

Final
Programme

ESHO 2014

29th Annual Meeting of the
EUROPEAN SOCIETY for
HYPERTHERMIC ONCOLOGY



Torino, Italy

June, 11th-14th 2014



Congress President: Pietro Gabriele, MD

Sponsored by the International Association for Hyperthermic
Oncology and its member organizations:

ESHO: European Society for Hyperthermic Oncology

With the welcome participation of the
Italian Association for Radiation Oncology (AIRO)





Dear Colleagues,

It is with great pleasure that I invite you to attend the 29th Annual Meeting of European Society for Hyperthermic Oncology ESHO, to be held in Turin, Italy, June 11-14, 2014.

In the last year was published an important phase III study on soft tissue sarcomas and a next generation of studies need more participation than in the past. Your participation at this meeting is essential also to achieve this goal.

The scientific program of ESHO 2014 will cover the major clinical, physical, and biological developments within hyperthermia; these will be presented in the form of keynote lectures, symposia, workshops and as poster presentations.

The venue of the meeting will be the National Car Museum, situated in the South Turin, and located near the great Lingotto building. This is a wide space with excellent rooms at reasonable prices, full lecture facilities, and adequate space for exhibitors and posters.

The accommodations are choised with accuracy: talking about hotels, they are sited in Lingotto or in center Turin, at only two kilometers, five minutes of metro, from the site of the Congress.

Turin itself is the third largest city in Italy with about 1.000.000 inhabitants. Historically it is one of the oldest towns of Italy, ancient capital of Italy Kingdom in 1861-1865, and offers great opportunities for tourists and professional visitors for his ancient royal palaces, aegyptian, cinema and car national museums and XX century architectures.

Turin also has a long association with hyperthermia. Clinical studies were initiated at Turin University Hospital-Molinette back in 1979 and since then the research and clinical groups at this hospital and from 1999 also in Mauriziano Hospital and now in Candiolo Cancer Center, made significant technical (with Aeritalia in the 80'-90s) and clinical contributions to the field.

Turin was also the site of more than one Italian and International Course/Congress for Hyperthermic Oncology in 1987, 1996, 2004 and 2005.

I look forward to seeing you in Turin in June, 2014, for what I'm sure will be a wonderful meeting.

Pietro Gabriele, MD
President of the ESHO Meeting





ESHO

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EDUCATIONAL DAY

Scientific Cancer Center of Candiolo, (Candiolo, TO)

Wednesday - June 11th 2014

Session Radiotherapy and Oncology

Radiotherapy Room, Scientific Cancer Center Candiolo

Chairs: *P. Gabriele (Candiolo, To), M. Stasi (Candiolo, To)*

- | | | |
|---------|--|-----------------------------------|
| 09.45 | History of hyperthermia | <i>P. Gabriele (Candiolo, To)</i> |
| 10.05 | Biology and physiology of hyperthermia | <i>C. Guiot (Torino)</i> |
| 10.25 | Physics of hyperthermia with microwaves and radiofrequency | <i>A. Di Dia (Candiolo, To)</i> |
| 10.45 | Hyperthermia facilities in 2014 | <i>H. Crezee (Amsterdam)</i> |
| 11.10 | Discussion | |
| 11.30 | Coffee break | |
| 11.50 | Clinical results of Hyperthermia and Radiation therapy | <i>S. Maluta (Verona)</i> |
| 12.15 | The rationale of association of Hyperthermia and Chemotherapy and clinical results | <i>L.H. Lindner (Munich)</i> |
| 12.40 | Discussion | |
| 13.00 | Lunch | |
| Chairs: | <i>A. Di Dia (Candiolo, To), E. Garibaldi (Candiolo, To), G. Penduzzu (Candiolo, To)</i> | |
| 14.00 | Video presentation of Hyperthermia in Turin | |
| | <i>G. Petrilli, S. Signoretta (Candiolo, To)</i> | |
| 14.20 | Visit of facilities of the Radiotherapy Department in Candiolo and clinical treatments with superficial microwave hyperthermia | |
| 16.30 | Final discussion and conclusions | |

