

# 9<sup>th</sup> International Meeting UPDATES IN NEURO-ONCOLOGY

## Brain Tumor Symposium

Cortona (AR), Italy  
July 2-4, 2010



JOHNS HOPKINS UNIVERSITY  
SCHOOL OF MEDICINE  
Baltimore, Maryland USA



THE STATE OF OHIO  
MINISTRY OF HEALTH  
THE ARMY MEDICAL CENTER  
Allotted to the University  
Social Faculty of Medicine  
Municipality of Tel Aviv-Ro



תל אביב  
משרד הבריאות  
מרכז הרפואי של  
המדינה  
מיועד לרפואת  
המדינה  
המחלקה לרפואת

THE UNIVERSITY OF TEXAS  
MD ANDERSON  
CANCER CENTER

UC Neuroscience Institute  
AT UNIVERSITY HOSPITAL  
BRAIN TUMOR CENTER

MAYFIELD



**Tabella Cortonensis**  
the third longest etruscan  
text in the world after the  
*Liber Linteus of Zagreb* and  
the *tabula capuana*,  
2<sup>nd</sup> century B.C.  
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Final Program

## 9<sup>th</sup> International Meeting

### UPDATES IN NEURO-ONCOLOGY

## Brain Tumor Symposium

Cortona (AR), Italy - July 2-4, 2010

### Honorary President

John M. Tew  
*Cincinnati, OH, USA*

### Meeting President

Sergio Maria Gains  
*Milan, Italy*

### Scientific Committee

Eileen Bohan	<i>(Baltimore, MD, USA)</i>
Giovanni Broggi	<i>(Milan, Italy)</i>
Antonio E. Chiocca	<i>(Columbus, OH, USA)</i>
Francesco DiMeco	<i>(Milan, Italy)</i>
Alessandro Olivi	<i>(Baltimore, MD, USA)</i>
Zvi Ram	<i>(Tel Aviv, Israel)</i>
Allen K. Sills	<i>(Nashville, TN, USA)</i>
Carlo L. Solero	<i>(Milan, Italy)</i>

### Organizing Committee

Cecilia Casali  
Francesco DiMeco  
Federico Legnani  
Andrea Salmaggi  
Antonio Silvani  
Betty M. Tyler

### Department of Neurosurgery

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### In collaboration with



### Under the Auspices



## Program description

This meeting will provide a unique opportunity to join a selected group of outstanding international experts from leading Institutions in the discussion of cutting-edge concepts and techniques in Neuro-Oncology. In addition, the format of the meeting, as well as its spectacular venue, will allow a friendly and productive interaction among participants and Faculty with ample opportunities to socialize. The program is aimed at advancing the knowledge of neurosurgeons, neurologists, medical oncologists, radiation oncologists, neuropathologists, neuroradiologists, internists, nurses, and researchers on the latest emerging neuro-oncology treatments.

## Educational Objectives

**Discuss integration of new laboratory findings into clinical practice**

**Describe the latest advances in clinical CNS tumor care**

**Present case studies and review with speaker panel**

## Topics

Pathology of CNS tumors

GBM stem cells

Management of brain metastases

Advances in malignant gliomas

Advances in neurosurgical oncology

Surgery of eloquent areas

Advances in skull base surgery

Spine tumors

## Faculty

Mario	<b>Ammirati</b>	<i>Columbus, OH, USA</i>
Anthony L.	<b>Asher</b>	<i>Charlotte, NC, USA</i>
Tracy	<b>Batchelor</b>	<i>Boston, MA, USA</i>
Lorenzo	<b>Bello</b>	<i>Milan, Italy</i>
Lucia	<b>Benvenuti</b>	<i>Livorno, Italy</i>
Mitchel S.	<b>Berger</b>	<i>San Francisco, CA, USA</i>
Alberto	<b>Bizzi</b>	<i>Milan, Italy</i>
Jaishri	<b>Blakeley</b>	<i>Baltimore, MD, USA</i>
Deborah	<b>Blumenthal</b>	<i>Tel Aviv, Israel</i>
Stefano	<b>Boriani</b>	<i>Bologna, Italy</i>
Henry	<b>Brem</b>	<i>Baltimore, MD, USA</i>
Giovanni	<b>Broggi</b>	<i>Milan, Italy</i>
Jeffrey	<b>Bruce</b>	<i>New York, NY, USA</i>
Fabio	<b>Calbucci</b>	<i>Bologna, Italy</i>
Giampaolo	<b>Cantore</b>	<i>Pozzilli, Italy</i>
Giulio	<b>Cantù</b>	<i>Milan, Italy</i>
Paolo	<b>Cappabianca</b>	<i>Naples, Italy</i>
Carmine M.	<b>Carapella</b>	<i>Rome, Italy</i>
Cecilia	<b>Casali</b>	<i>Milan, Italy</i>
Susan	<b>Chang</b>	<i>San Francisco, CA, USA</i>
Antonio E.	<b>Chiocca</b>	<i>Columbus, OH, USA</i>
Alfredo	<b>Cigliano</b>	<i>Naples, Italy</i>
Virginie	<b>Clément</b>	<i>Geneva, Switzerland</i>
Michael	<b>Cooper</b>	<i>Nashville, TN, USA</i>
Carlo Maria	<b>Croce</b>	<i>Columbus, OH, USA</i>
Domenico	<b>d'Avella</b>	<i>Padua, Italy</i>
Enrico	<b>de Divitiis</b>	<i>Naples, Italy</i>
Roberto	<b>Delfini</b>	<i>Rome, Italy</i>
Alberto	<b>Delitala</b>	<i>Rome, Italy</i>
Franco	<b>DeMonte</b>	<i>Houston, TX, USA</i>
Francesco	<b>DiMeco</b>	<i>Milan, Italy</i>
Clemens	<b>Dirven</b>	<i>Rotterdam, Holland</i>
Alessandro	<b>Ducati</b>	<i>Turin, Italy</i>
Hugues	<b>Duffau</b>	<i>Montpellier, France</i>
Charles G.	<b>Eberhart</b>	<i>Baltimore, MD, USA</i>
Marica	<b>Eoli</b>	<i>Milan, Italy</i>
Vincenzo	<b>Esposito</b>	<i>Pozzilli, Italy</i>
Andrea	<b>Falini</b>	<i>Milan, Italy</i>
Laura	<b>Fariselli</b>	<i>Milan, Italy</i>
Sergio Maria	<b>Gaini</b>	<i>Milan, Italy</i>
Gary	<b>Gallia</b>	<i>Baltimore, MD, USA</i>
Michelangelo	<b>Gangemi</b>	<i>Naples, Italy</i>
Alessandro	<b>Casbarrini</b>	<i>Bologna, Italy</i>
Paola	<b>Gaviani</b>	<i>Milan, Italy</i>
Fred	<b>Gentili</b>	<i>Toronto, Canada</i>
Isabelle	<b>Germano</b>	<i>New York, NY, USA</i>
Felice	<b>Giangaspero</b>	<i>Rome, Italy</i>
Cesare	<b>Giorgi</b>	<i>Terni, Italy</i>
Roberta	<b>Glick</b>	<i>Chicago, IL, USA</i>





