Faculty

AGAZZI GIANCELSO
AVERSA ALESSANDRO
BACUZZI ALESSANDRO
BALBI SERGIO
BARMASSE HERVE'
BARTSCH PETER
BEGHI CESARE
BERVERLY MARC
BLANCHER MARC
BONI LUIGI
BONO GIORGIO
BRIOT RAPHAEL
BRODMANN MAEDER MONIKA
BRUGGER HERMANN
BRUNELLO ANNA
BURTSCHER MARTIN
BUDDHA BASNYAT
CAMANNI ENRICO
CARCANO GIULIO
CARRAFIELLO GIANPAOLO
CASELLA MARIO
CASTELNUOVO PAOLO
CAUCHY EMMANUEL
CHIOCCONI RAMON
COGO ANNALISA
CUFFARI SALVATORE
CRIVELLARO PIETRO
DE BUJAN FEDERICO FERNANDEZ
DE LA PIERRE FRANZ
DELLA BORDELLA MATTEO
DIKIC NENAD
DOMINIONI LORENZO
DONATI SIMONE
DONEGANI ENRICO
DOW JENNIFER
DOZIO EUGENIA
DURRER BRUNO
ELLERTON JOHN
ELSENSOHN FIDEL
FAULHABER MARTIN
FLICK WALDEMARO
FUGAZZOLA CARLO
GARZENA GUIDO
GATTERER HANDRES
GIARDINI GUIDO
GOBBI CRISTIANO
GROSSI PAOLO
HABELER PETER
HACKETT PETER
HEFTI URS
HILLEBRANDT DAVID
INTROZZI LORENZO
KUPPER THOMAS
LEVINE BENJAMIN D.
MACIAS DARRYL
MAGGIORINI MARCO
MANTOVANI ROBERTO
MARIANI FULVIO
MAZZI GIUSEPPE
MERCALLI LUCA
MESSNER REINOLD
MESSNER HUBERT
MILANI MARIO
MINOJA GIULIO
MONDINELLI SILVIO GNARO
MONTAROLO PIER GIORGIO
MORO SIMONE
NEGRINI DANIELA
NERIN ANTONIA
NOTTARIS ROMOLO
OELZ OSWALD
ORRASH MASSIMO
OSVALDO CHIARA
PADDEU ANTONIO
PARATI GIANFRANCO
PASCERI GIOVANNI
PASSI ALBERTO
PECCHIO ORIANA
PRESTINI ANTONIO
RADICE ANTONIO
REISTEN OLIVER
RICHALET JEANPAUL
RINALDI ADRIANO
RIVA ELY
RODWAY GEORGE
ROI GIULIO SERGIO
RUFFINO GIOVANNI
SALERNO-URIARTE JORGE ANTONIO
SAVARY-BORIOLI BEPPE
SCHOEN CORINNA
SCHOENE ROBERT
SCHNEIDT TIZIANO
SCHWEIZER JUERG
SERTORELLI ERMINIO
SESANA GIOVANNI
SICURO MARCO
SPANEVELLO ANTONIO
STECK UELI
STRAPAZZON GIACOMO
STRAPAZZON PASCAL
STREHLER KARL
SURACE MICHELE
TAVANI MARIO
TORTI VINCENZO
TOZZI MATTEO
VACCARI EZIO
VALOTI PAOLO
VALSECCHI ANGELO
VALSESIA TERESIO
VISETTI ENRICO
WALPOTH BEAT
WANSCHER MICHAEL
WILLIAMS JASON
ZAFFREN KEN

and other...

The 2nd International University Master Course is based in Varese at the University of Insubria and in Zermatt, by Air Zermatt Training Center, University of New Mexico, University of Grenoble/Toulose and is aimed at foreign and italian Health Workers. There is a maximum number of 10

places available and the course **is approval by the following International Organisations: UUIA Medcom, CISA-IKAR and ISMM**.
The course consists of a total number of 1.500 hours as academic regulations, 750 among lectures, internships and on site practical session.

IMPORTANT The Master is dedicated to **doctors** specialists in anesthesia and intensive care, emergency surgery, emergency medicine, or similar, and doctors and **paramedics** with work experience of at least five years in an emergency-urgency department. The selection board will have the authority, however, examining the curriculum, to evaluate any exceptions, reflecting the international criteria for enrollment in such courses.

For inscription, it's necessary academic degree level 2 according to the EU Regulation and a good clinical and physical assessment, with ECG under stress certification.

OFFICIAL LANGUAGE

The official course language is English and in some cases Italian.

COURSE CREDITS

Following completion of the course, a formal academic ceremony will be held where each student will receive a graduation certificate recognised worldwide. To obtain the graduation certificate each candidates will prove to be present at 75% of lessons and medical training.
A final course examination, consists in a multiple answer test, practical examination dedicated to MMEM and academic thesis presentation.

