

Accreditamento ECM (Medico Chirurgo – Infermiere) 4,5 Crediti

WEIL CONFERENCE



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# Conference on CARDIAC ARREST, SHOCK AND TRAUMA

Save Patients Lives Through Research  
in Critical Care and Education

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ISTITUTO MARIO NEGRI  
8-9 September 2012 - Milan, Italy





Sponsored By:



## WEIL CONFERENCE - Organizing & Scientific Committee

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“Coordinamento Clinico del Soccorso Sanitario”

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### **R. White**

Department of Internal Medicine, Division  
of Cardiovascular Diseases, Mayo Clinic  
College of Medicine, Rochester (USA)

### **L. Wik**

National Competence Center of Emergency  
Medicine, Oslo University (N)

## WEIL CONFERENCE - Program September 8<sup>TH</sup>

### 09.00 **Opening Address**

*Chairpersons: G. Ristagno, A. Gullo / Welcome Address: S. Garattini, E. Jimenez, P. Lumb*

### 09.30 **State of the Art in Critical Care**

- Tribute to Max Harry Weil, the Father of Critical Care. From the Beginning of Critical Care to the Present State of the Art - *A. Gullo*
- Quality of Care Assessment and Improvement: The GiVITI Experience - *G. Bertolini*
- Guidelines, Recommendations and Planning Strategy in Trauma Care - *P. Lumb*
- DISCUSSION: *R. Gazmuri, P. Lumb, P. Murabito, M. Noc, G. Sganga, M. von Planta*

### 10.50 **Coffee Break**

### 11.20 **Quality of CPR**

- Systemic and Myocardial Acid-Base Changes During CPR - a Historical Perspective - *M. von Planta*
- Chest Compression Only vs Chest Compression Plus Ventilation - *M. Castrén*
- Manual vs Mechanical Chest Compression - *L. Wik*
- Utstein Style and Quality of CPR - *E. Cerchiari*
- DISCUSSION: *M. Fries, R. Gazmuri, J. Jimenez, T. Pellis, M. von Planta*

### 13.00 **Lunch**

### 14.00 **Moderated Poster Session**

### 15.00 **Advances on Defibrillation**

- Priorities of Intervention and Predictors of Success of Defibrillation - *G. Ristagno*
- Ventricular Fibrillation and Defibrillation: State of Our Knowledge and Uncertainties - *R. White*
- DISCUSSION: *M. Balzanelli, R. De Gaudio, R. Latini, K. Kern, F. Kette, L. Wik*

### 16.00 **Invited Lecture**

- Comparison of Currently Available AEDs - *F. Kette*

### 16.20 **Oral Communication**

- Is Possible and Useful a CT Scan During Cardiopulmonary Resuscitation? - *M. Raimondi*

### 16.30 **Coffee Break**

### 17.00 **Optimization of CPR Procedures on Sudden Cardiac Death**

- Optimized Approach in Cardiocerebral Resuscitation - *K. Kern*
- Reperfusion Strategies of Sudden Cardiac Death - *M. Noc*
- ECMO Strategy in Cardiac Arrest - *R. Fumagalli*
- DISCUSSION: *A. Arcadipane, M. Fries, E. Jimenez, P. Lumb, A. Pesenti*

## WEIL CONFERENCE - Program September 9<sup>TH</sup>

### 08.30 **Pharmacological Approach During CPR**

- Vasopressors During CPR - *C. Sandroni*
- Targeting Mitochondria During CPR - *R. Gazmuri*
- The Potential Contribution of Corticosteroids to Positive Cardiac Arrest Outcomes - *S. Mentzelopoulos*
- DISCUSSION: *G. Cammarata, J. Jimenez, K. Kern, G. Li Volti, R. White*

### 09.50 **Invited Lecture**

- Translational Research: Current Status, Challenges, and Future Strategies - *G. Tognoni*

### 10.10 **Oral Communication**

- Researching New Biomarkers Predictive of Outcome of Cardiac Arrest: The Kynurenine Pathway Activation. An Experimental and Clinical Investigation - *F. Fumagalli*

### 10.20 **Coffee Break**

### 10.50 **Post-Resuscitation Care**

- Effectiveness of Hypothermia in Human Cardiac Arrest and Update on TTM Trial - *T. Pellis*
- New Strategies to Improve Outcome After Cardiac Arrest - *M. Fries*
- Predicting Outcome of Cardiac Arrest - *B. Böttiger*
- DISCUSSION: *M. Castrén, R. Gazmuri, G. Gullo, K. Kern, C. Ori*