Session Surgery

Surgery Room, Scientific Cancer Center Candiolo

Chairs: *M. De Simone (Candiolo, To), M. Vaira (Candiolo, To)*

- | | | |
|-------|--|---|
| 09.00 | HIPEC operation in surgery room via leaded | <i>M. De Simone (Candiolo, To), M. Vaira (Candiolo, To)</i> |
| 16.00 | Final discussion and conclusions | |
| 16.30 | End of the session | |

Educational Day without E.C.M. Italian Credits





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

Opening Session

Auditorium

18.00

Opening Ceremony

Authorities Greetings

G.C. Van Rhoon ESHO President
R. Maurizi Enrici AIRO President
P. Gabriele Congress President

Opening Lecture

Current aspects of hyperthermia *R. Issels (Munich)*

19:30

Orchestra e Coro
"I Music Piemonteis"
Città di Ciriè - Torino

Foyer Museo Nazionale dell'Automobile

20.00

Welcome cocktail

ESHO CONGRESS
Wednesday - June 11th 2014

ESHO CONGRESS





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

I Session Clinical Developments I

Auditorium

Chairs: *N.R. Datta, R. Wessalowski*

- | | | |
|-------|---|-----------------------------------|
| 08.30 | Introduction | <i>N.R. Datta, R. Wessalowski</i> |
| 08.40 | HDR + interstitial hyperthermia in cervix cancer | <i>A. Zolciak-Siwinska</i> |
| 09.00 | Hyperthermia in pediatric cancer | <i>R. Wessalowski</i> |
| 09.20 | Hyperthermia and protontherapy in soft tissue sarcoma | <i>N.R. Datta</i> |

Oral communications

- | | |
|-------|---|
| 09.40 | Regional hyperthermia added to hormonal therapy and radiotherapy in T2b-T4 prostate cancer. Long-term follow up results
<i>S. Dall'Oglio</i> |
| 09.50 | Correlation of tumor temperature with treatment outcome in the therapy of abdominal sarcomas with chemotherapy and regional hyperthermia (RHT)
<i>S. Abdel-Rahaman</i> |
| 10.00 | Hyperthermia and re-irradiation for postirradiated locoregionally recurrent breast cancers: A single institutional experience
<i>E. Puric</i> |
| 10.10 | Discussion |
| 10.30 | Coffee Break |

II Session Developments in Nanotechnology

Auditorium

Chairs: *S. Coluccia, I. Yermakova*

- | | | |
|----------------------------|--|---------------------------|
| 11.00 | Introduction | |
| 11.10 | Magnetic nanostructures for hyperthermia | <i>F. Albertini</i> |
| 11.30 | Nanostrategies in cancer therapy | <i>R. Cavalli</i> |
| 11.50 | Cellular magnetic hyperthermia | <i>M.R. Ibarra Garcia</i> |
| <i>Oral communications</i> | | |
| 12.10 | Iron oxide nanoflakes for hyperthermia and magnetic resonance imaging
<i>A. Cervadoro</i> | |
| 12.20 | Iron-oxide nanoparticles used for target cancer gene therapy and hyperthermia
<i>E. Vernè</i> | |
| 12.30 | Composite bone cements based on PMMA loaded with a ferrimagnetic bioactive glass-ceramic for the treatment of bone tumour
<i>M. Bruno</i> | |
| 12.40 | End of the Session | |
| 12.45 | ESHO General Assembly | |
| 13.15 | Lunch | |





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

III Session Perspective of a multicentric randomized Phase III Trial

Auditorium

Chairs: *J. van der Zee, L.H. Linder*

14.00	Introduction	<i>J. van der Zee</i>
14.10	Hyperthermia in breast cancer	<i>G. van Tienhoven</i>
14.30	Hyperthermia in soft tissue sarcoma	<i>L.H. Lindner</i>
14.50	Hyperthermia in cervix cancer	<i>M. Franckena</i>

Oral communications

15.10	Prospective phase II trial of salvage brachytherapy with interstitial hyperthermia in patients with local recurrence of prostate cancer after external beam radiation therapy <i>A. Kukielka</i>
15.20	Combined chemoradiotherapy with local microwave hyperthermia for the treatment of T3N0 laryngeal carcinoma: a retrospective study with long-term follow-up <i>V. Kouloulis</i>
15.30	Investigation for a prognostic parameter available from deep hyperthermia treatment planning parameters in locally advanced cervical patients <i>Z. Rijnen</i>
15.40	Discussion
16.00	Coffee Break

