

*With the increasing knowledge on the mechanisms that regulate cell death in multicellular organisms, it has become clear that similar signalling, controls and execution pathways are involved in physiological cell turnover as well as pathological demise. Thus, endogenous mediators, but also environmental pollutants and drugs or bacterial toxins seem to affect directly or via secondary endogenous products the same death programme. The identification of sensitive targets in signalling pathways that regulate death or survival has also unveiled new possibility for early detection of toxic damage as well as new potential therapeutic targets. This workshop, the fourth of a series held at the University of Calabria, Cosenza, will focus on three primary aspects:*

- 1) Endogenous factors that modulate or activate apoptosis:
  - a) intracellular mediators such as NO, Ca<sup>2+</sup> or cytokines*
  - b) genes such as p73 and p53**
- 2) Exogenous factors that may determine cell death or survival in pathological conditions or when employed as pharmacological agents:
  - a) bacterial toxins and viral products*
  - b) drugs and xenobiotics**
- 3) The molecular mechanisms underlying these interactions.*

*As tradition in the latest symposia, have agreed to participate outstanding speakers from different European top-ranking institutes.*



**DEPARTMENT OF PHARMACOBIOLOGY**  
**University of Calabria**

**IV Workshop on**  
**Apoptosis in Biology and Medicine**  
**“Neuroimmune Links”**

**Arcavacata di Rende**  
**March 27<sup>th</sup>, 2000**  
**Aula Magna**

## Under the auspices of The

University of Calabria, Cosenza  
University of Catanzaro "Magna Græcia"  
Italian Association of Immunopharmacology

## Sponsors

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## Organizing Committee

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## Local Organizing Secretariat

*Mr. Nicola Fico*  
Department of Pharmacobiology  
University of Calabria  
87030 Arcavacata di Rende (CS)  
☎ (39-984) 493248  
Fax (39-984) 493271

## Programme

Chairmen  
*S. Andò (Italy) & J.O. Dolly (UK)*

9.00-9.20 *J.O. Dolly (UK)*  
**Neuroexocytosis probed with botulinum toxins**

9.20-9.40 *P.L. Nicotera (Germany)*  
**Block of neuronal exocytosis and apoptosis**

9.40-10.00 *G. Bagetta, S. Piccirilli, C. Nucci (Italy)*  
**Apoptotic signals converge from the eye to the brain as consequence of light deprivation**

10.00-10.20 *B. Brune (Germany)*  
**Signalling involved in NO protective or triggering effects in apoptosis**

10.20-10.40 *E. Clementi (Italy)*  
**Regulation of apoptosis by the crosstalk between ceramide and nitric oxide**

10.40-11.10 *Coffee Break*

Chairmen  
*C. Fiorentini (Italy) & W. Malorni (Italy)*

11.10-11.30 *G. Melino (Italy)*  
**Role of p73 in neuronal differentiation and death**

11.30-11.50 *V. De Laurenzi (Italy)*  
**Knock out of tissue transglutaminase**

11.50-12.10 *G. Schettini (Italy)*  
**Occurrence of amyloidogenic peptides in Alzheimer Disease. Identification, processing and neurotoxic properties**

12.10-12.30 *H. Walczak (Germany)*  
**Role of TRAIL in cell death**

12.30-12.50 *A. Spinedi (Italy)*  
**Complexity of the relationship between sphingolipid metabolism and apoptosis**

12.50-13.10 *S. Ceruti (Italy)*  
**Differential mechanisms of apoptosis induced by purine analogs in astrocytoma**

13.10-13.30 *General Discussion*

Chairmen  
*P.L. Nicotera (Germany) & G. Bagetta (Italy)*

## Section II: Oxidative stress in neuroAIDS

**Welcome address and introducing remarks**  
15.00-15.30 *S. Venuta (Italy) & E. Bonmassar (Italy)*

Chairmen  
*E. Bonmassar (Italy) & C. Riccardi (Italy)*

15.30-16.00 *M. Tardieu (France)*  
**Free radical overproduction and bcl2 modulation in cultured neurones and microglial cells**

16.00-16.30 *C. Turco (Italy)*  
**The effect of oxidative stress in the expression pro-and anti-apoptotic gene families and transduces**

16.30-17.00 *P. Clayette, D. Dormont (France)*  
**Modulation of endogenous free-radical scavengers in Neuroimmune disorders**

17.00-17.30 *Coffee Break*

Chairmen  
*A. Modesti (Italy) & E. Avvedimento (Italy)*

17.30-18.00 *H. Nottet (NL)*  
**Monocyte extravasation and neuroAIDS: role of peroxynitrite**

18.00-18.30 *C.F. Perno (Italy)*  
**The effect of novel free-radical scavengers in HIV replication in cells of CNS**

18.30-19.00 *V. Mollace (Italy)*  
**Anti-apoptotic effect of novel free-radical scavengers in neuroAIDS**