May 18-20, 2009
Consiglio Nazionale delle Ricerche, Rome, Italy

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Speakers Include

Special Ceremony for the 100th Birthday of
Rita Levi-Montalcini
Nobel Prize Winner 1986 for the NGF Discovery

a C.N.R. & CDDconference www.cddconferences.eu

Presented by

Partners

Consiglio Nazionale delle Ricerche
Cell Death & Differentiation
The SASS Foundation for Medical Research, Inc.
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Per i 100 anni di una delle più illustri scienziate della storia d’Italia, Rita Levi-Montalcini, un doveroso omaggio, degno di un Nobel della Medicina.
Il prof. Antonio Giordano ha partecipato attivamente, come presidente del comitato scientifico e Chairman di una sezione, al congresso dedicato alle patologie neurodegenerative, tenutosi a Roma tra il 18-20 maggio. Durante questo incontro, ampio risalto è stato dato alla scienziata Italiana e alla sua vita dedicata alla ricerca scientifica. Lo Sbarro Health Research Organization di Philadelphia e la Human Health Foundation Onlus di Spoleto, sono stati tra i partners dell’evento. Tra gli iscritti al meeting a: il dott. Raffaele La Montagna, la dott.ssa Isabella Caligiuri, il dott. Daniele Conti, la dott.ssa Valeria Rizzo, e la dott.ssa Paola Indovina (giovani ricercatori finanziati dalla Human Health Foundation Onlus).
Il meeting “Neurodegeneration”, patrocinato del Consiglio Nazionale delle Ricerche, C.N.R., ha affrontato problematiche legate a patologie quali l’Alzheimer, il Parkinson e la Sla per una valutazione approfondita sui meccanismi molecolari alla base di queste malattie neurodegenerative nonché’ un bilancio sui più recenti progressi dalla ricerca.
La Human Health Foundation Onlus, attraverso la presenza a questo prestigioso incontro, sottolinea la propria crescita a livello scientifico internazionale, con l’ambizione di diventare uno dei punti di riferimento della ricerca e del confronto scientifico in Italia.
The increasing incidence of neurodegenerative disorders represents a relevant public health problem, disrupting the quality of life for millions of people as well as costing billions of Euros every year. The recent progress in understanding the basic molecular mechanisms of Alzheimer’s, Parkinson’s, Huntington’s, multiple sclerosis, stroke and various other neurodegenerative diseases is providing new therapeutic approaches. Here, we bring together the most dynamic international scientists to discuss the advances in genetics, molecular mechanisms and signaling pathways contributing to neuronal dysfunction, neurotoxicity and pathology.
Day 1: Monday 18th May 2009

08:00 - 18:00  Registration

09:30 - 09:45 Welcome address from the Chair
Welcome address from the President of the C.N.R., professor Luciano Maiani

09:45 -10:45  Opening Lecture:
Chair: Gerry Melino
Genetic Control of Programmed Cell Death in C. elegans
H. Robert Horvitz, Cambridge MA

Welcome cocktail

Session 1  “Synaptic plasticity and neurodegeneration”
Chair: Lamberto Maffei & David Rubinsztein

11:15 - 11:40  Tom C. Sudhof, Stanford CA
Neurotransmitter release and Neurodegeneration: The SNARE connection

11:40 - 12:15  Lennart Mucke, San Francisco CA
Strategies to Prevent Neural Network Dysfunction in Alzheimer's Disease

12:15 - 12:35  Patrick Jean Rouge, Strasbourg F
Potential role of noncoding RNAs in Alzheimer’s disease

12:35 - 12:55  Grace Stutzmann, Chicago IL
Aberrant revuitment of ER calcium stores alters synaptic activity
in pre-symptomatic Alzheimer’s disease mice

lunch & poster viewing

Session 2  “Mechanisms of disease: plasticity and physiological response”
Chair: Tullio Pozzan & Sudhir Gupta

14:00 - 14:35  Martha Constantine-Paton, Cambridge MA
Excitability and Cell Death

14:35 - 15:10  Lamberto Maffei, Pisa I
Plasticity in the adult nervous system and restoration of function

15:10 - 16:15  Nils Goran Larsson, Stockholm S
Mitochondrial dysfunction in neurodegeneration and ageing

16:45 - 17:20  Bertil Fredholm, Stockholm S,
Adenosine and Neurodegeneration – protection or aggravation?

17:20 - 17:40  Claudio Grassi, Rome I
Herpes Simplex Virus type 1 induces intracellular Ca2+ signal dysregulation
triggering APP processing in rat neocortical neurons

coffee break

18:10 - 19:10  Evening Lecture:
Chair: Pierluigi Nicotera
Novel Messenger Molecules Mediating Neurotoxicity
Solomon H. Snyder, Baltimore MD
**Day 2: Tuesday 19th May 2009**

**Session 3**

“Protein Folding Diseases & Amyloid”

*Chair:* Elena Cattaneo & Gianluigi Condorelli

09:00 - 09:35 Dennis Selkoe, Boston MA,
Regulated intramembrane proteolysis and the origin of Alzheimer's Disease

09:35 - 10:10 Christian Haas, Munich D,
The biological and pathological function of secretases

10:10 - 10:45 Giuseppina Tesco, Charleston MA
Regulation of BACE degradation by GGA3: implications for Alzheimer’s disease pathogenesis

10:45 - 11:10 Adriano Aguzzi, Zurich CH,
Biology and Neuroimmunology of Prion Diseases

*coffee break*

11:40 - 12:00 **Round Table:** *Research on Neuroscience in Europe.*
Discussants: G Condorelli, F Fazio, T Longhi, P Nicotera