Parallel Session Poster Presentation

Room 150

Chairs: *V. Donato, A. Grandinetti*

15.00	Implantation of superficial hyperthermia in Northern Israel - preliminary results <i>R. Ben Yosef</i>
15.10	Efficacy and toxicity of hyperthermia with Helical Tomotherapy in superficial recurrent and metastatic tumors <i>E. Garibaldi</i>
15.20	Trimodal treatment for unresectable pancreatic adenocarcinoma: percutaneous irreversible electroporation (IRE) + Gemox + Capacitative hyperthermia <i>G.P. Ianniello</i>
15.30	Preliminary results of chemoradiation plus hyperthermia and high-dose-rate brachytherapy for locally advanced cervical carcinoma <i>E. Clarke</i>

ESHO CONGRESS Thursday - June 12th 2014





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

- 15.40 Pre-operative neoadjuvant use of whole-body and locoregional hyperthermia in mammary carcinoma. Preliminary report
E. Pontiggia
- 15.50 Feasibility study of electromagnetic antenna model for superficial hyperthermia treatment planning
G.I. Boboc
- 16.00 Coffee Break

IV Session Diagnostic Imaging and drug delivery

Auditorium

Chairs: *A.L. Grosu, M.R. Ibarra Garcia*

- 16.20 Introduction
- 16.30 The role of diagnostic tools in hyperthermia *D. Regge*
- 16.50 Theoretical and practical role of PET(CT) imaging in the hyperthermia associated with radiotherapy and/or chemotherapy *A.L. Grosu*
- 17.10 Real time monitoring of FUS by imaging *A. Melzer*
- 17.30 Multifunctional Plasmonic Nanoparticles for Sensing, Imaging and Cancer Therapy *S. Astilean*
- Oral Communications*
- 17.50 Electric tissue property imaging using MRI for improved SAR assessment during Hyperthermia treatment planning
E. Balidemaj
- 18.00 Non-invasive absolute temperature measurement in deep hyperthermia using MRI-spectroscopy
J. Hartmann
- 18.10 Optimization of thermosensitive liposome formulations for intravascular drug release
W. J.M. Lokerse
- 18.20 Tumor ablation combined with thermo-sensitive liposomal doxorubicin: effect of treatment time and administration schedule
D. Haemmerich
- 18.30 Discussion
- 18.45 End of the Sessions





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

V Session TPS and Quality Control Developments

Auditorium

Chairs: *H. Crezee, M. Stasi*

- | | | |
|-------|---|---------------------------|
| 08.30 | Introduction | <i>H. Crezee</i> |
| 08.40 | Treatment planning systems for hyperthermia | <i>H.P. Kok</i> |
| 09.00 | Advanced hyperthermia treatment planning directed at head and neck | <i>M.M. Paulides</i> |
| 09.20 | Guidelines and Quality Controls | <i>H. Dobsicek Trefna</i> |
| | <i>Oral Communications</i> | |
| 09.40 | Benefits of quantitative and adaptive HTP guidance for loco-regional deep hyperthermia based on VEDO | <i>G.C. Van Rhooen</i> |
| 09.50 | First results with a new 3D E-field scanning phantom for quality assurance in deep hyperthermia systems | <i>D. Marder</i> |
| 10.00 | Hyperthermia Treatment Planning (HTP) for the bladder: Modeling Fluids | <i>G. Shooneveldt</i> |
| 10.10 | Feasibility of on-line adaptive hyperthermia treatment planning: prediction of SAR changes in patients after phase steering | <i>H.P. Kok</i> |
| 10.20 | Discussion | |
| 10.30 | Coffee Break | |