TUITION FEE

The enrolment fee for the course is Euro 8.500,00.
There are possible forms of deferred payment after agreement (only for italian students).

The fee include:
all practical part by Air Zermatt Training Center (winter and summer), practical part with University Grenoble course and New Mexico course with related overnights.

For any further information and for the course program please contact:

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Photo by Francesca Agosta Tipress Ag. Fotografica (Tris Rotondo 2012 - CAS Ticino)

in collaboration with

2nd International Master Course *in* Mountain Emergency Medicine

dedicated to A. Farè and F. Della Bordella and B. Dürrer

2017 - 2018

Varese - Zermatt - Bolzano - Albuquerque/Grand Canyon - Aosta/Chamonix - Davos
Milano - Torino - Bressanone/Brixen - Bad Toelz - Innsbruck - Grenoble - Toulouse

Under the Patronage of

Director: **Lorenzo Dominioni**
University of Insubria

Co-Directors/Coordinators:
Luigi Festi - Oliver Reisten and Hermann Brugger
Osp. Univ. di Circolo, Varese / Air Zermatt-Alpine Training Center, Zermatt/Inst. Mountain Emergency Medicine, EUR.AC Bolzano

Scientific Committee

President: Marc Blancher
University of Grenoble

Cesare Beghi University of Insubria
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Monika Brodmann Maeder Inselspital Bern
Giulio Carcano University of Insubria
Emmanuel Cauchy Resamont /IFremmont Chamonix
Osvaldo Chiara - Ospedale Ca-Granda Nigurada Milano
John Ellerton Mountain Rescue Council Medical Officer for Patterdale MRT
Paolo Grossi University of Insubria
Peter Hackett Institute For Altitude Medicine Telluride
Darryl Macias University of New Mexico
Daniela Negrini University of Insubria
Alberto Passi University of Insubria
Antonio Spanevello Fondazione Maugeri - University of Insubria

The Master in Mountain Emergency Medicine, born from the integration of the Master in Mountain Medicine with the course of Mountain Emergency, Air Zermatt Training Center, directed by Oliver Reisten.

The Master in Emergency course is overlaps with that basic in Mountain Medicine, but with 16 days more of training in helicopter rescue (9 days at Alpine Training Center/Air Zermatt, 3 days at Grenoble Emergency University Course and 4 days in Grand Canyon with University of New Mexico Course). We are in the second edition and in first edition are recorded 8 students, all physicians, active in the field of emergency-urgency, Italian and foreign (Netherlands, Slovakia, USA).

It is the only university course of its kind in the world and the aim is to train doctors and paramedics (the master is open to paramedics with 2° level university degree, active for at least 5 years in the field of emergency-emergency) specialists in helicopter rescue in hard conditions and rough environment.

The master reaches the goal of professionally high preparation, thanks to the support of the most prestigious figures in the world of emergency in the mountains, and dealing with advanced emergency organizations and institutions, landmarks worldwide.

The training in Zermatt, in Grenoble and in New Mexico / Grand Canyon, put the students in contact with different situations and different environments, ensuring professionalism able to move in any terrain and in all weather conditions, but also able to adapt to different health systems throughout the world.

We believe that adequate preparation in the field, a high and effective professional approach in the rescue operations, is not possible without an accurate knowledge of the "after". The knowledge that by our actions in the field depends the prognosis and the "hospital" outcome of the patient, is the reason of training at the Department of Emergency-Urgency, Niguarda CàGranda Hospital in Milan, point of reference at European level. The training will be of variable length, in relation to the frequency desire and needs of each student, with a minimum of a week.

Remain the other features that distinguish the Master in Mountain Medicine, University of Insubria: the number and prestige of teachers, guides and instructors, about 140, from all over the world; collaboration with 26 research institutions or health institutions and emergency, hospital and university, in Europe and the USA; the need to acquire the degree with a severe test and the preparation and presentation of a thesis (The graduation and the final exam will also see a specific part concerning the additional helicopter rescue under the tutorship of Oliver Reisten. There will then be an additional test and an evaluation of the ability to move and work in helicopter rescue context, in the mountain field); finally, the close cooperation and participation in events centered on the mountain and of international importance, such as International Mountain Summit in Brixen.