Umberto	<b>Godano</b>	<i>Cagliari, Italy</i>
Ziya L.	<b>Gokaslan</b>	<i>Baltimore, MD, USA</i>
Stuart A.	<b>Grossman</b>	<i>Baltimore, MD, USA</i>
Giancarlo	<b>Guizzardi</b>	<i>Florence, Italy</i>
Lawrence R.	<b>Kleinberg</b>	<i>Baltimore, MD, USA</i>
Chang-Hyuk	<b>Kwon</b>	<i>Columbus, OH, USA</i>
Kevin D.	<b>Judy</b>	<i>Philadelphia, PA, USA</i>
Fred	<b>Lang</b>	<i>Houston, TX, USA</i>
Sean	<b>Lawler</b>	<i>Columbus, OH, USA</i>
Federico	<b>Legnani</b>	<i>Milan, Italy</i>
Russell	<b>Lonser</b>	<i>Bethesda, MD, USA</i>
Francesco	<b>Maiuri</b>	<i>Naples, Italy</i>
Yael	<b>Mardor</b>	<i>Tel Hashomer, Israel</i>
Carlo E.	<b>Marras</b>	<i>Milan, Italy</i>
Robert L.	<b>Martuza</b>	<i>Boston, MA, USA</i>
Ehud	<b>Mendel</b>	<i>Columbus, OH, USA</i>
Ida M.	<b>Milanesi</b>	<i>Milan, Italy</i>
Arva	<b>Nabavi</b>	<i>Kiel, Germany</i>
Ichiro	<b>Nakano</b>	<i>Columbus, OH, USA</i>
Massimiliano	<b>Neroni</b>	<i>Rome, Italy</i>
Alessandro	<b>Olivi</b>	<i>Baltimore, MD, USA</i>
Bianca	<b>Pollo</b>	<i>Milan, Italy</i>
Zvi	<b>Ram</b>	<i>Tel Aviv, Israel</i>
Brent	<b>Reynolds</b>	<i>Gainesville, FL, USA</i>
Laurence D.	<b>Rhines</b>	<i>Houston, TX, USA</i>
Gregory J.	<b>Riggins</b>	<i>Baltimore, MD, USA</i>
Roberta	<b>Rudà</b>	<i>Turin, Italy</i>
Michael	<b>Sabel</b>	<i>Düsseldorf, Germany</i>
Andrea	<b>Salmaggi</b>	<i>Milan, Italy</i>
Maurizio	<b>Salvati</b>	<i>Rome, Italy</i>
Prakash	<b>Sampath</b>	<i>Providence, RI, USA</i>
Antonio	<b>Santoro</b>	<i>Rome, Italy</i>
Raymond	<b>Sawaya</b>	<i>Houston, TX, USA</i>
Massimo	<b>Scerrati</b>	<i>Ancona, Italy</i>
Allen K.	<b>Sills</b>	<i>Nashville, TN, USA</i>
Antonio	<b>Silvani</b>	<i>Milan, Italy</i>
Riccardo	<b>Soffietti</b>	<i>Turin, Italy</i>
Dennis A.	<b>Steindler</b>	<i>Gainesville, FL, USA</i>
John M.	<b>Tew</b>	<i>Cincinnati, OH, USA</i>
Reid	<b>Thompson</b>	<i>Nashville, TN, USA</i>
Tarik	<b>Tihan</b>	<i>San Francisco, CA, USA</i>
Francesco	<b>Tomasello</b>	<i>Messina, Italy</i>
Giuseppe	<b>Trincia</b>	<i>Mestre, Italy</i>
Pietro P.	<b>Versari</b>	<i>Alessandria, Italy</i>
Angelo Luigi	<b>Vescovi</b>	<i>Milan, Italy</i>
Kevin	<b>Walter</b>	<i>Rochester, NY, USA</i>
Fumio	<b>Yamaguchi</b>	<i>Tokio, Japan</i>

