

SIXTH
INTERNATIONAL
MEETING

NeuroHIV

on HIV Infection
of the Central
Nervous System

www.neurohiv.com

MATERA, Italy - Casa Cava

October, 8th-10th 2015





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MATERA 2019



MINISTERO DELLA SALUTE

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UNIVERSITÀ DEGLI STUDI DI ROMA "TOR VERGATA"



UNIVERSITÀ VITA-SALUTE SAN RAFFAELE



I.N.M.I. "LAZZARO SPALLANZANI"



OSPEDALE SAN RAFFAELE
ISTITUTO DI RICOVERO E CURA A CARATTERE SCIENTIFICO

I.R.C.C.S. SAN RAFFAELE



SIMIT - SOCIETÀ ITALIANA DI MALATTIE INFETTIVE E TROPICALI



SIVIM - SOCIETÀ ITALIANA DI VIROLOGIA MEDICA

PRESENTATION

HIV-associated dementia has been one of the most threatening complications of HIV infection. Although the incidence of this specific syndrome has dramatically decreased among people receiving combination antiretroviral treatments, a new spectrum of neurological and neuropsychiatric problems has emerged as a challenge for the coming years.

This spectrum involves - known CNS problems, as well as less-well defined problems in patients with treated chronic infection. Among the latter, neurocognitive impairment is a main concern, and research studies investigating causes, extent, phenotypes and monitoring are under way. Potential loss of control of HIV replication in the CNS is also of concern because it may be associated with more severe neurological disease. Why does this occur, how often and how can we recognize it, are also questions waiting for answers. In this regard, particular attention is required when switching from older "neuroprotective" drug combinations to newer therapeutic approaches, including simplified regimens. On the other hand, the potential CNS toxicity of ARV drugs is also emerging as a focus of particular attention. Finally, CNS cells may harbor HIV during systemically controlled infection and serve as potential viral reservoirs that are relevant to systemic approaches to HIV eradication.

This meeting has the objectives of reviewing concepts on HIV brain infection in the current era, addressing unsolved issues and discussing control strategies for the future.





SCIENTIFIC COMMITTEE

Andrea Antinori

Rome, Italy

Paola Cinque

Milan, Italy

Steven Deeks

San Francisco, USA

Magnus Gisslén

Goteborg, Sweden

Giuseppe Ippolito

Rome, Italy

Adriano Lazzarin

Milan, Italy

Carlo Federico Perno

Rome, Italy

Richard W. Price

San Francisco, USA

Kevin Robertson

Chapel Hill, USA

Day I - October 8th, 2015

08.00am-09.00am Registration
09.00am-09.15am Welcome Remarks

BIOMARKER SYMPOSIUM

09.15am-11.00am **ROUND TABLE I - CSF MARKERS**

Chairpersons: A. Antinori (Rome, Italy), P. Cinque (Milan, Italy)

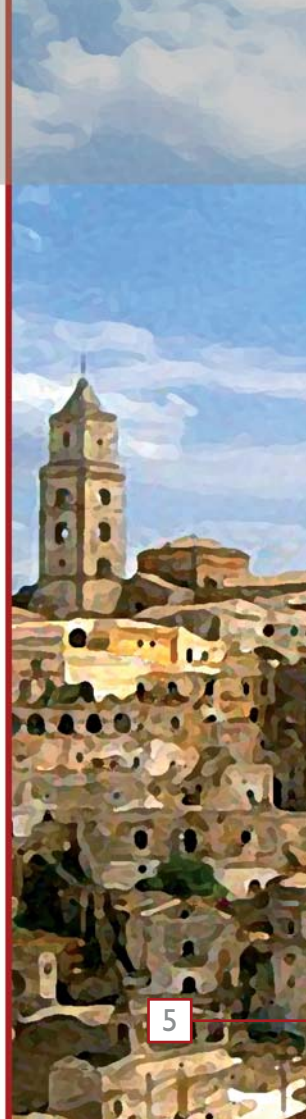
09.15am-09.30am Introduction • **R.W. Price** (San Francisco, USA)
09.30am-09.45am CSF Viral biomarkers • **R. Swanstrom** (Chapel Hill, USA)
09.45am-10.00am Systemic Inflammatory biomarkers • **P. Hunt** (San Francisco, USA)
10.00am-10.15am CSF inflammatory biomarkers • **R.W. Price** (San Francisco, USA)
10.15am-10.30am AD neuronal biomarkers • **K. Blennow** (Mölnådal, Sweden)
10.30am-10.45am HIV neuronal markers • **M. Gisslén** (Goteborg, Sweden)
10.45am-11.30am Discussion (Round Table)