VI Session Clinical Developments II: Surgery

Auditorium

Chairs: *M. Deraco, M. De Simone*

- | | | |
|-------|---|--------------------------------|
| 11.00 | Introduction | <i>M. Deraco, M. De Simone</i> |
| 11.10 | Isolated Limb Perfusion | <i>A.M. Eggermont</i> |
| 11.30 | HIPEC: Indications and results | <i>A. Königsrainer</i> |
| 11.50 | HIPEC in ovarian cancer | <i>J.M. Classe</i> |
| | <i>Oral Communications</i> | |
| 12.20 | Cytoreductive Surgery and hyperthermic Intraperitoneal Chemotherapy in patients with Pseudomixoma Peritonei from appendiceal origin | <i>M. Vaira</i> |
| 12.30 | Cytoreductive Surgery plus hyperthermic Intraperitoneal Chemotherapy for the treatment of peritoneal carcinomatosis | <i>L. Santurro</i> |

Friday - June 13th 2014

ESHO CONGRESS





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

- 12.40 Evaluation in nude mice of Heated Intraperitoneal Chemotherapy versus Targeted Alpha-Therapy with Bismuth-213
A. Derrien
- 12.50 Discussion
- 13.00 Lunch

VII Session Biological Developments

Auditorium

Chairs: *M. Dewhrist, M.R. Horsman*

- 14.00 Introduction *M.W. Dewhrist - M.R. Horsman*
- 14.10 Has hyperthermia biology changed? *M.R. Horsman*
- 14.30 Quantifying the combined effect of radiation therapy and hyperthermia *H. Crezee*
- 14.50 Key physiologic effects of hyperthermia that can be exploited for therapy *M.W. Dewhrist*

Oral Communications

- 15.10 Programmed cell death and damage associated molecular patterns induced by modulated electrohyperthermia in colorectal adenocarcinoma model
N. Meggyeshazi
- 15.20 Enhancement of radiation-induced chromosomal trans location by hyperthermia is time-dependent
J. Bergs
- 15.30 Thermosensitization of trabectedin in human soft-tissue sarcoma (STS) cells: hyperthermia-mediated BRCA2-degradation is involved in enhanced cytotoxicity
D. Harnicek
- 15.40 Estimating Radio-Sensitisation based on Re-Oxygenation after hyperthermia by using Dynamic Models
S. Scheidegger
- 15.50 Phosphatidyldiglycerol-based thermosensitive liposomes and hyperthermia in an orthotopic rat bladder tumor model
S. Limmer
- 16.00 Discussion
- 16.10 Coffee Break





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

Parallel Session Poster Presentation

Room 150

Chairs: *J. Contreras, A. Gramaglia*

15.00 Retrospective analysis of patients treated with hyperthermia and radiation and chemoradiation. A single institution report
N.G. Huilgol

Poster Presentation

15.15 Quasi-experimental feasibility study (case-control) associating local deep hyperthermia treatment with standard cancer treatments and describing the patterns of response
I. Herruzo Cabrera

15.25 Temozolomide, thalidomide and hyperthermia in a recurrent high grade astrocytoma of the spinal cord previously treated by surgery and radiotherapy
A. Gramaglia

15.35 The role of capacitive hyperthermia in the combined treatment of peritoneal carcinosis
G.M. Pigliucci

15.45 A retrospective assessment of loco-regional Hyperthermia and fever-range whole body Hyperthermia in an integrative oncology setting
G. Parmar

15.55 International Research in the field of onco-Hyperthermia and its impact on Clinical Practice
A. Barich

16.05 Planning of Head and Neck Tumours Treatment
B. Vrbova

16.15 Discussion

16.20 Coffee Break

VIII Session Technical innovations for clinical applications

Auditorium

Chairs: *B. Audone, I. Vrba*

16.40 Introduction *I. Vrba*

16.50 Advances in Radiofrequency versus HIFU hyperthermia *G. Ter Haar*

17.10 Accuracy and stability in a new deep hyperthermia system *S. Ciampa*

Friday - June 13th 2014

ESHO CONGRESS





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

- 17.30 Exploring 434 MHz phased array for hyperthermia heating of semi-deep targets *P. Tognolatti*
- Oral Communications*
- 17.50 Clinical feasibility of the AMC2 hyperthermia system.
A. Bakker
- 18.00 An optical electric-field probe for quality assurance during simulation guided hyperthermia
D. De Jong
- 18.10 Applicator for head and neck tumor treatment: effect of frequency variation and patient positioning
H. Dobšiček Trefná
- 18.20 Discussion
- 18.30 *ESHO Award Session*
- Informa/Yamamoto editor awards 2013 announcement *M.W. Dewhirst*
Students Awards *G.C. van Rhoon, P. Gabriele*
- 18.40 *Introduction to the ESHO-BSD Award Winner* *R. Wessalowski*
- 18.50 Presentation of the ESHO Award Winner
- 19.00 End of the Session