Dr. Luigi Festi

Deputy Chief Thoracic and General Surgery, Ospedale di Circolo Varese

luigi.festi@asst-settelaghi.it

CALENDAR LESSONS

13 February 2017
Inauguration Varese

13-18 February 2017
Varese - Chamonix - Davos

22-31 March 2017
24-26 March 2017 - Grenoble course
28-31 March Finale Ligure - Climbing techniques

20-25 April 2017
20-22 April 2017 Bad Toelz - Helicopter Rescue Simulator
23-25 April 2017 Air Zermat practical part winter

22-28 May 2017 Varese - REGA -Zurigo

03-09 July 2017
Practical part on Glacier

18-24 September 2017
Air Zermatt-Alpine Rescue Center Summer part

02-08 October 2017
New Mexico / Grand Canyon

05-11 March 2018
Chamonix

07-12 May 2018
University of Innsbruck - Eurac Bolzano

September 2018 (facultative)
Master Peak in Caucaso (Cost about € 2500)

27-28 November 2018
Diploma Session - Varese

Module 1

Basis, Diagnosis, Treatment of Altitude Sickness 48 hours

- Altitude Sickness
- Children and the mountain
- High altitude training
- The medical practice of mountain
- The elderly and the mountain
- Cardiopathic patients and mountaineering
- Pulmonary failure and mountaineering
- Neurological disease and the mountain
- The woman and the mountain

Module 2

Hyperthermia: Diagnosis and Treatment Hyperthermia 35 hours

- Hypothermia
- Frostbite
- Sunstroke, heatstroke
- Notions on personal technical
- Equipment and apparel
- Diving medicine

Module 3

Trauma in Mountaineering: Diagnosis and Treatment 42 hours

- Analgesia on the field
- Abdominal traumatology
- Thoracic traumatology
- Orthopedic trauma
- Basic radiology
- Interventional radiology
- Vascular trauma
- Neurosurgical trauma
- Maxillofacial trauma in mountaineering
- Emergencies odonto-stomatology
- Tracheostomy
- Shock
- Sepsis: diagnosis and treatment

Module 4

Emergency Rescue in Montaineering 129 hours

- Avalanche
- Electrocution, lightning
- Mountain rescue techniques
- Helicopter rescue techniques
- Notions on personal equipment
- Stress management in mountaineering
- Organized rescue on the mountain
- The intensive care unit and alpine trauma
- Alpine trauma and rescue services
- Helicopter Rescue Team (c/o Air Zermatt, REGA

Module 5

The Doctor and the Mountain 36 hours

- Decompression sickness
- Survival and navigation techniques
- Nutrition in mountaineering
- Travel medicine

Module 4 and 7 are dedicated to MMEM

- The doctor on expeditions
- Medical legal aspects in mountaineering
- Juridical aspects
- International mountaineering organisation
- Medical communication
- Geological characteristics and rescue techniques
- Risk management
- Meteorology and mountain
- Doping in mountaineering
- Historical and cultural aspects of mountaineering

Module 7 110 hours

Emergency medicine *Program Winter*

- Basics on survival techniques, protection of the patient against further harm, self protection, bivouac…..
- Glacier travel, belaying in ice and snow, ice climbing, crevasse accident, improvised crevasse rescue.
- Organized crevasse rescue, tri- and bipod, crevasse container, ice hammer.
- Comrade aid and organized rescue in avalanche accidents, transceiver search, helicopter search, Recco, shovelling probing, ABS-Pack and other systems against burial, medical aspects of avalanche accidents, prognosis in avalanche victims.
- Working with the helicopter in winter conditions.

Management of a mountain casualties, during winter season. In cold and snow conditions. - **Grenoble**

Technical and medical Skills to acquire:

- Basic ice climbing skills,

- How to deal with evolution on winter environment (snow and ice),

- How to use technical rescue devices dedicated for winter rescue

- Mountain rescue simulations based on real cases,

- Theoretical Knowledge on avalanche, hypothermia, frostbites.

- How to deal with a polytrauma in winter

- Medical management of an avalanche victim, an hypothermia victim

- Patient orientation: trauma system, trauma network

Module 6

The Doctor and Alpine Medical Practice 68 hours

- Introduction
- Mountaineering techniques and basics of skimountaineering
- Basics of climbing techniques
- Mountain rescue techniques

Module 7 *Program Summer*

- Patient bag, vacuum mattress, stretcher, horizontal net
- Training on improvised rescue techniques
- Rescue on via ferrata
- Suspension trauma, rescue in lights sports
- Basics of caving and cave rescue
- Basics of canyoneering and canyoneering rescue
- General medical circumstancies in canyoneering, ….injury treatment in canyoneering
- Working with helicopters … hovering … introduction to HEC (human external cargo), …. procedures on longline, load transfer system
- Descend into Grand Canyon to Bright Angel lodge. Medical rescue scenarios, overview of point of care testing, iSTAT fluid replacement, field blood products, tranexamic acid
- Summer mountaineering techniques.

Terrestrial rope rescue.

Lectures on important topics will be presented in some cases

MEDICAL TRAINING

10 hours

Clinic Mountain Medicine
c/o Ospedale U. Parini Aosta/ Chamonix

20 hours

Cardiology
c/o Istituto Auxologico Italiano, Università Bicocca Milano

40 hours *

Emergency Department
c/o Ospedale Niguarda-Cà Granda Milano

*** It is possible improve the training according to didactical and specific necessity of each student**