

SHRO Press - Pierpaolo Basso

Neurodegeneration, Roma 18, 19, 20 maggio 2009

Consiglio Nazionale delle Ricerche, C.N.R. P.le Aldo Moro, Roma

Per i 100 anni di una delle piu` 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 e' stato dato alla scienziate 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 nonche' un bilancio sui piu` 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.

Ospiti del congresso presentato da Bertil Fredholm, presidente dell`assemblea del Nobel di Stoccolma: il ministro dell'Istruzione, dell'Università e della Ricerca Mariastella Gelmini, il vice ministro della Salute Ferruccio Fazio, Pietro Calissano dell'Ebri, Istituto europeo di ricerca sulle malattie del cervello.



“Neurodegeneration”

a C.N.R. & CDDconference, www.CDDconferences.eu
(*Cell Death & Differentiation*, published by Nature-Publishing-Group, www.nature.com/cdd)

Rome, May 18-20, 2009
Consiglio Nazionale delle Ricerche, C.N.R., piazzale Aldo Moro. Roma

Special tribute to **Rita Levi-Montalcini** for her 100th birthday
Presented by **Bertil Fredholm**, President of the Nobel Assembly, Stockholm

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.

Chair:

Solomon Snyder
Gerry Melino
Pierluigi Nicotera

Scientific Advisory Board:

Nicolas G. Bazan, New Orleans
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Sudhir Gupta, Irvine
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Stuart A. Lipton, San Diego

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Giacinto Bagetta, Cosenza
Giorgio Bernardi, Rome
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The SASS Foundation

The Sbarro Health Research Organization

MRC Toxicology Unit

NEURODEGENERATION

18-20 MAY 2009, C.N.R., ROME, ITALY

Preliminary PROGRAM

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 revitment 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 - 16:45 **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
Neurotrophin-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.