11.30am-12.00pm COFFEE BREAK

12.00pm-01.30pm **ROUND TABLE II - NEUROIMAGING MARKERS**

Chairpersons: M. Gisslén (Goteborg, Sweden), R.W. Price (San Francisco, USA)

12.00pm-12.30pm MRS, DTI, Functional MRI • **B. Ances** (St. Louis, USA)
12.30pm-01.00pm PET (including TSPO) and other modalities • **J. Becker** (Pittsburgh, USA)
01.00pm-01.30pm Discussion (Round Table)
01.30pm-02.30pm LUNCH



Day I - October 8th, 2015

SESSION I - Brain function and behavior in treated patients - I

Chairpersons: **G. Angarano** (Bari, Italy), **A. Lazzarin** (Milan, Italy)

- 02.30pm-02.50pm Neuropsychological test impairment in treated cohorts • **R. Heaton** (San Diego, USA)
- 02.50pm-03.00pm Discussion
- 03.00pm-03.20pm Neuropsychological test performance in current patients • **A. Antinori** (Rome, Italy)
- 03.20pm-03.30pm Discussion
- 03.30pm-03.50pm Resource limited settings: the international neurological and normative studies • **K. Robertson** (Chapel Hill, USA)
- 03.50pm-04.00pm Discussion
- 04.00pm-04.30pm COFFEE BREAK and POSTERVIEWING

SESSION 2 - Brain function and behavior in treated patients - II

Chairpersons: **S. Gerevini** (Milan, Italy), **G. Guaraldi** (Modena, Italy)

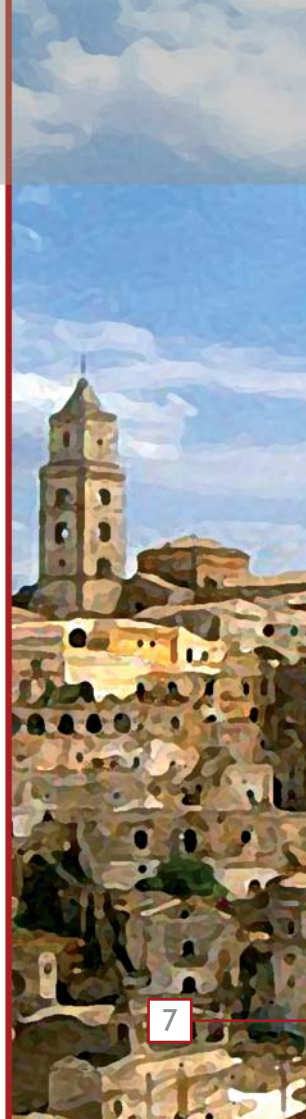
- 04.30pm-04.50pm The aging brain in HIV: the clinical view • **A. Winston** (London, UK)
- 04.50pm-05.00pm Discussion
- 05.00pm-05.20pm Structural and functional neuroimaging in the cART era • **B. Ances** (St. Louis, USA)
- 05.20pm-05.30pm Discussion
- 05.30pm-05.50pm Metabolic and brain vascular abnormalities in HIV infection • **R. Ellis** (San Diego, USA)
- 05.50pm-06.00pm Discussion

Day 2 - October 9th, 2015

SESSION 3 - The effects of ART on CNS reservoirs

Chairpersons: **G. Ippolito** (Rome, Italy), **S. Bonora** (Turin, Italy), **C. Torti** (Catanzaro, Italy)

- 08.30am-08.50am Early treatment and its effects on reservoirs • **S. Spudich** (New Haven, USA)
- 08.50am-09.00am Discussion
- 09.00am-09.20am The relevance of CSF PK in managing CNS ART effectiveness • **A. Calcagno** (Turin, Italy)
- 09.20am-09.30am Discussion
- 09.30am-09.50am CNS ART effectiveness in clinical trials • **S. Letendre** (San Diego, USA)
- 09.50am-10.00am Discussion
- 10.00am-10.30am COFFEE BREAK and POSTER VIEWING
- 10.30am-10.50am CNS viral escape • **P. Cinque** (Milan, Italy)
- 10.50am-11.00am Discussion
- 11.00am-11.20am HIV neuropathology • **S. Lucas** (London, UK)
- 11.20am-11.30am Discussion
- 11.30am-01.00pm **ORAL COMMUNICATIONS**