Friday, July 2<sup>nd</sup>

09,00 Opening Remarks  
 Francesco DiMeco, Alessandro Olivi

## 09,10 Open abstract session I

10,10 Moderators: Marica Eoli, Antonio Silvani

- 09,10 SPERA - Recruitment of immune Effector cells against astrocytoma by MHC-Chlrotoxin chimeric proteins  
**O. Cohen-Inbar**, I. Zafir-Lavie, M. Zaaroor, Y. Reiter (*Haifa, Israel*)
- 09,15 Inhibition of the transcription factor KLF-8 reduces glioma cell proliferation  
**A. Romagna**, V. Albrecht, I. Jaehnert, J.-C. Tonn, C. Schichor, O. Schnell (*Munich, Germany*)
- 09,20 Genetically engineered malignant glioma-specific T cells resistant to glucocorticoids  
 S. Kong, R. P. Junghans, **P. Sampath** (*Providence, RI, USA*)
- 09,25 Glioma Immunotherapy and Immunosuppression in a Mouse Model  
**R.P. Glick**, A. Ksendzovsky, E.P. Cohen, R. Zengou, T. Lichtor, D. Feinstein (*Chicago, IL, USA*)
- 09,30 Rai targeting reduces glioblastoma stem cell migration and tumor invasiveness  
**B. Ortensi**, D. Osti, S. Pellegatta, F. Pisati, F. Zunino, G. Locatelli, D. Levi<sup>1</sup>, P. Gaetani<sup>1</sup>, G. Finocchiaro, G. Pelicci (*Milan, Italy; <sup>1</sup>Rozzano, MI, Italy*)
- 09,35 Neural stem cells and glioblastoma  
**R. Rispoli**, P. Celli<sup>1</sup>, R. Mastrostefano (*Avezzano, AQ, Italy; <sup>1</sup>Rome, Italy*)
- 09,40 The CX3CL1/CX3CR1 adhesive loop in human glioblastoma promotes tumor progression  
**P. Gaetani**, M. Erreni, G. Solinas, R. Draghi, P. Brescia<sup>1</sup>, D. Osti<sup>1</sup>, D. Levi, R. Rodriguez y Baena, G. Pelicci<sup>1</sup>, P. Allavena (*Rozzano, MI, Italy; <sup>1</sup>Milan, Italy*)
- 09,45 Polymorphism and mutations of TP53 in gliomas and influence on tumoral onset  
**P. P. Panciani**, S. Gallone, V. Zappalà, S. Grifoni, P. P. Fenoglio, A. Agnoletti, A. Naldi, A. Pellerino, A. Ducati, M. Lanotte, M.T. Giordana (*Turin, Italy*)
- 09,50 High throughput microRNA microarray in human grade I-IV glioma and low and high grade glioma primary cell cultures  
**A. Conti**, M. Aguenouz, D. La Torre, L. Cama, G. Pezzino, D. Pontoriero, S. Romeo, F.F. Angileri, G. Costa, G. Ferlazzo, G. Vita, F. Tomasello (*Messina, Italy*)

- 09,55 Blood based biomarkers in solid tumors - applications to neuro-oncology  
**C. Bettegowda**, D. Dressman, M. Holdhoff, N. Agrawal, I. Kinde, L. Diaz, B. Vogelstein (*Baltimore MD, USA*)
- 10,00 In vitro invasion assay of primary vs recurrent glioblastoma multiforme stem like cells using organotypic rodent brain slice culture  
M. Rossi, A. Tarantino, R. Roncarati, M. Salerno, **P. Tunici**, A. Bakker (*Siena, Italy*)
- 10,05 Marker-independent identification of glioma-initiating cells  
**V. Clément**, D. Marino, C. Culdabu, M.-F. Hamou, V. Mlynarik, N. de Tribolet, K. Schaller, P.-Y. Dietrich, R. Gruetter, M. E. Hegi, I. Radovanovic (*Geneva, Switzerland*)

## 10,10 **Open abstract session II**

11,15 *Moderators:* Lucia Benvenuti, Paola Gaviani

- 10,10 Recurrent glioblastoma: which patients are candidate to second-line treatments?  
**M. Carolfi**, F. Portaluri, S. Zella, C. Menghetti, A. De Santis, S.M. Gaini (*Milan, Italy*)
- 10,15 Immunosuppression in Patients with High Grade Gliomas Treated with Radiation and Temozolomide: Final Report of a NABTT CNS Consortium Study  
**S.A. Grossman**, X. Ye, G. Lesser, A. Sloan, H. Carraway, S. Desideri, S. Piantadosi (*Baltimore, MD, USA*)
- 10,20 Clinic and analytic validation of a quantitative method for the determination of MGMT promoter methylation status in gliomas  
N. Icolaro, **P. Parrella**, A. La Torre, M. Copetti, V. M. Valori, R. Barbano, A. Notarangelo, M. Bisceglia, S. Parisi, E. Maiello, V. M. Fazio, V. A. D'Angelo (*San Giovanni Rotondo, FG, Italy*)
- 10,25 Changes in gliomas structural features after Temodal treatment evaluated by DTI-MR texture analysis: a preliminary study  
**A. Castellano**, L. Bello, E. Fava, M. Riva, G. Casaceli, G. De Nunzio<sup>1</sup>, M. Donativi<sup>1</sup>, G. Pastore<sup>1</sup>, R. Rudà<sup>2</sup>, R. Soffietti<sup>2</sup>, A. Falini (*Milan, Italy; <sup>1</sup>Lecce, Italy; <sup>2</sup>Turin, Italy*)
- 10,30 Unique MRI findings in patients treated with Bevacizumab (Avastin) with Pathology correlation  
**K.D. Judy**, M.A. Guzman (*Philadelphia, PA, USA*)
- 10,35 Continuous low-dose temozolomide and celecoxib in recurrent glioblastoma  
**F. Stockhammer**<sup>1,2</sup>, M. Misch<sup>2</sup>, A. Koch<sup>2</sup>, M. Czabanka<sup>2</sup>, M. Plotkin<sup>2</sup>, C. Blechs Schmidt<sup>2</sup>, J. Tuettenberg<sup>3</sup>, P. Vajkoczy<sup>2</sup> (*<sup>1</sup>Rostock, Germany; <sup>2</sup>Berlin, Germany; <sup>3</sup>Idar-Oberstein, Germany*)

