The new International Master course in Mountain Expedition Medicine, born with the objective to creating a new type of expedition doctor or paramedic, highly specialized, able to handle any medical emergencies, and also logistics on the field, providing professional support to the work of rescue team, in case of accidents or sudden illnesses.
The aim is to create a health personnel who, knowing management of emergencies in the field, and knowing in depth the technical skills in mountaineering and climbing, places it as a leader and as a second guide in the expeditions.
A specialist who knows how to deal with the expedition guide and participants, assessing correctly their skills and physical fitness, and comparing them to the expedition field. This role was already done in part, by Master in Mountain Medicine, but now we want to create a figure with greater specialization and experience and high academic preparation of theoretical and technical level. This is achieved by combining the expertise and experience of the previous course of the University of Insubria, the skills of Air Zermatt Training Center, those of the Austere Course and Mountain Medicine at the University of New Mexico, and those of medical staff and guides in the Denali Park in Alaska.
A course so comprehensive and complex in its development, does not exist at the time in the world. The new Master Course, which takes largely theoretical part of the Master in Mountain Medicine and Master in Mountain Emergency Medicine, provides trips and practical training on the field among others, in Zermatt at altitude below the Matterhorn, in the Grand Canyon in Arizona and in New Mexico, in the Denali Park in Alaska, in Chamonix, with weekly schedule distributed over two years.
The comparison with mountain guides of great experience and professionalism, with renowned mountaineers, with alpinist doctors as Oswald Oelz or Tom Hornbein, will complete the educational path, after which there will be a similar assessment to the other masters with multiple choice questions, the presentation of a thesis, and an assessment of skills and attitudes in the field, to create a professional profile able to better manage expeditions or groups of climbers all over the world.

There is a maximum number of 10 places available and the course is approved by the following International Organisations:UIAA-Medcom, CISA-IKAR and ISMM. The course consists of a total number of 1.624 hours as academic regulations, 904 among lectures, internships and on site practical session.

Lectures and practical traning will be held, among others, at the University of Insubria in Varese, at the EURAC headquarters of the Institute of Mountain Medicine and Emergency in Bolzano, at IFremmont, Chamonix, University of New Mexico/Grand Canyon, Air Zermatt Training Center, Denali Park-Alaska.

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, a practical evaluation on the field and the thesis presentation previously arranged.

TUITION FEE

The enrolment fee for the course is Euro 7.000,00. The fee include:
training and lectures by locations indicated on the program and corresponding overnights.

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in collaboration with
EURAC research
INSTITUTE OF MOUNTAIN EMERGENCY MEDICINE
THE UNIVERSITY of NEW MEXICO · DENALI

1st International Master Course in Mountain Expedition Medicine 2017-2018

dedicated to Bruno Dürrer

TRAINING CENTER

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

UNDER THE PATRONAGE OF

Ospedale di Circolo · Fondazione Macchi · Regione Lombardia · Sistema Sanitario · CLUB ALPINO ITALIANO · IMS · Dipartimento Neuroscienze Università di Torino · rega · Università degli Studi Milano Bicocca · Università Innsbruck · Ente Ospedaliero Cantonale · Sezione Ticino Club Alpino Svizzero CAS Club Alpin Suisse Schweizer Alpen-Club Club Alpin Svizzer · CLUB ALPINO SVIZZERO · CORPO NAZIONALE SOCCORSO ALPINO E SPELEOLOGICO · ISMM International Society for Mountain Medicine · INTERNATIONAL SOCIETY FOR MOUNTAIN MEDICINE · UIAA MEDCOM UIAA · International Commission for Mountain Emergency Medicine ICAR MEDCOM · AMGA · SISSI Società Italia Svizzera Studi Ipotermia · SLF · Université Toulouse III Paul Sabatier · Faculté des Sciences de l'Ingénieur · BERGWACHT BAYERN · Université Grenoble Alpes

Director: **Lorenzo Dominioni**
University of Insubria

Co-Directors/Coordinators:
Luigi Festi - Hermann Brugger and Darryl Macias
Osp. Univ. di Circolo, Varese / Inst. Mountain Emergency Medicine, EUR.AC Bolzano / The University of New Mexico, Albuquerque

OFFICIAL LANGUAGE
The official course language is English.