Day 2 - October 9th, 2015

- 11.30am-11.45am **OC 1** - MACROPHAGES SUSTAIN HIV REPLICATION *IN VIVO* INDEPENDENT OF T CELLS • *J. Honeycutt and J.V. Garcia*
- 11.45am-12.00pm **OC 2** - CEREBRAL BLOOD FLOW AND COGNITIVE FUNCTION IN HIV-INFECTED MEN WITH SUSTAINED SUPPRESSED VIREMIA ON COMBINATION ANTIRETROVIRAL THERAPY • *T. Su, H.J.M.M. Mutsaerts, M.W.A. Caan, F.W.N.M. Wit, J. Schouten, G.J. Geurtsen, D.J. Sharp, M. Prins, E. Richard, P. Portegies, P. Reiss, C.B. Majoie, on behalf of the AGEHIV Cohort Study*
- 12.00pm-12.15pm **OC 3** - SHOULD WE STILL USE THE "THREE QUESTIONS TEST" AS A SCREENING OF HIV-ASSOCIATED NEUROCOGNITIVE DISORDERS? EVALUATION OF SENSITIVITY, SPECIFICITY, POSITIVE AND NEGATIVE PREDICTIVE VALUE AND ASSOCIATION WITH ALTERED QUALITY OF LIFE • *F. Iannuzzi, F. Bai, L. Borghi, M. Trunfio, E. Merlini, A. d'Arminio Monforte and G. Marchetti*
- 12.15pm-12.30pm **OC 4** - A NOVEL METRIC OF COGNITIVE ABILITY THAT CAN ALIGN NEUROPSYCHOLOGICAL TESTS OVER TIME AND ACROSS STUDIES: VALIDATION IN CHARTER DATA • *M-J. Brouillette, L.K. Fellows, S.C. Scott, N. Mayo, I. Grant for the CHARTER Group*
- 12.30pm-12.45pm **OC 5** - ASYMPTOMATIC NEUROCOGNITIVE IMPAIRMENT, CARDIOVASCULAR RISK FACTORS, AND DEPRESSION ARE ASSOCIATED WITH PROGRESSION OF HIV-ASSOCIATED NEUROCOGNITIVE DISORDERS (HAND): RESULTS FROM THE ONTARIO HIV TREATMENT NETWORK (OHTN) COHORT STUDY • *S.B. Rourke, J. Gill, A. Rachlis, C. Kovacs, G. Arbess, J. Brunetta, A. Carvalhal, C. Power, R. Rosenes, M. Atkinson, L. Cysique, T. Marcotte, A. Burchell, and T. Bekele*
- 12.45pm-01.00pm **OC 6** - LONG TERM CLINICAL OUTCOME OF HIV-INFECTED PATIENTS WITH CEREBROSPINAL FLUID VIRAL ESCAPE
F. Ferretti, L. Passeri, E. Tuveri, S. Gerevini, A. Lazzarin, P. Cinque
- 01.00pm-02.00pm LUNCH and POSTER VIEWING

Day 2 - October 9th, 2015

SESSION 4 - CNS inflammation

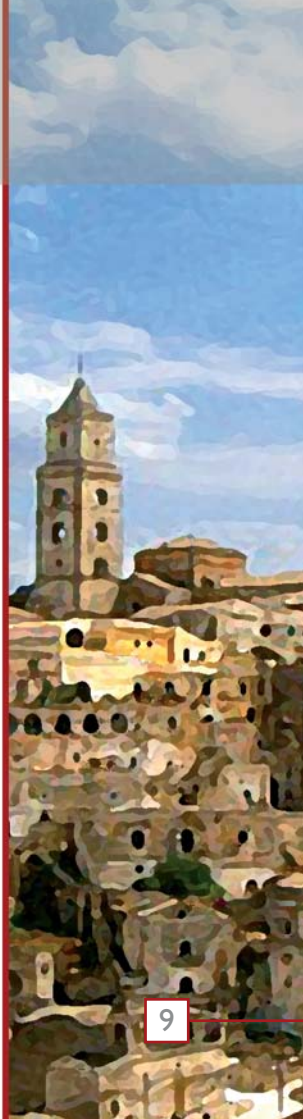
Chairpersons: **A. d'Arminio Monforte** (Milan, Italy), **S. Lo Caputo** (Florence, Italy)

- 02.00pm-02.40pm Inflammation and neurodegenerative diseases • **M. Heneka** (Bonn, Germany)
02.40pm-02.50pm Discussion
02.50pm-03.20pm CNS inflammation in untreated and treated HIV • **R.W. Price** (San Francisco, USA)
03.20pm-03.30pm Discussion
03.30pm-04.00pm COFFEE BREAK and POSTER VIEWING