- 10,40 Phase II trial of induction standard dose of Temozolomide followed by Temozolomide and concurrent radiosurgical treatment is effective treatment in single brain metastasis from solid tumors: an update  
V. Sciacca<sup>2</sup>, R. Rossi<sup>2</sup>, R. Pace, N. Del Matto, M. Santarelli, A.M. Rauco, G. De Santis, V. Capparella, P. Domini<sup>1</sup>, **A. Lugini**  
(Rieti, Italy; <sup>1</sup>Palombara Sabina RM, Italy; <sup>2</sup>Latina, Italy)
- 10,45 Can high dose fotemustine revert MGMT resistance in glioblastoma multiforme?  
C. Buonerba, V. Romeo, C. Gallo, G. Di Lorenzo, **A. Marinelli** (Naples, Italy)
- 10,50 Surgical treatment of temporal tumoral drug-resistant epilepsy caused by low grade neoplasm: our experience  
**F. Natrella**, A. Mariottini, R. Rocchi, G. Vatti, L. Palma (Siena, Italy)
- 10,55 Prognostic impact of IDH1 and IDH2 mutations in a series of 100 astrocytomas WHO grade II  
**F. Stöckhammer**, R. Ahmadi, N. Becker<sup>1</sup>, K. Hohlen<sup>2</sup>, M. Misch<sup>2</sup>, A. Christians<sup>1</sup>, C. Dictus, W. Wick<sup>1</sup>, C. Herold-Mende, J. Meyer<sup>1</sup>, A. Unterberg, A. von Deimling<sup>1</sup>, C. Hartmann<sup>1</sup>  
(Rostock, Germany; <sup>1</sup>Heidelberg, Germany; <sup>2</sup>Berlin, Germany)
- 11,00 Functional status of neuro oncological patients after treatments  
**I. Springhetti**, C. Da Ros, C. Villani, D. Sparpaglione, A. Zancan, M. Scotti (Pavia, Italy)
- 11,05 Circulating Endothelial Cells. A marker of response to bevacizumab in relapsing high grade glioma patients?  
**M. Eoli**, A. Calleri, L. Cuppini, E. Mancuso, E. Prodi, S. Pellegatta, P. Porrati, E. Anghileri, M.G. Bruzzone, F. Bertolini, G. Finocchiaro (Milan, Italy)
- 11,10 Correlation between O6-Methylguanine-DNA Methyltransferase and survival in elderly patients with glioblastoma treated with radiotherapy plus concomitant and adjuvant temozolomide  
**G. Minniti**<sup>1,2</sup>, V. Armosini<sup>1</sup>, M. Salvati<sup>2</sup>, A. Arcella<sup>2</sup>, F. Buttarelli<sup>1</sup>, E. Clarke<sup>1</sup>, A. D'Elia<sup>1</sup>, G. Lanzetta<sup>2</sup>, V. Esposito<sup>2</sup>, S. Scarpino<sup>1</sup>, R. Maurizi Enrici<sup>1</sup>, F. Giangaspero<sup>1,2</sup> (Rome, Italy; <sup>2</sup>Pozzilli, IS, Italy)

*Open coffee hrs. 11,00-11,30*

## Pathology

*Moderators:* Yael Mardor, Bianca Pollo, Maurizio Salvati

- |       |   |
|-------|---|
| 11,15 | Pathology of brain tumors: overview<br><b>Tarik Tihan</b>                               |
| 11,30 | Pathology and molecular biology of pediatric astrocytomas<br><b>Felice Giangaspero</b>  |
| 11,45 | Hypoxia, Notch and Stem-Like Cancer Cells<br><b>Charles G. Eberhart</b>                 |
| 12,00 | Targeting the hedgehog pathway in malignant glioma<br><b>Michael Cooper</b>             |
| 12,15 | Causes and consequences of microRNA dysregulation in cancer<br><b>Carlo Maria Croce</b> |
| 12,30 | Neuro-Oncologic Implications of von Hippel-Lindau Disease<br><b>Russell Lonser</b>      |

*Open coffee hrs. 11,00-11,30*

12,45  
14,00 **Lunch**

## Stem cell symposium

*Moderators:* Carmine M. Carapella, Virginie Clément, Antonio Silvani

- |                              |  |
|------------------------------|--|
| 14,00                        | Astrocytic stem cell, boundaries and gliomas<br><b>Dennis A. Steindler</b>                             |
| 14,15                        | Emergent behaviour in tumor populations<br><b>Brent Reynolds</b>                                       |
| 14,30                        | Recent Advances in Regulatory Mechanisms of Human GBM Cancer Stem Cells<br><b>Angelo Luigi Vescovi</b> |
| 14,45                        | Experimental therapeutics targeting glioblastoma stemcells<br><b>Ichiro Nakano</b>                     |
| 15,00                        | CMV infection and glioblastoma originating from neural stem cells<br><b>Chang-Hyuk Kwon</b>            |
| 15,15                        | Embryonic Stem Cell-mediated gene transfer for high grade gliomas<br><b>Isabelle Germano</b>           |
| <u>15,30</u><br><u>15,50</u> | Discussion and Q&A   |