### 12.15 **Oral Communication**

- Comparison of Oxygen and Carbon Dioxide for Brain and General Hypothermia in a Rabbit Model and Physics of CO<sub>2</sub> Expansion with no Neurological Defect in the First OHCA Patient - *G. Fontaine*

### 12.30 **Invited Lecture**

- From Experimental and Clinical Evidence to Guidelines - *J. Nolan*

### 12.50 **Combining Physiology, Clinical Outcome, Education, and Research**

- Role of Central Venous Saturation Monitoring - *L. Gattinoni*
- Education and Research in Critical Care - *P. Lumb*

### 13.30 **Closing Remarks** - *G. Ristagno*

## WEIL CONFERENCE - General Information

### THE VENUE

The venue of the “WEIL CONFERENCE - Conference on Cardiac Arrest, Shock and Trauma” is the Mario Negri Institute. The Mario Negri Institute for Pharmacological Research is a not-for-profit biomedical research organization. It was founded in 1961, and started work in Milan on 1 February 1963. There are now research units in Bergamo, at Ranica – near Bergamo – and at Santa Maria Imbaro, near Chieti.

#### Address:

Istituto di Ricerche Farmacologiche “Mario Negri”

Via Giuseppe La Masa, 19 - 20156 Milano

Ph: +39 02 390141 - Fax: +39 02 3546277

E-mail: [mnegri@marionegri.it](mailto:mnegri@marionegri.it) - Website: [www.marionegri.it](http://www.marionegri.it)

### REGISTRATION FEE

#### Registration Fees:

- Doctors ..... € 200,00\*
- Nurses and IRC member ..... € 150,00\*
- Resident ..... € 100,00\*

\*VAT 21% included

#### Registration Fee includes:

Congress Bag - Badge - Attendance Certificate - Coffee Break - Lunch



## WEIL CONFERENCE - General Information

### REGISTRATION DESK

The registration desk is located in the main hall of Istituto Mario Negri.

Opening hours:

**Saturday, 8 September 8.00-18.00 hrs**

**Sunday, 9 September 8.00-16.00 hrs**

Pre-registered delegates will receive the congress materials upon their arrival.

### CONGRESS LANGUAGE

All sessions of the scientific program are in English with simultaneous translation English/Italian.

### BADGES

Delegates will receive a name badge on registration time. The badge must worn prominently in order to gain access to the congress area during all scientific and social events. Admission will be refused to anyone not in possession of an appropriate badge.

### POSTER PRESENTATIONS

Posters will be affixed in the Poster Area - Main Floor from 09.30 a.m. of September 8 to 14.30 p.m. of September 9. Authors are required to be next their own posters during the coffee breaks and during the moderated poster session (September 8<sup>th</sup> 14.00/15.00 - 5 min for presentation + 1 min for discussion)

**POSTER SIZE:** 120 cm (Height) - 80 cm (Base)

## ABSTRACT DETAILS

**Oral Communication** PLENARY ROOM

### **Is Possible and Useful a CT Scan during Cardiopulmonary Resuscitation?**

**Raimondi M**, Pamploni G, Sgromo V, Guerci M, Sforzini I, Comelli A, Brancaglione A, Brancati S, De Napoli S, Consumati S, Cortesi S, Raimondi A, Rizzardi R.

### **Researching New Biomarkers Predictive of Outcome of Cardiac Arrest: the Kynurenine Pathway Activation. An Experimental and Clinical Investigation**

**Fumagalli F**, Ristagno G, Fries M, Brunelli L, Bagnati R, Pastorelli R, Latini R.

### **Comparison of Oxygen and Carbon Dioxide for Brain and General Hypothermia in a Rabbit Model**

**Fontaine G**, Piquet J, Lalot A, Didon JP, Schmid JJ, Jouven X, Chachques JC.

### **Physics of CO<sub>2</sub> Expansion with no Neurological Defect in the first OHCA patient**

**Fontaine G**, Mayaux J, Beygui F, Hidden-Lucet F, Himbert C, Isnard R, Metzger JP, Cariou A, Jouven X, Komajda M.

**Poster** AREA POSTER - Ground Floor - September 8th, 14.00 - 15.00

P1

### **Comparison of Oxygen, Compressed Air and Carbon Dioxide for Brain and General Hypothermia in Vitro**

Fontaine G, Didon JP, Schmid JJ, Jouven X.