ESHO CONGRESS

Museo Nazionale dell'Automobile (Torino)

IX Session HIFU and thermal ablation

Auditorium

Chairs: *F. Orsi, G. Borasi*

09.00	Introduction	<i>F. Orsi, G. Borasi</i>
09.10	Biological effects of HIFU	<i>G. Ter Haar</i>
09.25	FUS/RT: thermal and non-thermal radio-sensitization for improve effectiveness of RT	<i>G. Borasi</i>
09.40	HIFU in prostate cancer and metastases treatment	<i>A. Napoli</i>
10.00	HIFU in pancreas, breast and uterus cancers	<i>F. Orsi</i>

Oral Communications

10.20	Applicability of three thermal damage models for lesion prediction following continous and fragmented MR-guided HIFU exposures of liver tissue	<i>J. Martin</i>
10.30	HIFU-mediated heat treatments with temperature induced local drug-delivery: drug uptake quantification	<i>E.C.M. Kneepkens</i>
10.40	INRIM facilities for HIFU field characterization	<i>G. Durando</i>
10.50	Discussion	
11.00	Coffee Break	

Auditorium

12.50	Closing Remarks	<i>G.C. Van Rhoon</i>
13.15	End of the ESHO Congress	

ESHO CONGRESS Saturday - June 14th 2014





ESHO MEETINGS

Museo Nazionale dell'Automobile (Torino)

Wednesday - June 11th 2014

Auditorium

13.30|16.00

ESHO Board Meeting

Auditorium

16.00|18.00

Editorial International Journal Hyperthermia Meeting

Thursday - June 12th 2014

Auditorium

12.45|13.15

ESHO General Assembly

ESHO 

Meetings without E.C.M. Italian Credits





ETHIDEA PARALLEL MEETING

Museo Nazionale dell'Automobile (Torino)

Friday - June 13th 2014

Low Level EM Fields and Thermodynamic Models: Toward a New Research Horizon

Room 150

- 16.40 Elf Slows the Growth of Rhabdomyosarcoma Cell Line
C. Leo, A. Ponzetto
- 16.55 Thermodynamic approach to the analysis of cancer:
temperature and external fields
U. Lucia, B. Montrucchio
- 17.10 Low Energy Electromagnetic Interference Effects on Escherichia Coli Growth
U. Malapelle, P. Pallante, S. Esposito
- 17.25 Microwave Radiometer for Medical Application
S. Vesnin, M. Sedankin, L. Ovchinnikov
- 17.40 Investigating Beneficial Effects of Low Energy Pulsing Electromagnetic Fields:
the Need for an Epidemiological Approach
G. Fonte, F. Silvestri, G. Gervino

ETHIDEA MEETING

Parallel Meeting without E.C.M. Italian Credits





SIMFER PARALLEL MEETING

Museo Nazionale dell'Automobile (Torino)

Saturday - June 14th 2014

**Meeting of the Italian Society of Physical Medical and Rehabilitation on Thermal Therapy
Congresso Regionale della Società Italiana di Medicina Fisica e Riabilitazione (Sez. Piemonte e Valle d'Aosta)**

Sala 150

08.30 Registrazione (Registration)

Terapie fisiche antalgiche in riabilitazione: Stato dell'arte
(Physiatric therapies: state of the art)

