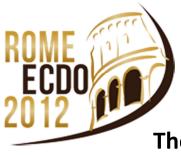# TRAINING COURSE PROGRAM

9th Training course on "Concepts and methods in Programmed Cell Death"
The role of Metabolism, Redox Systems and Mitochondria in death and survival

Friday September 14th, 2012

Welcome word (Francesco Cecconi and Eleonora Candi)

Chair: **Francesco Cecconi** (Rome, Italy)

14.00 - 14.45 **Boris Zhivotovsky** (Karolinska Institute, Stockholm, Sweden)
Mitochondria in Cell Death: Implication of ROS

14.45 - 15.30 **Luca Scorrano** (University of Geneve, Geneve, Switzerland)
Keeping mitochondria in shape: a matter of life and death

15.30 - 16.00 **Coffee break**

Chair: **Eleonora Candi** (Rome, Italy)

16.00 - 16.45 **Soraya Smaili** (Federal University of São Paulo, Brazil)
Intracellular calcium stores: location and communication to cell death

16.45 - 17.30 **Nika Danial** (Dana-Farber Cancer Institute, Boston, MA, USA)
Integration of mitochondrial fuel utilization pathways and cellular stress responses

17.30 - 18.15 **Massimo Zeviani** (Istituto "Besta" IRCCS, Milan)
Breaking, crippling and outing the magic circle: disorders of mitochondria and mitochondrial DNA

18.15 - 18.30 **Discussion**

20th Euroconference on Apoptosis
” From Death to Eternity”

<u>Friday September 14th, 2012</u>

Welcome and Keynote Lecture

Chair:	**Gerry Melino (Rome, Ghent, Leicester)**

19:00 - 19:15   **Official Opening**

19:15 - 20:00   **ECDO Keynote Lecture**
Arnold Levine (Institute for Advanced Study, Princeton, New Jersey, USA.)
Allele-Specific p53 Mutant Reactivation

20:00   **Welcome Reception**

<u>Saturday September 15th, 2012</u>

Session 1: Regulation of autophagy

Chair:	**Hans Uwe Simon (Bern, Switzerland)**

9:00 - 9:30   **Noburu Mizushima** (Tokyo Medical and Dental University, Bunkyo-ku, Japan)
Formation and maturation of the autophagosome

9:30 - 10:00   **Sharon Tooze** (London Research Institute, Cancer Research, United Kingdom)
Novel mammalian regulators of starvation-induced autophagy

10:00 - 10:30   **Ana Maria Cuervo** (Albert Einstein College of Medicine, NY, USA)
Selective Autophagy: fighting cell death in multiple fronts

10:30 - 11:00   **Coffee break** (with exhibition viewing)

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Session 2: Cell death and autophagy in pathophysiology

Chair: **Sten Orrenius** (Stockholm, Sweden)

11:00 - 11:30   **Andrea Ballabio** (Telethon Institute of Genetics and Medicine, Naples, Italy)
A Transcriptional control of cellular clearance and energy metabolism

11:30 - 11:45   **Valentina Cianfanelli** (University of Rome "Tor Vergata", Italy)
Short talk, *Ambra1 is an haploinsufficient tumor suppressor gene regulating autophagy and cell proliferation*

11:45 - 12:00   **Helin Vakifahmetoglu Norberg** (Harvard Medical School, Boston, USA)
Short talk, *Targeting Autophagy and mutant p53 in cancer cells*

12:00 - 12:30   **Sharad Kumar** (University of Adelaide, Australia)
Regulation of developmental cell death by growth signaling and Autophagy

12:30 - 14:00   **Lunch**

Session 3: Cell death, cancer and metabolism

Chair: **Klaus Michael Debatin** (Ulm, Germany)

14:00 - 14:30   **Tak Mak** (University Health Network, Toronto, Canada)
TNF signaling: Expect the Unexpected

14:30 – 14:45   **Alessandro Terrinoni** (University of Rome "Tor Vergata", Italy)
Short talk, *Involvement of p63 apoptosis/differentiation pathway in cochlear neuroepitelum*

14:45 - 15:00   **Thomas Kaufmann** (Institute of Pharmacology, Bern, Switzerland)
Short talk, *The Bcl-2 Family Member Bok: A Bax/Bak Homologue?*

15:00 – 15:15   **Marie Hardwick** (Johns Hopkins University, Baltimore, USA)
Short talk, *BCL-xL and BAX cooperate to change membrane shapes*

15:15 – 15:45   **Vishva Dixit** (Genentech Inc., San Francisco, USA)
RIPK3: Role of the kinase activity in necroptosis

16:00 – 18:00   **POSTER SESSION 1** (with coffee and soft drinks): (uneven poster numbers)

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<u>Sunday September 16th, 2012</u>

Session 4: Death receptor's signalling

Chair: **Peter Krammer** (Heidelberg, Germany)

9:00 - 9:30 **Douglas R. Green** (St. Jude Children's Research Hospital, Memphis, USA)
Dead on Arrival: How caspases promote and prevent cell death