SESSION 5 - The macrophage and CNS reservoir

Chairpersons: **S. Aquaro** (Rome, Italy), **G. Poli** (Milan, Italy)

- 04.00pm-04.20pm Compartmentalization and tropism • **R. Swanstrom** (Chapel Hill, USA)
04.20pm-04.30pm Discussion
04.30pm-05.00pm Macrophage-microglial reservoir and the role of SAMHD1 in determining susceptibility of macrophages to HIV infection • **R. Gupta** (London, UK)
05.00pm-05.15pm Discussion
05.15pm-05.35pm SIV brain infection • **K. Williams** (Boston, USA)
05.35pm-05.45pm Discussion



Day 3 - October 10th, 2015

SESSION 6 - CNS mitigation

Chairpersons: **A. Gori** (Monza, Italy), **G. Parruti** (Pescara, Italy)

- 09.00am-09.20am Strategies of systemic mitigation - ATCG studies • **P. Hunt** (San Francisco, USA)
09.20am-09.30am Discussion
09.30am-09.50am CNS anti-inflammatory strategies in neurodegenerative diseases • **A. Chan** (Bochum, Germany)
09.50am-10.00am Discussion
10.00am-10.30am COFFEE BREAK and POSTERVIEWING

SESSION 7 - Beyond standard ART: eliminating the CNS reservoir

Chairpersons: **S. Lewin** (Melbourne, Australia), **S. Spudich** (New Haven, USA)

- 10.30am-10.50am Immunology of HIV Persistence Systemically and in CNS: Implications for an HIV Cure • **S. Deeks** (San Francisco, USA)
10.50am-11.10am Macrophages as a reservoir during long-term ART • **S. Lewin** (Melbourne, Australia)
11.10am-11.30am Models of CNS cure/mitigation in primates • **J. Clements** (Baltimore, USA)
11.30am-11.50am CNS cure studies in humans • **O.S. Sogaard** (Aarhus, Denmark)
11.50am-12.10pm Discussion
12.10pm-12.30pm FINAL REMARKS
CME Questionnaire compilation
LUNCH

FACULTY

Beau ANCES, St. Louis, USA

Gioacchino ANGARANO, Bari, Italy

Stefano AQUARO, Rome, Italy

Andrea ANTINORI, Rome, Italy

James BECKER, Pittsburgh, USA

Kaj BLENNOW, Mölndal, Sweden

Stefano BONORA, Turin, Italy

Andrea CALCAGNO, Turin, Italy

Andrew CHAN, Bochum, Germany

Paola CINQUE, Milan, Italy

Janice CLEMENTS, Baltimore, USA

Antonella d'ARMINIO MONFORTE, Milan, Italy

Steven DEEKS, San Francisco, USA

Ronald ELLIS, San Diego, USA

Simonetta GEREVINI, Milan, Italy

Magnus GISSLEN, Goteborg, Sweden

Andrea GORI, Monza, Italy

Giovanni GUARALDI, Modena, Italy

Ravindra GUPTA, London, UK

Robert HEATON, San Diego, USA

Michael HENEKA, Bonn, Germany

Peter HUNT, San Francisco, USA

Giuseppe IPPOLITO, Rome, Italy

Adriano LAZZARIN, Milan, Italy

Scott Lee LETENDRE, San Diego, USA

Sharon LEWIN, Melbourne, Australia

Sergio LO CAPUTO, Florence, Italy

Sebastian LUCAS, London, UK

Giustino PARRUTI, Pescara, Italy

Carlo Federico PERNO, Rome, Italy

Guido POLI, Milan, Italy

Richard W. PRICE, San Francisco, USA

Kevin ROBERTSON, Chapel Hill, USA

Ole Schmeltz SØGAARD, Aarhus, Denmark

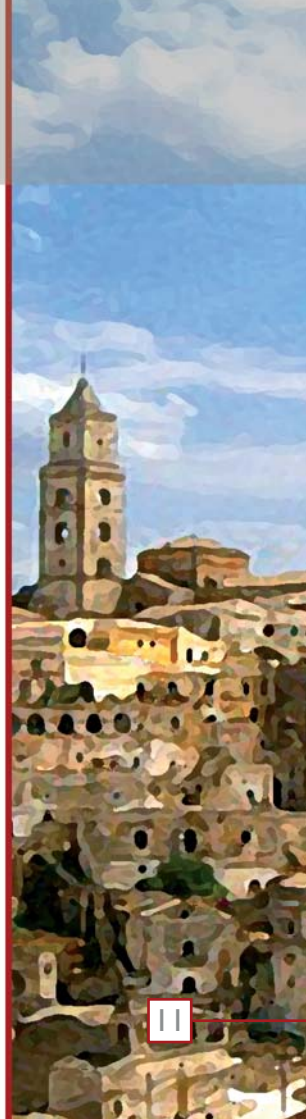
Serena SPUDICH, New Haven, USA

Ron SWANSTROM, Chapel Hill, USA

Carlo TORTI, Catanzaro, Italy

Ken WILLIAMS, Boston, USA

Alan WINSTON, London, UK



GENERAL INFORMATION

CONGRESS VENUE

CASA CAVA

Via San Pietro Barisano, 47, Matera (MT)