Chair: F. Gamna, M.V. Actis

Invited ESHO Speakers for Lectures

09.00 Basi fisiche (physical rational) *C. Guiot*

09.20 Basi biologiche (biological rationale) *E. Garibaldi*

09.40 Basi fisiologiche (physiological rationale) *I. Yermakova*

10.00 Tecnologia (technologies for thermal therapies) *A. Di Dia*

10.20 Risultati clinici in oncologia (clinical results in oncology) *S. Maluta*

10.40 Coffee break

10.50 Laser e Ultrasuoni (Laser and US) *G.C. Rovere*

11.10 Radiofrequenze (Radiofrequencies) *C. Mariconda*

11.30 Onde d'urto (Shockwaves therapy) *M. Carruba*

11.50 Elettroterapia (Electrotherapy) *A. Nascimbeni*

Chairs: C. Cisari, G. Massazza, G.C. Rovere

12.10 Tavola Rotonda (Round Table)
Si può ancora parlare di terapie fisiche nel terzo millennio?
(Physiotherapeutic therapies in third millenium)

Discussione (Discussion)

13.00 Closing remarks

SIMFER MEETING

Parallel Meeting without E.C.M. Italian Credits





COMPANIES SYMPOSIA

Museo Nazionale dell'Automobile (Torino)

Saturday - June 14th 2014

Auditorium

Chairs: *G. Borasi, G.C. Van Rhoon*

11.20|12.50

Dr. Sennewald - (30 minutes)

Deep RF Phase Array Hyperthermia Numerical Evaluation Study - *P. Turner*

Hifu Italy (20 minutes)

Presentation of the JC Hifu system - *F. Cirillo*

Oncotherm (15 minutes)

Alba Hyperthermia System (10 minutes)

Alba 4D: the new gateway to hyperthermia - *P.F. Pavoni*

Celsius42+ (10 minutes)

Thermo-tolerance in loco regional deep region hyperthermia - *M. Roesch*

COMPANIES SYMPOSIA

Symposia without E.C.M. Italian Credits





POSTER LIST

Biology

- P01.** Dosing in oncologic hyperthermia
A.Szasz
- P02.** Effects of PARP-1 gene knockdown in RFA-induced inflammatory response
F.Novelli
- P03.** Effects of combined PARP1-inhibitor, hyperthermia, cisplatin and radiation on human cervical tumor cells in vitro
A.L. Oei
- P04.** Inhibition of tumor growth in a xenograft model of glioblastoma treated with MSR-1 Magnetosomes and Alternating Magnetic Field
S. Mannucci

Clinic

- P05.** Combination Radiofrequency Hyperthermia and Trabectedine in treatment of uterine leiomyosarcoma A case report
M. Assogna
- P06.** Chemotherapy combined with regional Hyperthermia in locally advanced unresectable pancreatic cancer
G.M. Pigliucci
- P07.** Stabilization of metastatic Breast Cancer with capacitive hyperthermia plus standard-dose chemotherapy and/or metronomic
G.M. Pigliucci
- P08.** Electrochemotherapy for cutaneous breast cancer metastases: Our experience
M. Montuori
- P09.** Electrochemotherapy a modern treatment of cutaneous and subcutaneous tumors of various Hystology: experience of Policlinico Tor Vergata
A. Feliziani
- P10.** New needle-grid electrodes for Electrochemotherapy.
L.G. Campana
- P11.** Hyperthermia and external beam Radiotherapy in the treatment of superficial recurrent tumors. Retrospective analysis of the experience of Maurizio Umberto I Hospital in Torino- Italy
G. Malinverni
- P12.** The history of Hyperthermia in Turin
P. Gabriele
- P13.** Combination Radiofrequency Hyperthermia, Chemotherapy and Hormone Therapy in treatment of recurrent Breast Cancer. A Case Report
M. De Chicchis

Engineering/Physics-Microwave

- P14.** Dynamic CT tracking of tissue shrinkage during microwave thermal ablation
L. Farina
- P15.** Basic Detection of Breast Cancer by the help of Electromagnetic Wave reflection
L. Oppl
- P16.** Experimental characterization and numerical modelling of the thermal lesion induced by microwave ablation
V. Lopresto
- P17.** Computer modeling of radiofrequency Hyperthermia
O. Gandhi
- P18.** Optimal constrained power focusing: a new methodology for microwave hyperthermia treatment planning
L.Crocco
- P19.** 3-D time-reversal method in microwave hyperthermia
P. Takook