12:00 - 12:25 Special tribute to professor Rita Levi-Montalcini for her 100th birthday
Salute from Bertil Fredholm, President of the Nobel Assembly, Stockholm
Salute from the Minister for Education, On. Mariastella Gelmini
Salute from the Under-Secretary of State for Health, professor Ferruccio Fazio

12:25 - 13:00 Concert in honor of professor Rita Levi-Montalcini
Claudia-Sophie Giannotti, violin & Claudia Wernig, piano

*lunch & poster viewing*

**Session 4**

“Protein Folding Diseases & Amyloid II”

*Chair:* Adriano Aguzzi & Stuart A. Lipton

14:00 - 14:35 Stephen Strittmatter, Yale US,
title TBA

14:35 - 15:10 David Rubinsztein, Cambridge UK,
Autophagy and neurodegeneration

15:10 - 15:30 Francesco Cecconi, Rome I,
Ambra1 and autophagy in neurodegeneration

15:30 - 15:50 Pietro Calissano, Rome I
The NGF-target neurons model to induce and analyze an *in vitro*, Alzheimer-like, molecular syndrome.

*coffee break*

16:20 - 16:55 Tony Schapira, London UK,
Neurodegeneration in Parkinson's disease

16:55 - 17:30 Michael Goedert Cambridge UK,
title TBA

17:30 - 18:05 Pierluigi Nicotera, Bonn D,
Synaptic loss and plasticity in neurodegeneration

18:05 - 18:25 L. Miguel Martins, Leicester UK,
Omi/HtrA2 in Parkinson's disease
Day 3: Wednesday 20th May 2009

Session 5  
“Mechanisms of Neurodegeneration”
Chair: Richard A. Knight & D. James Surmeier

9:00 - 9:35 Elena Cattaneo, Milan I,  
BDNF and other pathogenic mechanisms in Huntington's Disease

9:35 - 10:10 Valina L. Dawson, Baltimore MD,  
Clues about Parkinson's disease from genetic mutations

10:10 - 10:30 Yin Liu, Baltimore MD  
Neurothrophin-TrkB signalins is required for maintenance of the mouse neuromuscular junction in adulthood

coffee break

11:00 - 11:35 Stuart A. Lipton, La Jolla CA,  
S-Nitrosylation of Drp1 Mediates β-Amyloid-Induced Mitochondrial Fission and Neuronal Synaptic Damage

11:35- 11:55 Paolo Salomoni, Leicester UK,  
The tumour suppressor Pml regulates cell fate in the developing brain

11:55- 12:15 Selected presentation from Abstracts 1

12:15- 12:35 Selected presentation from Abstracts 2

12:35 - 12:55 Selected presentation from Abstracts 3

lunch & poster viewing

Session 6  
“From Signaling to Therapy”
Chair: Giorgio Bernardi & Tullio Pozzan

14:00 - 14:35 Craig Montell, Baltimore MD,  
A therapeutic concept for the childhood neurodegenerative disease MLIV arising from a Drosophila model

14:35 - 15:10 J. Kevin Foskett, Philadelphia PA,  
ER Calcium Signaling and Alzheimer’s Disease

15:10 - 15:45 D. James Surmeier, Chicago IL,  
Calcium and selective vulnerability of monoaminergic neurons in Parkinson's disease

coffee break

16:15 - 16:50 John Collinge, London UK,  
Prion Strains and Neurotoxicity

16:50 - 17:10 Giovanna Mallucci, Leicester UK,  
Prion pathogenesis in vivo

17:10 - 17:30 Selected presentation from Abstracts 4

17:30 - 18:30 Closing Lecture:
Chair: Pierluigi Nicotera
Neuroprotectin D1: a sentinel for neurodegenerations  
Nicolas G. Bazan, New Orleans LA

18:30 Closing address by the Chair
Rita Levi Montalcini

Prof. Rita Levi-Montalcini, completed her medical studies in 1936 and did her specialization in neurology and psychology. In 1986, she received the Nobel Prize in Physiology and Medicine. She was born in Turin on April 22nd, 1909 along with her twin sister, Paola. Her father, Admo Levi, was a talented mathematician and electrical engineer, and her mother, Adele Montalcini, was a gifted painter. Her brother, Gino, was a well-known architect and professor at the University of Turin.

Despite their father’s opposition, the twins decided to have professional careers. Paola was one of the most well known painters in Italy while Rita received her father’s permission to study. Within eight months, she closed the gaps in Latin, Greek and mathematics, completed high school and began studying medicine at the University of Turin until 1936. Prof. Levi-Montalcini went for a short time to Brussels, where she did research in neurology. On the verge of the German invasion of Belgium, in the Spring of 1940, she returned to Turin, where she set up a small research unit.

In 1941, she and her family were forced to leave Turin due to the war, moving to a country cottage, where she once again set up her lab and renewed her experiments. In the Fall of 1943, the Germans invaded Italy and the family was forced to flee to Florence, where she lived in an underground cellar until the end of the war. At the end of the war, Prof. Rita Levi-Montalcini worked in a large refugee camp set up near Florence, combating various epidemics.

In May 1945, the family returned to Turin. In 1947, Prof. Levi-Montalcini was invited by Prof. Viktor Hamburger to join his research team in his laboratory at Washington University in St. Louis. Since 1956, she has been working and doing research in Italy at the C.N.R. (Consiglio Nazionale delle Ricerche) until her retirement. She was appointed an Italian Senator for life in 2001 and heads the philanthropic Fund for the Education of Girls and Young Women in Africa. She fostered the creation of the now successful European Brain Research Institute in Rome.

We have the unique opportunity to have Rita Levi Montalcini, a C.N.R. scientist, who celebrates her 100th birthday on April 22nd 2009. We therefore aim to celebrate this unique event with the President of the Nobel Assembly, the Ministry of Education and the Under-Secretary of Health of the Italian Government at the headquarters of C.N.R.