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Fabio Barbone	<b>ITALY</b>
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Marika Berglund	<b>SWEDEN</b>
Alfred Bernard	<b>BELGIUM</b>
Maxine Bonham	<b>UNITED KINGDOM</b>
Karin Broberg	<b>SWEDEN</b>
Emeir Duffy	<b>UNITED KINGDOM</b>
Jena Hamadani	<b>BANGLADESH</b>
Milena Horvat	<b>SLOVENIA</b>
Hans Løkke	<b>DENMARK</b>
Roberto Lucchini	<b>ITALY</b>
Gunnar Nordberg	<b>SWEDEN</b>
Michael G. Palmgren	<b>DENMARK</b>
Giovanni Parrinello	<b>ITALY</b>
Jukka Salonen	<b>FINLAND</b>
Staffan Skerfving	<b>SWEDEN</b>
Ulf Strömberg	<b>SWEDEN</b>
Marie Vahter	<b>SWEDEN</b>
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For further information please visit the  
 websites of the PHIME project  
<http://www.phime.org/>

and the Institute of Occupational  
 Health of Brescia:  
<http://www.medlavoro-unibs.it/news.html>



Institute of  
 Occupational  
 Health,  
 University of  
 Brescia, Italy

Public Health Impact  
 of Long-Term, Low-  
 Level Mixed Element  
 Exposure in  
 Susceptible  
 Population Strata

European Union,  
 6<sup>th</sup> Frame  
 Program

## FINAL ANNOUNCEMENT

# TRAINING COURSE on Risk Assessment of Metal Exposure

Brescia, Italy

September 18-26, 2008

This Course is financed by the  
 European Union and organized by the  
 University of Brescia.

## Description of the Training Program

The training program will be organized in Brescia, Italy, from September 18th to 26th, 2008. The University of Brescia will provide the infrastructure and will also certify the attendance to the course, through official recognition signed by the Rector of the University.

The size of classes will be of 40 participants maximum, and the composition should be of PhD and graduate students.

A special attention will be given to work groups, with a problem based learning approach. This will be structured in small groups in the afternoon of each day, with the teachers of the morning sessions guiding the students through the process. Rooms of different sizes will be available also for parallel meetings. Each group will be assigned with specific tasks, and problems to be approached with group discussions and web-based search. Each group will present a final solution to the other groups to stimulate general discussion. Teachers are available in case the groups have questions or need guidance.

## Training Venue

The School of Medicine of the University of Brescia (<http://www.unibs.it/online/med/Home.html>)

## Topics

The general topic of the training program is risk assessment of the health effects due to exposure to toxic metals. The training program will condense the main aspects approached by the PHIME project, that can be divided in three major components:

**First** of all the toxic substances heavy metals, but also with mentions to PCB, POPs and endocrine disruptors. Scientific updates regarding exposure levels in the environmental and occupational settings, and the most recent knowledge on human health effects will be provided. Especial emphasis will be given to interactions, effects on bone, kidney CNS.

**Secondly**, the plant physiology as a possible solution to the health problems raised by exposure, and the nutritional factors as important crossroad between nutrition and toxicology.

**Third** part will cover the methodological aspects: biomonitoring, the use of biomarkers, chemical analysis, data treatment of large dataset with the technical explanation of the various possibilities from NOAEL to Benchmark Dose analysis for the risk assessment, and a final outline of risk management in collaboration with other EU projects.

## Accommodation

Participants are highly recommended to reside in hotels apartments and hostels near the conference venue. The Training organizers will provide a list of locations and restaurants at good tariffs in a further announcement.

The Training organizers are not liable for personal injuries sustained, or for loss of, or damage to property belonging to training participants or their accompanying persons, either during or as a result of the training. Please check the validity of your own health insurance.

## Inscription

There is no inscription fee for the training course which is financed by the 6th Frame Program of European Union.

## Documents for inscription

Participants will have to provide an updated curriculum vitae and personal information by filling in the application form to the Course.

**SCIENTIFIC PROGRAM**  
**TRAINING COURSE on Risk Assessment of Metal Exposure**  
**18-26 SEPTEMBER 2008, Brescia, Italy**