POSTER LIST

- P20.** Head and Neck tumors treatment by ALBA Beta Applicator
D. Vrba
- P21.** Strategies for Effective Use of Existing HT Technology in International Clinical Trials
P.R. Stauffer
- P22.** Open and Laparoscopic Nephron Sparing Surgery by a new device “LaparoNewPro”: experimental study in pig model
M. Montuori
- P23.** Heat and mass transfer phenomena at solid-liquid nanoscale interface in theranostic applications
A. Cardellini
- P24.** Iron oxide magnetic nanoparticles included in PLGA nanoparticles and liposomes for MFH applications
S. Aime
- P25.** Fe-oxide nanoparticles for hyperthermia applications: role of surface, aggregation state, environment on their magnetic properties
P. Allia
- P26.** Morphological and thermal characterization of magnetic nanoflowers
R. Bertani
- P27.** Physical characterization of high rate heating magnetic nanoparticles for MHF
R. Bertani
- P28.** Impact of silicone and metal port-a-cath in patients treated with superficial hyperthermia
C.J. Trujillo Romero
- P29.** Novel applicators for superficial and deep local microwave hyperthermia based on zero-order mode resonator metamaterial
D. Vrba
- P30.** Matrix of interstitial helix applicator for the breast cancer treatment by microwave hyperthermia
L. Vojacova
- P31.** Applicator for superficial microwave hyperthermia filled with anisotropic dielectric media: numerical investigation of design degrees of freedom
J. Vrba
- P32.** Circular array of balanced antipodal Vivaldi antennas used for microwave hyperthermia treatment of breast cancer
I. Merunka
- P33.** Comparison thermocouple versus fiberoptic thermometry
G. van Stam
- P34.** Combination of waveguide applicators used for hyperthermia treatment of breast cancer
O. Fiser
- P35.** A new type of electromagnetic hyperthermia applicators for simultaneous action of radiation and heating on tumors
V. Kosterev
- P36.** A computational tool to evaluate the thermal response of human tissues exposed to millimeter and sub-millimeter electromagnetic waves
M. Borsero
- P37.** Hyperthermia operation of intelligent medicine to eliminate cancer
T. Watanabe
- P38.** Thermo-tolerance in loco regional deep region hyperthermia
M. Roesch
- P39.** Towards temperature-based hyperthermia treatment planning: a technique for tissue property optimization and its robustness for probe-location
R.F. Verhaart
- P40.** Blind focusing of the electromagnetic field for microwave hyperthermia
G. Bellizzi
- P41.** Deep RF Phase Array Hyperthermia Numerical Evaluation Study
P. Turner





GENERAL INFORMATION

Congress Venue

Museo Nazionale dell'Automobile

Corso Unità d'Italia 40, Torino - www.museoauto.it

Educational Day Venue

Scientific Cancer Istituto di Candiolo

Strada Provinciale, 142 km 3,95 - Candiolo, Torino - www.ircc.it

Language

The official language of the Meeting is English. No simultaneous translation will be provided.

Registration

Participant registration will take place from 14:30 on Wednesday June 11th and from 8:00 am on all other days.

Speakers

All speakers are kindly requested to upload their presentations well in advance of the session in which they will participate, but at the very latest in the break immediately prior to that session. Speakers are also reminded to stay within the allotted time; chairpersons have been instructed to keep all speakers to the time assigned.

Posters

The Poster display area will be directly connected to the Meeting rooms and the Exhibition area. Your poster board will be marked with your poster number. All posters can be mounted on the provided poster boards: on Wednesday June 11th from 17:30 to Saturday 14th until 10:00.

Make sure to remove all poster-mounting materials from the board after the end of the Meeting.

Poster boards must not be damaged. Sticking material for the posters will be provided on site.

The size of your poster boards is 120 x 90 cm (height x width).

Badges

All participants are kindly requested to wear their name badges during the meeting.

Certificate of Attendance

A certificate of attendance will be provided at the end of the meeting if requested.

E.C.M. credits (CME italian credits)

E.C.M. (CME italian credits) will be available only for italian participants:

- | | |
|--|--|
| - Medical Doctor (Interdisciplinary Area) | - Medico Chirurgo (Area interdisciplinare) |
| - Physician | - Fisico |
| - Technician | - Tecnico di Radiologia |

Commercial Exhibition

There will be an exhibition by companies involved in hyperthermia or related areas.