ORGANIZING SECRETARIAT



Nadirex International Srl -

Via Riviera, 39 - 27100 Pavia

Tel. +39.0382.525714/35 - Fax +39.0382.525736

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CME



The request for CME credits has been forwarded to the Italian Ministry of Health for Italian participants.

Nr. 265-133794 - Nr. 20,5 CME credits

The Congress is intended for 100 participants.

Medical practitioners: *Infectious Diseases - Microbiology and Virology - Psychiatry.*

Psychologist and Psychiatrist.

GENERAL INFORMATION

REGISTRATION FEE

Early Registration closes 20th July Euro 366,00 (€ 300,00 + 22% VAT)

Late Registration from 21st July Euro 427,00 (€ 350,00 + 22% VAT)

THE REGISTRATION FEE INCLUDES:

- Participation in the scientific work
- Congress kit
- Certificate of attendance
- CME certificate
- Abstract Book
- Coffee breaks and working breakfasts for the whole period
- Thursday 8th October Dinner
- Friday 9th October Dinner

CERTIFICATE OF ATTENDANCE

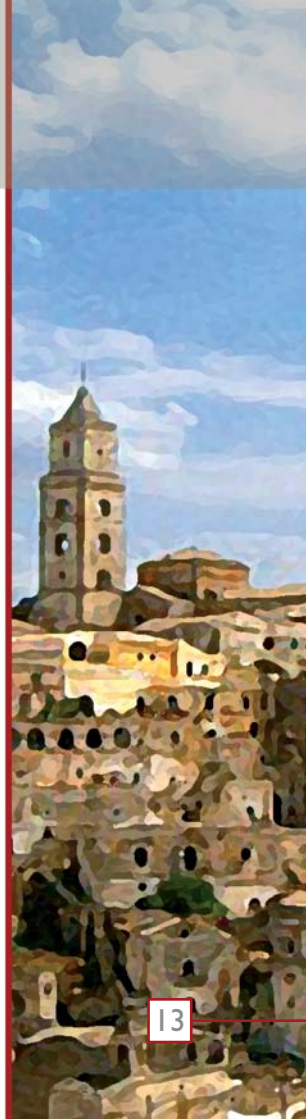
The Certificate of Attendance will be delivered at the end of the Meeting to all the participants registered at the desk of the Organizing Secretariat.

SLIDES AND INTERNET POINTS

A computerized projection will be provided by technicians.
Please provide the file of your presentation in electronic format.

OFFICIAL LANGUAGE

Official language: English.



GENERAL INFORMATION

ORAL COMMUNICATIONS AND POSTERS

The scientific programme of the conference will include Sessions of Oral Communications and Discussions of Posters. The abstracts will be selected by referees, chosen on the basis of their scientific expertise in the field. The referees will decide the type of presentation. Abstracts must contain original data, not already presented on other occasions. Abstracts must be in English and will be published in the Abstract Book.

TOPICS

- *Brain function and behavior in treated patients*
- *The effects of ART on CNS reservoirs*
- *CNS inflammation and mitigation*
- *The macrophage and CNS reservoir*
- *Beyond standard ART: eliminating the CNS reservoir*

Abstracts must be submitted exclusively using the on-line form, following the instructions available at www.neurohiv.com.

The Organizing Secretariat will inform the first author on the abstract form, via e-mail, of the acceptance of the work, the format (oral communication or poster) and the date and time of presentation.

Ten minutes will be allocated for the presentation of each communication, after which there will be a 5-minute discussion.

Size of Posters: 70 cm wide x 100 cm high. Material to hang the Posters will be available near the display area. The presence of one of the authors is requested for the discussion of the Posters.

DEADLINE FOR ABSTRACT SUBMISSION

September 15th, 2015, 6.00 p.m. - On-line submission.

September 20th, 2015 - Notification of acceptance of abstracts.

REGISTRATION OF AUTHORS

Payment of the registration fee is an indispensable condition for the presentation of oral communications or posters. The person presenting the abstract must be indicated as the first author.

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