels - Belguim



Stefan O.P. Hofer UHN Toronto General Hospital, Toronto - Canada



Marco Innocenti Ospedale Careggi, Florence-Italy



Nicolas Leymarie Institut Gustave Roussy, Paris - France



S. Raja Sabaphathy Ganga Hospital, Coimbatore - India



Eric Santamaria MD Hospital General "Dr. Manuel Gea Gonzalez", Mexico City- Mexico



Dirk J. Schaefer University Hospital Basel, Basel - Switzerland



Sinikka Suominen Helsinki Univ. Hospital, Helsinki – Finland



Jin Sup Eom Asan Medical Center, Seoul-Korea



Koenraad Van Landuyt Hospital St Joan Reus- - Spain



Carmen Vega Hospital de Sant Pau, Barcelona – Spain

CLINICAL IMMERSION CENTERS

0

0



THE UNIVERSITY OF TEXAS MDAnderson Cancer Center Making Cancer History*

MD Anderson Cancer Centre 1515 Holcombe Blvd. Houston, Texas, USA Tel: 1-877-916-0378 • www.mdanderson.org Coordinator: Edward Chang





Fundación CCMIJU (Centro de Cirugía de Mínima Invasión Jesús Usón) Carretera Nacional 521, Km 41.8 - 10004 Cáceres www.ccmijesususon.com Training coordinator: Elena Abellán





Hospital de Sant Pau C/ Sant Quintí 89 · Barcelona Tel: +34 932 91 90 00 • www.santpau.es Training coordinator: Carmen Vega





Asan Medical Center 388-1, Pungnap-Dong, Songpa-Gu, Seoul, Korea Tel: +82-2-3020-3602 • www.eng.amc.seoul.kr Training coordinator: Jin Sup Eom





European Institute of Oncology Via Giuseppe Ripamonti, 435 Milan, Italy Tel: +39 674 891 • www.ieo.it Training coordinator: Cristina Garusi





Hospital St Joan Reus Avinguda del Doctor Josep Laporte, 2, Reus, Spain Tel: +34 977 31 03 00 • www.salutsantjoan.cat Training coordinator: Koenraad Van Landuyt





Institut Gustave Roussy 114, rue Edouard-Vaillant, 94805 Villejuif Cedex Tel: +33 1 45 21 61 19 • www.igr.fr Training coordinator: Nicolas Leymarie



Surgery UNIVERSITY OF TORONTO

UHN Toronto General Hospital 200 Elizabeth Street, 8N-865 · Toronto, Ontario, Canada M5G 2C4 • Tel: 416-340-3449 • www.uoftplasticsurgery.ca Training coordinator: Stefan O.P. Hofer





St Thomas' Hospital

Westminister Bridge Road, London SE1 7EH Tel: +44 020 71887188 • www.guysandstthomas.nhs.uk Training coordinator: Marlene See





Hospital Bogenhausen Englschalkinger Straße 77, 81925 München Tel: +49 (089) 9270-0 • info.kb(at)klinikum-muenchen.de Training coordinator: Milomir Ninkovic





HOSPITAL GENERAL Dr. Manuel Gea Gonzalez

Hospital General Dr. Manuel Gea Gonzalez Calz de Tlalpan 4800 Sección XVI, Tlalpan, Ciudad de México, Distrito Federal Tel: (+52) 55 4000 3000 • www.hospitalgea.salud.gob.mx Training coordinator: Eric Santamaria



Puistosairaala, Park Hospital Helsinki University Hospital Stenbäckinkatu 11, Helsinki, Finland Tel: + +358 9 4711 • www.hus.fi Training coordinator: Sinikka Suominen







A+ Surgery Clinic

3F, 337 Fuxing North Road, Songshan District, Taipei. Taiwan 105 · lymphedemamicrosurgery.com Training coordinator: Ming-Huei Cheng



HIROSHIMA UNIVERSITY

International Center for Lymphedema Hiroshima University Hospital 1-2-3 Kasumi, Minami-ku, Hiroshima, 734-8551 Japan Training coordinator: Isao Koshima



Universitair Ziekenhuis Gent

Ghent University Hospital De Pintelaan 185 · Ghent, Belgium Tel: +32 9 332 21 11 • www.uzGhent.be Training coordinator: Fillip Stillaert





Instituto Rizzoli LVia Pupilli,1, 40136 Bologna, Italy Tel: 051-6366111 • www.ior.it Training coordinator: Marco Innocenti





Plastic Surgery Group AG Seefeldstrasse 214, CH-8008 Zürich www.plasticsurgery-group.com Training coordinator: Jian Farhadi





Universitair Ziekenhuis Brussel Laarbeeklaan 101 · 1,090 Brussels Tel: +32.2.477.41.11 • Fax: +32.2.477.77.80 www.plasticsurguzbrussels.com Training coordinator: Moustapha Hamdi



Universitätsspital Basel

Universitätsspital Basel Spitalstrasse 21/ Petersgraben 4 · 4031 Basel Tel: +41 61 265 25 25 • Fax: +41 61 265 26 50 www.unispital-basel.ch Training coordinator: Dirk. J. Schaefer



Ganga Hospital 313, Mettupalayam Road, Coimbatore - 641 043 Tamil Nadu, India • Tel: +91 422 2485000 (Ext 5414) www.gangahospital.com Training coordinator: S. Raja Sabaphaty

ADMISSION REQUIREMENTS

PARTICIPANT PROFILE

• For the Master Degree: Specialists in plastic surgery and final-year plastic surgery residents

• Microvascular technique course is highly recommended (minimum 25 learning hours)

SELECTION CRITERIA WILL BE BASED ON:

- Curriculum vitae
- Letter of recommendation (Reference from the chief of the applicant training program)
- Motivation letter
- Interview (if the educational coordinators deemed necessary)

APPLICATION CHECKLIST & DEADLINES

• Applicants should submit their application forms to Elena.Mohedano@rmes.es

• Application deadline: 30th September of the current year

Once the application period has closed, Education Coordinators start processing the applications.

Only eligible candidates who have submitted all the required documents within the set application period are taken into consideration in the student selection process.

39

MRM

FULL PROGRAM FEE:

Master's Degree 17.227 euros* *Issuing fee for University Certificate not included

PAYMENT CALENDAR	(€)	DEADLINE
Reservation fee	*1.800 €	2 weeks after admission
1st Instalment	8.190 €	By 1st September
2nd Instalment	7.237 €	By 30th January

*Non refundable reservation fee

Interested applicants should contact the RMES coordinator for full details: Contact: Elena Mohedano Email: elena.mohedano@rmes.es Direct phone: +34 935 565 505



GET IN TOUCH

For further information or assistance, please contact:

Elena Mohedano

Elena.Mohedano@rmes.es Telephone: 00 34 935565505 Website: www.rmes.es