9:30 - 10:00

Peter Vandenabeele (VIB and Ghent University, Belgium)
Role of RIPK1 and RIPK3 in cell death modality switches in vitro and in vivo

10:00 - 10:30

Henning Walczak (Imperial College London, UK)
Death receptors and ubiquitin in cell death, cancer and inflammation

10:30 - 11:00 **Coffee break** (with exhibition viewing)

Session 5: Ubiquitin regulation of death and survival

Chair: **Zahra Zakeri** (New York, USA)

11:00 - 11:30 **Ivan Dikic** (Goethe University, Frankfurt am Main, Germany)
Ubiquitin and autophagy networks

11:30 - 11:45 *Manuela Antonioli* (INMI. Rome, Italy)
***Short talk**, Regulation of autophagy by the E3 ubiquitin ligase Cullin 4*

11:45 - 12:00 **Laura Dickens** (Leicester, UK)
***Short talk**, A New DISC Model reveals a crucial role for Caspase-8 Death Effector Domain Chain Assembly in mediating Apoptotic Cell Death*

12:00 - 12:30 **Yufang Shi** (IHS, SIBS, Shanghai, China)
Mesenchymal stem cells: a double-edged sword in regulating immune responses

12:30 - 14:00 **Lunch**

Session 6: Cell death and microRNA

Chair: **Marie-Lise Gougeon** (Paris, France)

14:00 - 14:30 **Anders Lund** (University of Copenhagen, Denmark)
MicroRNA regulation of Autophagy

14:30 -15:00 **George Calin** (The University of Texas, Houston, USA)
Non-codingRNA revolution in the cancer society

15:00 – 15:15 **Christine Watson** (University of Cambridge, United Kingdom)
Short talk, *Die another way – the role of Stat3 target genes in LM-PCD*

15:15 - 15:45 **Anne Willis** (MRC Toxicology, Leicester, U.K)
Remodelling of a polypyrimidine tract binding protein complex is required for IRES-mediated translation during TRAIL-mediated apoptosis

16:00 - 18:00 **POSTER SESSION 2** (with coffee and soft drinks): (even poster numbers)

ECDO Honorary Lecture and General Assembly

Chair: **Boris Zhivotovsky** (Stockholm, Sweden)

18:00 - 18:45 **ECDO Honorary Lecture and EMBO Lecture**

Karen Vousden, The Beatson Institute for Cancer Research, Glasgow, UK
The role of p53 in metabolic adaptation and survival

18:45 - 19:00 **Poster Awards**

19:00 - 19:30 **ECDO General Assembly**

20:30 **Gala Dinner**

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Monday September 17th, 2012

Joint sessions with "9th International Meeting on Yeast Apoptosis"

Session 7: Aging

Chair:	**C. Mazzoni and S. Giannattasio** (Rome, Italy)

8:30 - 9:15 **Guido Kroemer** (Institute Gustave Roussy, Paris, France)
Autophagy regulation at the level of the acetylproteome
EMBO Lecture

9:15 - 9:30 **Giuseppe Filomeni** (University of Rome "Tor Vergata" Italy)
Short talk, *Age-dependent modulation of GSNO reductase by cytosine methylation and its impact on mitochondrial dynamics and mitophagy: A new pathway through which metabolism and epigenetics affect redox signaling*

9:30 – 9:45 **Vladimir I. Titorenko** (Montreal, Canada)
Short talk, *Mitophagy is a longevity assurance process that in yeast sustains functional mitochondria, maintains lipid homeostasis, and protects cells from apoptotic and "lipoptotic" modes of cell death*

9:45 - 10-00 **Jason Sims** (Trieste, Italy)
Short talk, *Chromosome Translocation Affects the Life Span of Saccharomyces cerevisiae*

10:00 – 10:30 **Valter Longo** (Los Angeles, USA)
Acetic acid is a non-toxic ketone body-like carbon source metabolized by tor/sch9 deficient mutants to extend longevity in S. cerevisiae

10:30 – 11:00 **Frank Madeo** (Graz, Austria)
Spermidine: A novel autophagy inducer and longevity elixir

11:00 - 11:30 **Coffee break** (with exhibition viewing)

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Session 8: Cell death and immunity

Chair: **Laszlo Fesus** (Debrecen, Hungary)

11:30 – 12:00 **Kodi Ravichandran** (University of Virginia, Charlottesville, USA)
Apoptotic cell clearance by bronchial epithelial cells critically influences airway inflammation

12:00 – 12:15 **Gudrun Strauss** (University of Ulm, Germany)
Short talk, *Recombinant CD95-Fc (APG101) prevents graft-versus-host disease in mice without disabling anti-tumor cytotoxicity and T cell functions*

12:15 - 12:30 **Walter Malorni** (Istituto Superiore di Sanità, Italy)
Short talk, *Mitochondrial raft-like microdomains in cell death process: another brick in the wall*

12:30 – 13:00 **Laurence Zitvogel** (Paris, France)
The IFN/IFNRA pathway in the response to immunogenic cell death

13:00 **End of the meeting – Closing remarks**