P2

### **Physics of Cold Propagation in Fossa Nasalis and Brain after CO<sub>2</sub> Expansion in Agar-agar model; Value of IR Imaging**

Fontaine G, Didon JP, Schmid JJ, Jouven X.

P3

### **Is Mouth better than Nose Approach for Brain Protection in OHCA?**

Fontaine G, Didon JP, Schmid JJ, Jouven X.

P4

### **Choice of Canula Thickness in a Rabbit Model for Oral Cooling**

Fontaine G, Piquet J, Lalot A, Didon JP, Schmid JJ, Jouven X, Chachques JC.

## ABSTRACT DETAILS

P5

### **Cooling by CO<sub>2</sub> Expansion- Is a Regulator Necessary?**

Fontaine G, Didon JP, Schmid JJ, Jouven X.

P6

### **Comparison of Clinical and Experimental Cooling Techniques for OHCA**

Fontaine G, Didon JP, Schmid JJ, Jouven X.

P7

### **Value of Liquid CO<sub>2</sub> for Emergency Cooling**

Fontaine G, Didon JP, Schmid JJ, Jouven X.

P8

### **The GF Bottle**

Fontaine G, Didon JP, Schmid JJ.

P9

### **Computer Scan Tomography during Cardiopulmonary Resuscitation Delivered by an Automatic Chest Compression Device**

Cabrini L, Monti G, Bruno G, Borghi G, Colombo S, Zangrillo A.

P10

### **Out Hospital Peri-Mortem Caesarium Section in Post Traumatic Cardiac Arrest: Case Report**

Spagnoli M, Gatti F, Zerbi SM, Colombo D, Landriscina M, Kette F.

P11

### **Back from the Dead: A Case of Auto Resuscitation ('Lazarus phenomenon') in a Patient with a do not Resuscitate Order in Place. Review of the Current Literature and Ethical Considerations of Post Resuscitative Care Provision**

Graham B.

P12

### **Acute Heart Failure in Children: Successful Treatment of Acute Myocarditis by AV ECMO**

Nonini S, Mondino M, Bottiroli M, Zannoli. S, Delor F, Ligabò EV, Beziza E, Nardella R, Facchini A, Ceravola E, Paino R.

## ABSTRACT DETAILS

P13

### **Therapeutic Hypothermia in Cardiac Arrest and Ventilation-Associated Pneumonia after Intubation: a One-year First Analysis in our ICU**

Campanile V, Roman Pognuz E, Verginella F, Leone D, Ellero T, Capri C.

P14

### **An Unexpected Cardiac Arrest in the Operating Room: a Case of Successful Prolonged CPR**

Gurrieri C, Macca A, Murabito P, Stimoli F, Gullo A.

P15

### **Sudden Cardiac Death and New Guidelines CPR**

Gurrieri C, Ristagno G, Murabito P, Gullo A.

P16

### **Ocular Ultrasound to Detect Intracranial Hypertension in Trauma Patients**

Cammarata G, Ristagno G, Cammarata A, Mannanici G, Denaro C, Gullo A.

P17

### **Prehospital Mechanical CPR, Experiences as a High Quality “bridge” to Intrahospital Prolonged CPR**

Piacentini A, Romanò G, Volontè M, Landriscina M.

P18

### **CyP, a Toll-Like Receptor 4 Antagonist, Protects the Heart from Ischemia/Reperfusion Injury**

Russo I, Soldo A, D’Alessandro S, Maggioni S, Gemma S, Staszewsky L, Molteni M, Rossetti C, Latini R.

P19

### **Post Resuscitation Treatment with Inhaled Argon Improves Outcome in a Porcine Model of Myocardial Infarction and Cardiac Arrest**

Ristagno G, Fumagalli F, Russo I, Tantillo S, Staszewsky L, Cornaghi L, Masson S, Latini R.

P20

### **Repeated Measurements of Neuron-Specific Enolase to Determine Favorable and Poor Neurological Prognosis after Target Temperature Management**

Di Luca E, Pellis T, Sanfilippo F, Lovisa D, Magagnin L, Franceschino E, Roncarati A, Mercante WP.