## 15.50 Open abstract session III

16,50 *Moderators:* Cecilia Casali, Cesare Giorgi

- 15,50 Neuroimaging of brain metastases in treatment with ipofractionated stereotactic radiotherapy: synergy between corvus inverse planning system and magnetic resonance with magnetization transfer contrast  
**A. Paladini**, F.A. Lupo, A. Papaleo, E. Cavallera, M. Santantonio, P. Cantisani (*Lecce, Italy*)
- 15,55 CyberKnife Radiosurgery and CyberKnife plus Temozolomide for Recurrent Gliomas  
**A. Conti**, A. Pontoriero, D. Arpa, C. Tuscano, M. Siracusa, F. Granata, P. Frosina, V. Adamo, M. Longo, C. De Renzis, F. Tomasello (*Messina, Italy*)
- 16,00 Role of palliative radiotherapy in brain metastases  
**M. A. Molinaro**, R. Molè, D. Pingitore (*Catanzaro, Italy*)
- 16,05 Stereotactic radiosurgery (SRS) for brain metastases: a review of complications  
**G. Minniti**<sup>1,2</sup>, M. Salvati<sup>1,2</sup>, A. Romano A<sup>1</sup>, M.C. Rossi Espagnet<sup>1</sup>, G. Trasimeni<sup>1</sup>, A. Bozzao<sup>1</sup>, E. Clarke<sup>1</sup>, M.F. Osti<sup>1</sup>, R. Maurizi Enrici<sup>1</sup>  
(*Rome, Italy*; <sup>2</sup>*Pozzilli, IS, Italy*)
- 16,10 Stereotactic Radiosurgery for the Treatment of Metastatic Brain Lesions  
**A. McCormack**, P.C. Whitfield, S.A. Kelly, S.J. Pascoe, J.D. Palmer, W.M. Adams, A. Gwillam, J. Pearn (*Plymouth, UK*)
- 16,15 LINAC-based radiosurgery for the treatment of brain metastases  
**N. Icolaro**, L. Gorgoglione, C. De Bonis, S. Parisi, P. Lauriola, V. A. D'Angelo (*San Giovanni Rotondo, FG, Italy*)
- 16,20 Helical Tomotherapy for whole brain irradiation and simultaneously integrated cerebral metastases boost: preliminary data of a randomized clinical trial  
**C. Caruso**, A.M. Scapatì, A. Monaco, M. Cianciulli, V. Donato (*Rome, Italy*)
- 16,25 Stereotactic Radiosurgery of Acoustic Neurinomas  
**M. Sramka**, M.Chorváth, O.Trompak, G. Králik, A. Durkovsky, S. Galbavy (*Bratislava, Slovakia*)
- 16,30 Pattern of practice for palliative treatment of glioblastoma (GBM): a survey promoted by the Italian Association of Radiation Oncology (AIRO)  
**D. Amelio**<sup>1</sup>, A. Farneti<sup>2</sup>, P. Anselmo<sup>3</sup>, S. Dall'Oglio<sup>4</sup>, A. Girlando<sup>5</sup>, M. Ferro<sup>6</sup>, M. Orsatti<sup>7</sup>, F. Tramacere<sup>8</sup>, P.B. Sciacero<sup>9</sup>, C. Fillini<sup>10</sup>, A. Boidi Trotti<sup>11</sup>, C. Guida<sup>12</sup>, L. Tomio<sup>1</sup>, G. Moro<sup>13</sup>, G. Silvano<sup>14</sup>, S. Pergolizzi<sup>15</sup>, M. Lupattelli<sup>2</sup>  
(<sup>1</sup>*Trento*, <sup>2</sup>*Perugia*, <sup>3</sup>*Terni*, <sup>4</sup>*Verona*, <sup>5</sup>*Catania*, <sup>6</sup>*Campobasso*, <sup>7</sup>*Sanremo*, <sup>8</sup>*Brindisi*, <sup>9</sup>*Ireia*, <sup>10</sup>*Cuneo*, <sup>11</sup>*Turin*, <sup>12</sup>*Naples*, <sup>13</sup>*Biella*, <sup>14</sup>*Taranto*, <sup>15</sup>*Taormina, Italy*)

*Open coffee hrs. 15,30-16,30*

## Friday, July 2<sup>nd</sup>

- 16,35 Pattern of practice for radical treatment of glioblastoma (GBM): a survey promoted by the Italian Association of Radiation Oncology (AIRO)  
M. Lupattelli<sup>1</sup>, **D. Amelio**<sup>2</sup>, C. Mantovani<sup>3</sup>, G. Mantello<sup>4</sup>, M. Signor<sup>5</sup>, S. Scocciati<sup>6</sup>, M. Fumagalli<sup>7</sup>, M.A. Mirri<sup>8</sup>, L. Marafioti<sup>9</sup>, R. Manzo<sup>10</sup>, M. Buglione<sup>11</sup>, P. Franzone<sup>12</sup>, M. Mignogna<sup>13</sup>, G. Lay<sup>14</sup>, V. Fusco<sup>15</sup>, A. Pontoriero<sup>16</sup>, R. Pacelli<sup>10</sup>, F. Mascioni<sup>17</sup>, D. Genovesi<sup>18</sup>  
(<sup>1</sup>Perugia, <sup>2</sup>Trento, <sup>3</sup>Turin, <sup>4</sup>Ancona, <sup>5</sup>Udine, <sup>6</sup>Florence, <sup>7</sup>Parma, <sup>8</sup>Rome, <sup>9</sup>Cosenza, <sup>10</sup>Naples, <sup>11</sup>Brescia, <sup>12</sup>Alessandria, <sup>13</sup>Lucca, <sup>14</sup>Cagliari, <sup>15</sup>Rionero in Vulture, <sup>16</sup>Messina, <sup>17</sup>Macerata, <sup>18</sup>Chieti, Italy)
- 16,40 Role of Helical Tomotherapy in the treatment of high grade gliomas near critical structures: a preliminary experience  
**C. Caruso**, A.M. Scapati, M. Salvati, V. Donato, R. Delfini (*Rome, Italy*)
- 16,45 The role of irradiation (with photons and particles) in the treatment of chordoma of the spine: a systematic review  
**D. Amelio**, S. Lorentini, M. La Macchia, M. Amichetti (*Trento, Italy*)

## Friday, July 2<sup>nd</sup>

Parallel Room

16.00  
16,30 **Navigated Brain Stimulation in neurosurgery**  
Jari Karhu (*Nexstim, Finland*)



## Brain tumor metastases

*Moderators:* Alberto Delitala, Laura Fariselli, Francesco Maiuri

- |       |   |
|-------|---|
| 16,50 | <i>Special lecture:</i><br>Surgical Management of Brain Metastasis: a 15 year perspective<br><b>Raymond Sawaya</b>                  |
| 17,10 | Whole-brain radiotherapy after surgery or radiosurgery<br><b>Riccardo Soffietti</b>   |
| 17,25 | Neurosurgery in the treatment of brain metastases in the Netherlands<br><b>Clemens Dirven</b>                                       |
| 17,40 | Surgical based therapy for brain metastases: an interdisciplinary experience of the University of Turin<br><b>Alessandro Ducati</b> |
| 17,55 | Radiosurgery and brain metastasis<br><b>Lawrence R. Kleinberg</b>   |
| 18,10 | Short communication: Chemokine receptors and brain mets<br><b>Andrea Salmaggi</b>   |
| 18,20 | <b>IML CLINICAL CASES audience response</b>   |
| 19,20 | <b>Anthony L. Asher &amp; Cesare Giorgi</b>   |
| 19,20 | End of session  |