SOCIAL PROGRAM

Welcome Reception

June 11th 2014 20h00

Museo Nazionale dell'Automobile, Corso Unità d'Italia 40, Torino - www.museoauto.it

- Cost included in the *Participant Registration Fee / Accompanying Registration Fee*

The *National Automobile Museum* has a new look, thanks to a modern, innovative design.

It's a museum that can attract to it not only an audience of specialists but is a space for all the people.

The path taking you around the exhibition tells the story and the evolution of the motor car, as well as the social themes linked to it, its transformation from a means of transport to an object of worship, from its origins right up to the contemporary evolution of creative thought, and all this is done with spectacular displays showing off the valuable pieces in the collection.

Conference dinner

June 13th 2014 19h30

NH Lingotto Tech Restaurant, Via Nizza 230, Torino - www.nh-hotels.it

- Cost for person Euro 50,00 (VAT included)

The **NH Lingotto Tech** hotel in Turin is situated in the historically-significant former **Fiat** automobile factory in the beautiful historic city of Turin. The hotel space was totally restored and redesigned by world-renowned architect **Renzo Piano** and is a striking blend of the contemporary and the historic.

The **NH Lingotto Tech** hotel in Turin seamlessly combines the best of Turin's old and new.

The hotel features a strikingly contemporary design incorporating the recently refurbished **Lingotto Fiat** plant.

The **NH Lingotto Tech** hotel's dramatic central atrium basks in the natural light pouring through the glass roof with the sense of light and spaciousness further enhanced by the feature windows and glass elevators allowing guests to experience the embrace of the stunning city surrounding them. The hotel's roof features a distinctive running track remodeled from the former Fiat car testing track.

The **NH Lingotto Tech** in Turin is located right next to the Lingotto metro station, only a few steps from the hotel.





REGISTRATION FEES

Registration Fee (VAT 22% included)

ESHO CONGRESS

	BY APRIL 11 th 2014	AFTER APRIL 11 th 2014
Participant - Member ESHO	<input type="checkbox"/> Euro 300,00	<input type="checkbox"/> Euro 400,00
Participant - No Member ESHO ^{*1}	<input type="checkbox"/> Euro 400,00	<input type="checkbox"/> Euro 500,00
Student (Physicians <30 years old and RTT) ^{*2}	<input type="checkbox"/> Euro 150,00	<input type="checkbox"/> Euro 180,00
Non-Exhibiting Industry	<input type="checkbox"/> Euro 800,00	<input type="checkbox"/> Euro 1.000,00
Accompanying person ^{*3}	<input type="checkbox"/> Euro 100,00	<input type="checkbox"/> Euro 150,00
One day Registration <input type="checkbox"/> June 12 th <input type="checkbox"/> June 13 th <input type="checkbox"/> June 14 th	<input type="checkbox"/> Euro 160,00	<input type="checkbox"/> Euro 160,00

EDUCATIONAL DAY - JUNE 11th (IRCC Candiolo)

	BY APRIL 11 th 2014	AFTER APRIL 11 th 2014
Participant - Member ESHO	<input type="checkbox"/> Euro 50,00	<input type="checkbox"/> Euro 70,00
Participant - No Member ESHO	<input type="checkbox"/> Euro 70,00	<input type="checkbox"/> Euro 90,00

CONGRESS DINNER - JUNE 13th (NH Tech Restaurant)

	BY APRIL 11 th 2014	AFTER APRIL 11 th 2014
Congress Dinner	Euro 50,00	Euro 50,00

^{*1} *Participant No Member ESHO*: reduced fee including one year ESHO-Membership and one year free subscription of The International Journal of Hyperthermia.

^{*2} *Student*: reduced fee including one year ESHO-Membership and one year free electronic access of The International Journal of Hyperthermia.

^{*3} *Accompanying person*: fee including Welcome cocktail (June 11th) and Congress Dinner (June 13th) for 1 person

Cancellation | Refunds

- The registration fee will be refunded minus a Euro 70.00 handling fee for cancellations received in writing before April 21th 2014
- For registrations cancelled after April 21th 2014 no refunds are possible.





Patronages





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