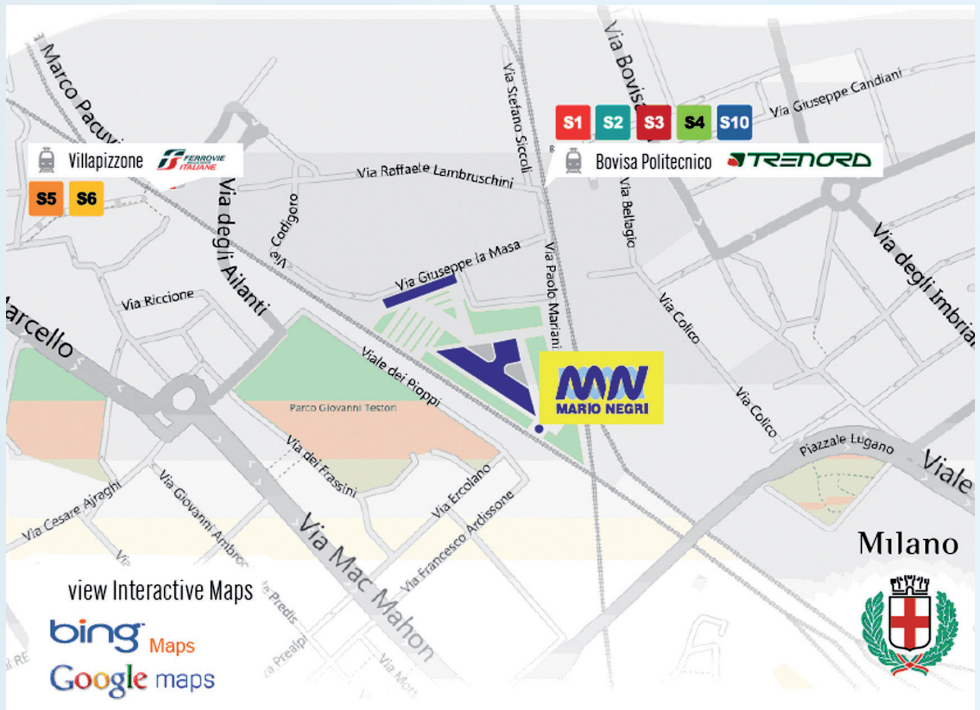




## WEIL CONFERENCE - How to get to Mario Negri?

### by AEROPLANE

Milan is easily reachable from THREE INTERNATIONAL AIRPORTS: MILANO LINATE (near to the downtown), MILANO MALPENSA (40 km) and ORIO AL SERIO (50 km, near to Bergamo). Together they ensure frequent domestic and international connections.



### MILANO MALPENSA

MALPENSA is the largest airport in the Milanese area and it has two terminals at its disposal that ensure domestic and International connections, as well as numerous intercontinental flights. The airport is well connected with the Lombard capital. The journey takes roughly one hour by car on the A8 autostrada (motorway). There are also shuttle services (Malpensa Bus Express, Malpensa Shuttle Air Pullman) that connect it with Stazione Centrale (Central Station) and Linate Airport. It is also connected by train to the downtown to Cadorna station (Malpensa Express Ferrovie Nord Milano).

## WEIL CONFERENCE - How to get to Mario Negri?

**From Malpensa to istituto Mario Negri:** take the train called MALPENSA EXPRESS (price for one-way ticket is 11 euros) to the downtown: get off at the station MILANO NORD BOVISA POLITECNICO, which is very close to the Istituto Mario Negri. Exiting the Bovisa Politecnico station you should take the stairs on the right and reach the main road. Take the left and follow the road, then take the first road on the right. After 100 m. take the first road on the left and the Istituto Mario Negri will be right in front of you (5 minutes walk). [www.milanomalpensa1.eu](http://www.milanomalpensa1.eu) - [www.milanomalpensa2.eu](http://www.milanomalpensa2.eu)



Malpensa Express



Trenord - Ferrovie Nord Milano

### MILANO LINATE

LINATE is a city airport, very close to the centre. In just a few minutes passengers can arrive in Piazza San Babila with the urban bus line number 73. Linate is also serviced by private shuttle buses that link the airport with Stazione Centrale (Central Station), Fiera Milano city, Rho fair centre and also Malpensa airport (Starfly, Air Pullman Noleggi, and Malpensa Shuttle Air Pullman).

**From Linate to istituto Mario Negri:** you can use TAXI or BUS 73 to Piazza San Babila, in the centre of Milan, where you can take the UNDERGROUND LINE 1 (also called RED LINE; price for a ticket is 1.5 euros and the ticket is valid for 90 minutes after first usage, also on suburban railways) to the CADORNA railway station. All trains leaving Cadorna station stop at the MILANO NORD BOVISA POLITECNICO STATION (see the box above for indications from this stop to Istituto Mario Negri). [www.milanoline.eu](http://www.milanoline.eu)



Bus 73 and X73 Linate Express to Linate Airport



Underground Line 1



Suburban railways from Cadorna Station

### MILANO ORIO AL SERIO

ORIO AL SERIO approximately one hour's travel from Milan, is well connected with the city centre. It can be reached by car in autostrada (motorway) Milano-Venezia A4 or by shuttle bus (Autostradale, Locatelli Air Pullman) that connects it with Stazione Centrale (Central Station), Milan. For those that arrive or depart in train, Bergamo's Stazione Centrale can be reached using buses that depart every ten minutes to and from the airport.