19,45 **Opening Ceremony and Welcome Cocktail**

## Saturday, July 3<sup>rd</sup>

### 08.15 Open abstract session IV

09.25

*Moderators:* Federico Legnani, Carlo E. Marras

- 08,15 The use of gliadel wafer in the surgical treatment of malignant gliomas: is it really an effective treatment?  
**M. Caroli**, M. Castiglione, S. Zella, C. Menghetti, A. De Santis, S.M. Gaini  
(*Milan, Italy*)
- 08,20 Fluorescence-guided resection of glioblastoma multiforme: a multiple sampling study to evaluate the accuracy of 5-aminolevulinic acid  
A. Agnoletti, **P.P. Panciani**, D. Garbossa, C. Fronza, V. Zappalà, M. Fontanella, M. Lanotte, A. Ducati (*Turin, Italy*)
- 08,25 Craniotomy for supratentorial gliomas: conscious sedation versus general anesthesia  
**P. Peruzzi**, S. Bergese, A. Vioria, E. Puente, M. Abdel-Rasoul, E.A. Chiocca  
(*Columbus, OH, USA*)
- 08,30 Association of F18-fluoro-ethyl-tyrosin uptake and 5-aminolevulinic acid-induced fluorescence in gliomas  
**F. Stockhammer**<sup>1,2</sup>, M. Misch<sup>2</sup>, P. Horn<sup>2</sup>, A. Koch<sup>2</sup>, N. Fonyuy<sup>2</sup>, M. Plotkin<sup>2</sup>  
(*Rostock, Germany; <sup>2</sup>Berlin, Germany*)
- 08,35 Small acoustic neuroma: role of hearing preservation surgery  
**A. Signorelli**, A. Mazzoni, C. Foresti, F. Biroli (*Bergamo, Italy*)
- 08,40 Awake surgery and meningiomas in elderly patients with increased anesthetic risk  
**R. Perez**, N. Paidakakos, A. Limberti, C. Junemann, A. Melcarne, M. Naddeo  
(*Turin, Italy*)
- 08,45 Verification of accuracy of Tractography in neuronavigation by direct 3D-positioning of motor tract by a subcortical electrode  
**T. Omura**, F. Yamaguchi<sup>1</sup>, T. Kojima<sup>1</sup>, H. Takahashi<sup>2</sup>, S. Kobayashi, A. Teramoto<sup>1</sup>(*Chiba, Japan, <sup>1</sup>Tokyo, Japan, <sup>2</sup>Kanagawa, Japan*)
- 08,50 Preoperative chemotherapy for infiltrative low-grade gliomas: a useful strategy to maximize surgical resection. A report of 3 cases  
**G. Spena**, L. Barletta, A. Barbanera, I. Acchiardi, M. Vitali, G. Longo, P. Versari (*Alessandria, Italy*)
- 08,55 Preoperative and intraoperative brain mapping for the resection of eloquent areas tumors. A prospective analysis of methodology, correlation and usefulness based on clinical outcome  
**G. Spena**, A. Nava, A. Pepoli, M. Bruno, F. D'Agata<sup>1</sup>, F. Cauda<sup>1</sup>, K. Sacco<sup>1</sup>, S. Duca<sup>1</sup>, L. Barletta, A. Barbanera, I. Acchiardi, P. Versari  
(*Alessandria, Italy; <sup>1</sup>Turin, Italy*)
- 09,00 5-ALA guided tumor resection: the "ultra" vision in neurooncology  
**A. Pichierri**, M. Salvati, A. Frati<sup>1</sup>, M. Antonelli, F. Giangaspero, A. Santoro, R. Delfini (*Rome, Italy; <sup>1</sup>Pozzilli, IS, Italy*)

# Saturday, July 3<sup>rd</sup>

- 09,05 Real time neuronavigation using pre-operative MRI and intra-operative ultrasound-imaging (USi) for brain tumor removal  
**F. Prada, L. Solbiati, M. Lamperti, M. Saini, S. Lodrini, A. Saladino, F. DiMeco, S. Giombini (Milan, Italy)**
- 09,10 Central neurocytoma with synaptophysin negativity  
**S. Galbavy, B. Rychly, A. Galbavy, M. Sramka (Bratislava, Slovakia)**
- 09,15 Computer-based neuropsychological screening in patients with CNS-tumors  
**M. Hoffer mann, L. Bruckmann, K. Zaar, G. Von Campe (Graz, Austria)**
- 09,20 CO2 flexible fiber laser in the skull base surgery  
**V. Mingione, A. Menniti, N. Russo, A. Delitala (Rome, Italy)**

## Advances in malignant gliomas

*Discussant:* Antonio E. Chiocca

*Moderators:* Domenico d'Avella, Clemens Dirven, Roberta Glick

- 09,25 *Special Lecture:*  
Oncologic viruses: trials, travails and synergies  
**Robert L. Martuza**
- 09,45 Do genomics help with therapy design for GBMs?  
**Gregory J. Riggins**
- 10,00 Iatrogenic immunosuppression in newly diagnosed glioblastoma  
**Stuart A. Grossman**
- 10,15 Identification of a blood-based proteomic signature for high grade glioma  
**Reid Thompson**
- 10,30 Management of oligodendroglioma in adults  
**Susan Chang**
- 10,45 The role of PARP inhibition in the management of malignant gliomas  
**Jaishri Blakeley**
- 11,00 Familiality in Brain Tumors  
**Deborah T. Blumenthal**
- 11,15 Anti-angiogenic therapy for glioblastoma  
**Tracy Batchelor**
- 11,30 Microvascular Drug Targets for Brain Tumors  
**Kevin Walter**

*Open coffee hrs. 10,30-11,00*

# Saturday, July 3<sup>rd</sup>

11,45 *Special lecture:*  
Developing New Therapies for Malignant Gliomas  
**Henry Brem**