Dr. Luigi Festi
luigi.festi@asst-settelaghi.it

CALENDAR LESSONS

13 February 2017
Inauguration Varese

13-18 February 2017 Varese - Chamonix - Davos

22-31 March 2017

22-23 March 2017 - Davos

27-30 March Finale Ligure - Climbing techniques

20-25 April 2017

20-21 April 2017 Bad Toelz - Helicopter Rescue Simulator

23-24 April 2017 Air Zermat practical part winter

22-28 May 2017

Varese - REGA -Zurigo

03-09 July 2017

Practical part on Glacier

18-19 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

01-10 June 2018

Alaska Denali Park

September 2018 (facultative)

Master Peak in Caucaso (Cost € 2500)

27-28 November 2018

Diploma Session - Varese

Module 1

Basis, Diagnosis, Treatment of Altitude Sickness 50 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 32 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 Alpine Medical Practice 68 hours

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

Module 6

The Doctor and the Mountain 36 hours

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

> 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

Program Winter

> Basics on survival techniques, protection of the patient against further harm, self protection, bivouac…..
> Glacier travel, belaying in ice and snow,
> 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.

Chamonix - Ifremmont
Place : IFREMMONT Chamonix
« Theorical lesson : rescue and ressucitation in austere environement » Presentation of few rescue places in Europe
France - Italie - Suisse - Tchéquie - Catalogne
Analgesia and ressucitation in austere environnement
Place : Annecy Dropping Zone (Base Meythet - Annecy)
« simulating rescue »
Presentation of EC145 and Dropping Zone
Simulation exercice with a simulator EC 145 (ECASC) Victime management - Boarding, winch and landing Workshop with virtual trauma cases
Personnal material : mountain clothing, mountain or ski shoes, harness, helmet, gloves,
Place : Parmelan Massif (closes from Annecy)
« Workshop in real condition »
Workshop : crevasse extraction, management, treatment and evacuation of the victim by EC 145
Place : Courmayeur (Italie) Refugio Cai Uget (Val Veni)
Workshop : rescue without helicopter, self rescue
DSA, rescue in avalanche, management of victime on the field with using sledge

Program Summer

> Patient bag, vacuum mattress, stretcher, horizontal net
> Training on improvised rescue techniques
> Rescue on via ferrata
> Suspension trauma, rescue in lights sports
> Working with helicopters…. hovering … introduction to HEC (human external cargo), … procedures on longline, load transfer system

Denali Park - Alaska
1: Kahiltna
Utilize the Kahiltna Base camp area. Likely setting up camp a bit up glacier from the main camp. Demonstrate / instruct the points of camp set up on a glacier (crevasse probing, safe tent sites, hygiene, cooking, etc).
> incorporate day trips up glacier - this will necessitate prior exposure to roped travel.
> incorporate lectures / education sessions pertinent to the area, including a review of altitude, frostbite, trauma care, evacuation standards, long term care (hygiene, nutrition)

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

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
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CAUCHY EMMANUEL
CHIOCCONI RAMON
COGO ANNALISA
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CRIVELLARO PIETRO
DE BUJAN FEDERICO FERNANDEZ
DE LA PIERRE FRANZ
DELLA BORDELLA MATTEO
DIKIC NENAD
DOMINIONI LORENZO
DONATI SIMONE
DONEGANI ENRICO
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DURRER BRUNO
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FUGAZZOLA CARLO
GARZENA GUIDO
GATTERER HANDRES
GIARDINI GUIDO
GOBBI CRISTIANO
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HACKETT PETER
HEFTI URS
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MONTAROLO PIER GIORGIO
MORO SIMONE
NEGRINI DANIELA
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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…