**From Orio al Serio to istituto Mario Negri:** take a SHUTTLE BUS to the STAZIONE CENTRALE, from where you can use the UNDERGROUND LINE 2 (also called GREEN LINE; price for a ticket is 1.5 euros and the ticket is valid for 90 minutes after first use, also on Trenord - Ferrovie Nord Milano railways) to get the CADORNA railway station. Then, to reach the istituto Mario Negri, take a train to the MILANO NORD BOVISA POLITECNICO STATION (see the Malpensa box above for indications from this stop to Istituto Mario Negri).



Bus service to Orio al Serio Airport



Underground Line 2



Suburban railways from Cadorna Station

## WEIL CONFERENCE - How to get to Mario Negri?

### by TRAIN

Milan has numerous railway stations at its disposal, the most important being CENTRALE, LAMBRATE and GARIBALDI.

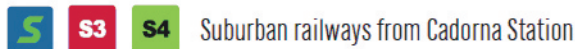
From **STAZIONE CENTRALE** (Central Station) trains depart for all Italian and European destinations, while the others function as an important hub for regional services.

Furthermore, in the middle of the city, beside Castello Sforzesco (Sforza Castle), there is **CADORNA STATION**. It is managed by the Ferrovie Nord group and represents an important regional railway siding.

This network, also used by the PASSANTE FERROVIARIO, which functions in a similar manner to an urban underground line and services numerous underground stations in the centre of Milan, such as Repubblica and Garibaldi Passante. Moreover, it connects the city with important tourist locations and the international airport Malpensa. With the Trenord railway, trains run to Como station, just a short distance from the lake, as well as Canzo in upper Brianza, Varese and Laveno on Lake Maggiore.



**From Cadorna Station to istituto Mario Negri:** take a train (price for a ticket is 1.5 euros) to the MILANO NORD BOVISA POLITECNICO STATION, which is very close to the Istituto Mario Negri. All trains leaving Cadorna station stop there. Exiting the Bovisa Politecnico stop you should take the stairs on the right and reach the main road. Take the left and follow the road, then take the first road on the right. After 100 m. take the first road on the left and the Istituto Mario Negri will be right in front of you (5 minutes walk). [www.trenord.it](http://www.trenord.it)



**From Central Station to istituto Mario Negri:** take the UNDERGROUND LINE 2 (also called GREEN LINE; price for a ticket is 1.5 euros and the ticket is valid for 90 minutes after first use, also on Trenord - Ferrovie Nord Milano railways) to get the CADORNA railway station. Then, to reach the Istituto Mario Negri, take a train to the MILANO NORD BOVISA POLITECNICO STATION (see above). [www.atm-mi.it](http://www.atm-mi.it) – [www.trenord.it](http://www.trenord.it)



### IF YOU ARE ALREADY IN MILAN

The easiest way to get the Istituto Mario Negri is taking a train (price for a ticket is 1.5 euros) from CADORNA STATION to the MILANO NORD BOVISA POLITECNICO STATION. All trains leaving Cadorna station stop there. Exiting the Bovisa Politecnico stop you should take the stairs on the right and reach the main road. Take the left and follow the road, then take the first road on the right. After 100 m. take the first road on the left and the Istituto Mario Negri will be right in front of you (5 minutes walk).



Suburban railways from Cadorna Station

In alternative, you can take a train from **GARIBALDI STATION** to the MILANO NORD BOVISA POLITECNICO STATION using the PASSANTE FERROVIARIO, which is similar to an urban underground line.



Suburban railways from Garibaldi Station

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# Honoring the legacy of resuscitation pioneer Max Harry Weil



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ZOLL is proud to be the platinum sponsor of the Weil Conference on Cardiac Arrest, Shock and Trauma, which pays homage to clinician, teacher, and researcher Dr. Max Weil and provides a forum for others focused on continuing to advance critical care medicine.

For more information about ZOLL,  
visit us at [www.zoll.com](http://www.zoll.com)

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