12.05 Discussion and Q&A  
12,25 **Antonio E. Chiocca**

12,25 **Lunch**  
13,30

## Advances in glioma and meningioma surgery

*Discussant:* Allen K. Sills

*Moderators:* Michelangelo Gangemi, Antonio Santoro, Massimo Scerrati

13,30 *Special lecture:*  
The Role of Imaging on the Treatment of Intracranial Tumors  
**John M. Tew**

13,50 *Special Lecture:*  
Convection enhanced delivery for malignant gliomas  
**Jeffrey Bruce**

14,10 1,5 T Intraoperative MRI for Glioma Surgery  
**Arya Nabavi**

14,25 The role of venous drainage in the surgical strategy for gliomas and meningiomas  
**Giovanni Broggi**

14,40 Navigation assisted intraoperative subcortical mapping.  
New technique to find Motor Tract  
**Fumio Yamaguchi**

14,55 Aiming at a complete resection of Glioblastoma multiforme in eloquent regions:  
the impact of fluorescence guided resection and awake surgery to avoid  
deficits. First results  
**Michael Sabel**

15,10 Aggressive meningiomas: surgical challenges and future treatments  
**Alessandro Olivi**

15,25 Discussion and Q & A  
15,45 **Allen K. Sills**

15,45 **Coffee break**  
16,00

## Surgery of eloquent areas

*Moderators:* Lucia Benvenuti, Alberto Bizzi, Fabio Calbucci

- |       |   |
|-------|---|
| 16,00 | <i>Special Lecture:</i><br>Lessons learned from mapping gliomas during surgery over 25 years<br><b>Mitchel S. Berger</b>  |
| 16,20 | The role of diffusion tensor imaging techniques in surgery of eloquent areas<br><b>Andrea Falini</b>  |
| 16,35 | Surgery of low-grade gliomas in eloquent areas: from brain hodotopy and plasticity to functional neurooncology<br><b>Hugues Duffau</b>                                  |
| 16,50 | Motor and Language DTI Fiber Tracking Combined with Intraoperative Subcortical Mapping for Surgical Removal of Low Grade Gliomas<br><b>Lorenzo Bello</b>                |
| 17,05 | Intra-operative cortical and subcortical monitoring of patients undergoing glioma surgery - an experience of 750 patients undergoing awake craniotomy<br><b>Zvi Ram</b> |
| 17,20 | Surgery for Gliomas involving Insula<br><b>Frederick Lang</b>   |
| 17,35 | Short communication: Chemotherapy for low grade gliomas<br><b>Roberta Rudà</b>  |
| 17,45 | <b>IML CLINICAL CASES audience response</b>   |
| 18,45 | <b>Prakash Sampath &amp; Vincenzo Esposito</b>  |

## Sunday, July 4<sup>th</sup>

### 08.00 **Open abstract session V**

08.30

*Moderators:* Massimiliano Neroni, Giuseppe Trincia

- 08,00 Use of 2 $\mu$ -Thulium laser in surgery of skull base meningiomas  
**E. Passacantilli**, G. Anichini, J. Lenzi, A. D'Amico, E. Arcovio, M. Salvati, A. Santoro (*Rome, Italy*)
- 08,05 Endoscopic endonasal techniques for intracranial rostral anterior skull base lesions: our initial 20 month experience  
**A. Germanwala**, A. Zanation (*Chapel Hill, NC, USA*)
- 08,10 Therapeutic algorithm for treatment of spinal metastases  
**A. Barbanera**, **M. Vitali**, G. Spena, G. Longo, P.P. Versari (*Alessandria, Italy*)
- 08,15 Spinal melanotic schwannoma a rare entity  
**A.C. Gallo**, G. Oliva, M. Natale, R. D'Avanzo, M. Rotondo, A. Moraci (*Naples, Italy*)
- 08,20 Unusual spinal masses: report of three cases  
**L. Arpino**, C. Capuano, V. Vitiello, G. Buono, A. Franco (*Naples, Italy*)
- 08,25 Minimally invasive approach through a frontal skin sulcus for excision of lesions of the anterior frontal region in patients at high anesthesia risk  
**M. Naddeo**, N. Paidakakos, B. Massa Micon, M. Cacciacarne, R. Perez (*Turin, Italy*)

### Skull base

*Moderators:* Enrico de Divitiis, Umberto Godano, Francesco Tomasello

- 08,30 Endoscopic endonasal skull base surgery: the Italian Experience  
**Paolo Cappabianca**
- 08,45 Endoscopic endonasal skull base surgery: the Hopkins experience  
**Gary Gallia**
- 09,00 Chordomas and chondrosarcomas: open vs endoscopic techniques and the role of adjuvant photon vs proton radiation therapy  
**Fred Gentili**
- 09,15 Combined approach for ethmoid malignant tumors  
**Giulio Cantù**
- 09,30 Foramen Magnum Meningiomas  
**Roberto Delfini**
- 09,45 Cranial base malignancy - limits of resectability  
**Franco DeMonte**
- 10,00 Fractionated stereotactic radiosurgery of skull base tumors  
**Mario Ammirati**

**10.15**

**10.30**

**Coffee break**

## Spine symposium

*Discussant:* Giancarlo Guizzardi

*Moderators:* Alfredo Cigliano, Massimiliano Neroni, Pietro P. Versari

- 10,30 *Special Lecture:*  
Metastatic Spinal Tumors: Evaluation and Decision Making  
**Ziya L. Gokaslan**
- 10,50 Radiosurgery in spine tumors  
**Ida M. Milanese**
- 11,05 Primary Spinal Tumors: Evaluation and Decision Making  
**Laurence D. Rhines**
- 11,20 Surgical Treatment of Primary Spinal Tumors: Region Specific Approaches for En Bloc Resection  
**Stefano Boriani, Alessandro Gasbarrini**
- 11,35 Novel technique for en-bloc resection of a chondrosarcoma  
**Ehud Mendel**
- 11,50 Intramedullary tumors  
**Giampaolo Cantore**
- 12,05 Discussion and Q&A  
12,25 **Giancarlo Guizzardi**
- 12,25 Closing remarks  
12,45 **Antonio E. Chiocca, Francesco DiMeco, Alessandro Olivi, Allen K. Sills**

## Poster Exhibition

Treatment for metastatic spinal cord compression recurrence  
F. Tancioni, P. Navarria, **M. Lorenzetti**, P. Gaetani, E. Aimar, F. Pessina, R. Draghi, M. Scorsetti, A. Santoro, R. Rodriguez y Baena (*Rozzano, MI, Italy*)

Ewing's sarcoma simulating vertebral angioma  
**M. Georgantzinou** (*Siena, Italy*)



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## Scientific Information

### Language

The official language of the Meeting is English.