		THU 18	FRI 19	MON 22	TUE 23	WED 24	THU 25	FRI 26
8.30	9.30	<b>Registration</b>	<b>Lead toxicology (Skerfving/ Bergdahl)</b>	<b>Arsenic and CNS (Vahter/ Hamadani)</b>	<b>Cadmium, bone, kidney (Bernard/ Åkesson)</b>	<b>Biomonitoring techniques (Aitio/Berglund)</b>	<b>Plant physiology (Palmgren)</b>	<b>Risk assessment (Nordberg) Epidemiological aspects (Barbone)</b>
9.30	10.30							
<b>BREAK</b>			<b>BREAK</b>					
10.45	11.45		<b>Mercury, CNS &amp; cardio (Salonen/ Weihe)</b>	<b>Manganese and CNS (Lucchini/ Albini)</b>	<b>Nutrition and Toxicology (Duffy/Bonham)</b>	<b>Analytical issues (Horvat)</b>	<b>Gene-metal interactions (Broberg/ Strömberg)</b>	<b>Multivariate modelling (Parrinello/ Strömberg)</b>
11.45	12.45							
<b>LUNCH</b>			<b>LUNCH</b>					
14.30	14.45	<b>Welcome (Lucchini)</b>	<b>Work group</b>					
14.45	15.00	<b>Orientation (Löfmark/ Galafassi)</b>						
15.00	16.00	<b>Overview of PHIME project (Skerfving)</b>						
16.00	17.00	<b>Overview of NoMiracle project (Løkke)</b>						

**TRAINING COURSE on Risk Assessment of Metal Exposure****18-26 SEPTEMBER 2008, Brescia, Italy**

	<b>SPEAKERS</b>	<b>COUNTRY</b>	<b>Full title</b>
1.	<b>Antero Aitio</b>	<b>FINLAND</b>	Biomonitoring: Goals, Techniques, and pitfalls. Importance in toxicology and risk assessment
2.	<b>Agneta Åkesson</b>	<b>SWEDEN</b>	Cadmium exposure and adverse effects on bone
3.	<b>Elisa Albini</b>	<b>ITALY</b>	Longitudinal follow-up studies in risk assessment: the example of Mn in occupational settings
4.	<b>Fabio Barbone</b>	<b>ITALY</b>	Epidemiological aspects in risk assessment
5.	<b>Ingvar Berghdal</b>	<b>SWEDEN</b>	Lead exposure: history, geography and assessment
6.	<b>Marika Berglund</b>	<b>SWEDEN</b>	Biomonitoring of mercury: use of different exposure biomarkers
7.	<b>Alfred Bernard</b>	<b>BELGIUM</b>	Cadmium exposure and adverse effects on renal function and diabetes
8.	<b>Maxine Bonham</b>	<b>UNITED KINGDOM</b>	Nutrition and toxicology: the balance between beneficial and adverse effects
9.	<b>Karin Broberg</b>	<b>SWEDEN</b>	Gene-metal interactions and use of related biomarkers
10.	<b>Emeir Duffy</b>	<b>UNITED KINGDOM</b>	Nutrition and toxicology: the balance between beneficial and adverse effects
11.	<b>Jena Hamadani</b>	<b>BANGLADESH</b>	Neuropsychological testing to assess developmental effects
12.	<b>Milena Horvat</b>	<b>SLOVENIA</b>	Quality Control and Quality Assurance in environmental epidemiologic studies: problems and solutions
13.	<b>Hans Løkke</b>	<b>DENMARK</b>	Overview of the NoMiracle Integrated Project : NOvel Methods for Integrated Risk Assessment of Cumulative stressors in Europe
14.	<b>Roberto Lucchini</b>	<b>ITALY</b>	Manganese neurotoxicity: the importance of lifetime cumulative exposure in risk assessment.
15.	<b>Gunnar Nordberg</b>	<b>SWEDEN</b>	Use of Benchmark Dose and NOAEL/LOAEL approach in risk assessment
16.	<b>Michael G. Palmgren</b>	<b>DENMARK</b>	Plant physiology and preventive aspects for toxicology
17.	<b>Giovanni Parrinello</b>	<b>ITALY</b>	Use of mixed models to assess multiple parameters of exposure, effect and hypersensitivity
18.	<b>Jukka Salonen</b>	<b>FINLAND</b>	Mercury and increased cardiovascular risk
19.	<b>Staffan Skerfving</b>	<b>SWEDEN</b>	Lead: health effects and unresolved issues
20.	<b>Ulf Stromberg</b>	<b>SWEDEN</b>	Multivariate modelling in risk assessment and for gene-environment interaction
21.	<b>Marie Vahter</b>	<b>SWEDEN</b>	Neurotoxicity of arsenic
22.	<b>Pál Weihe</b>	<b>FAROE ISLANDS</b>	Mercury and adverse effects on neurodevelopmental function



Institute of Occupational Health,  
University of Brescia, Italy



Public Health Impact of Long-Term, Low-Level  
Mixed Element Exposure in Susceptible  
Population Strata



European Union, 6<sup>th</sup> Frame Program

**APPLICATION FORM**

**TRAINING COURSE on Risk Assessment of Metal Exposure,  
18-26 SEPTEMBER 2008, Brescia, Italy**

**FAMILY NAME:**

**ADDRESS:**

**FIRST NAME:**

**COUNTRY:**

**DEGREE IN:**

**TEL. / FAX:**

**AFFILIATION:**

**E-MAIL:**

Please return this application form by E-mail to:

**MS. SIMONA GALAFASSI**

**medlav@med.unibs.it**