### Open Abstract sessions

The selected abstracts are presented during the conference as oral presentations - 5 minutes for presentation.

### Expenses

Authors of accepted papers must be prepared to pay all personal expenses incurred including meeting registration, travel and accommodation during the Meeting.

### CME Accreditation (for Italian participants only)

Sono stati attribuiti **11** Crediti formativi ECM per la categoria **Medico Chirurgo**,  
discipline:

**Neurochirurgia**

**Neurologia**

**Oncologia**

**Chirurgia maxillo facciale**

**Neuroradiologia**

**Medicina fisica e riabilitazione**

### Variations

The Scientific and the Organizing Secretariats reserve the right to make whatever change to the program they deem necessary for scientific and/or technical reasons, in compliance with Ministry regulations on CME credits.

### Attendance Certificate

At the end of the Meeting an attendance certificate will be given to all registered Participants.

### Audiovisual Equipment

PC projection (POWER POINT file on CD or on a memory stick, USB port or DVD) will be provided in the Meeting room.

Speakers are kindly requested to contact the *Slide Centre* to upload their presentation(s) and to test all the audiovisual material at least one hour before the lecture.

**Due to the several foreign guests all slides must be in English.**

# General Information

## Meeting Venue

### Teatro Signorelli

P.zza Signorelli - 52044 Cortona (AR - Italy)

Tel/Fax +39 0575 601882

[www.teatrosignorelli.com](http://www.teatrosignorelli.com) - [info@teatrosignorelli.com](mailto:info@teatrosignorelli.com)



### How to reach Cortona

The closest airport is Florence, but for continental flights is Rome or Milan.

Cortona can be easily reached either by car or by train, being served by the Autostrada del Sole (Valdichiana exit), State Road SS 71 and the Milan-Florence-Rome railway.

**By train:** Direct train Milan-Florence-Roma (see time tables for Rome-Cortona and Milan-Cortona connections: Terontola-Cortona railway station (194 km from Rome, 122 km from Florence) or Camucia-Cortona railway station. The Terontola station is 11 km from Cortona and the Camucia station is 5 km from Cortona. There is a bus service to Cortona from both stations.

**By car:** Autostrada del Sole (State Highway green on the map above): "Valdichiana" Exit. Upon exiting the highway, take the Siena-Perugia State Road and continue towards Perugia. There are 3 possible turn-offs for Cortona: Cortona via Manzano, Cortona via Laurentana and Cortona via Strada Statale 71 (State Road 71). In this latter case, at Camucia there is a deviation for Cortona and Città di Castello (the Umbran-Cortonese Province Road).

## Registration Fees

Members SINch & AANS/CNS € 250,00

Non Members € 320,00

Trainees € 150,00

**Fees include:** Congress material, Welcome reception, coffee breaks and lunches

## Registrations

It is possible to register on site.

Payments can be made in € (Euro) only, as follows:

- **cheque, eurocheque**, made payable to:  
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- **credit card** VISA, EUROCARD, MASTERCARD  
All payments made by credit card will be debited in € (Euro)
- **Cash** in € (Euro)

## Welcome Reception

All the participants are invited to participate to the Opening Ceremony of the meeting that will be held on Friday night, July 2, h. 7,45 p.m. at Cloister of Palazzo Casali (*Piazza Signorelli, 9 Cortona – walking distance from the meeting venue*).

**After the Opening Ceremony a Welcome Cocktail will be offered and it will be also possible to make a free guided visit to the Etruscan Museum ([www.cortonamaec.org](http://www.cortonamaec.org)).**

## Registration cancellation policy

No refund of cancellation of registration fees. Substitutions in writing will be accepted at any time.

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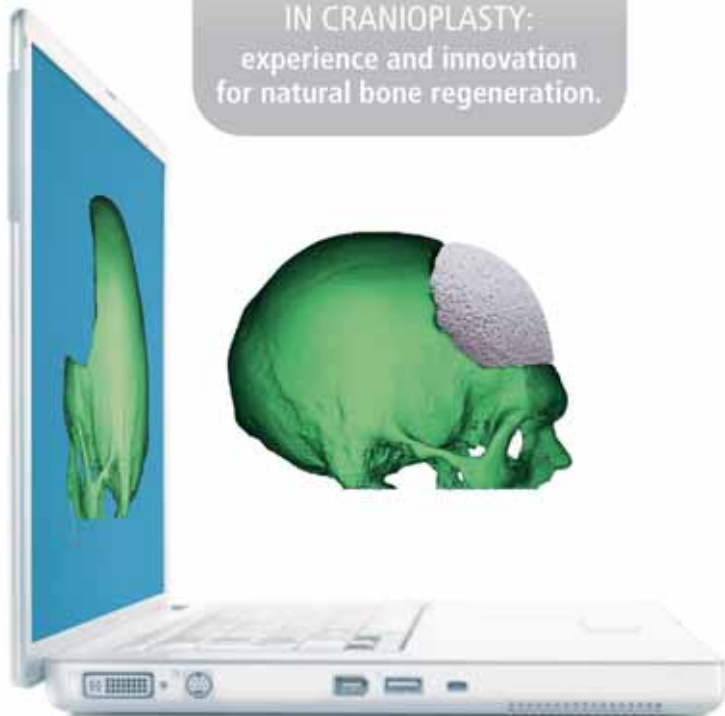
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