X Workshop on Apoptosis in Biology and Medicine Ten year research in cell death and repair University of Calabria 29-30 March, 2007 The X Workshop on Apoptosis in Biology and Medicine is organized in the frame of the PhD course on Pharmacology and Biochemistry of Cell Death run at the University of Calabria in consortium with the University Magna Graecia of Catanzaro and the University Tor Vergata of Rome. This will provide the students with the opportunity to meet with outstanding scentists of worldwide reputation in the field of pharmacology of cell death and repair and to discuss with them their research projects. The topics selected for this one and a half day meeting will range from basic mechanisms of neuronal cell death to the most recent experimental development of novel pharmacologic targets for therapeutical intervention. Starting in the year 1996 with the initial discussion on the biochemical and morphological features of apoptotic cell death and on the techniques developed for their identification, during the recent years the Workshop on Apoptosis in Biology and Medicine has been devoted to the discussion of hot topics concerned with the role of this type of cell demise in the development of human diseases like acute and chronic neurodegenerative disorders (stroke, Parkinson's and Alzheimer diseases, neuroAIDS etc.) and cancer. Decipheration of the human genome has posed new opportunities for a better understanding pathophysiological mechanisms underlying human diseases though limitations of a pure genomic approach to the development of novel therapeutics have emerged. Identification, however, of key cellular effector molecules yielded the proteomic approach to the study of mechanisms of cell death and repair generating important results mainly in the field of clinical oncology. In the frame of the depicted "omic" scenario of biomedical research the workshop is the venue where the fundamental role of the multidisciplinary approach typically used by Pharmacology in the development of novel therapeutics will be presented.



DOTTORATO DI RICERCA IN FARMACOLOGIA E BIOCHIMICA DELLA MORTE CELLULARE

X WORKSHOP ON

APOPTOSIS IN BIOLOGY AND MEDICINE

TEN YEAR RESEARCH IN CELL DEATH AND REPAIR

(Sala Stampa) University of Calabria 29th-30th March, 2007

Thursday, 29th March

17.00 Welcome address

Invited Opening Lectures

17.30 G. Melino (Rome)

Death by the p73 family: from cancer to neurodegeneration

18.00 Biggio G. (Cagliari)

The effect of chronic stress on GABAA receptor plasticity and function of (L'effetto della stress cronico sulla plasticità e funzione del recettore GABAA)

18.30 Bowery N.G. (Birmingham)

The discovery of GABA_B receptors: From bench to bedside

Friday, 30th March

9.00-13.30 *MEDIATORS OF NORMAL AND PATHOLOGICAL NEURONAL FUNCTION*

Chairpersons: V. Cuomo (Rome) and G. F. Di Renzo (Naples)

9.00-9.25 Annunziato L. (Naples)

Differential expression of Na+/Ca2+ exchanger in experimental brain ischemia

9.25-9.45 D. Amantea, G. Bagetta and M. T. Corasaniti (Cosenza, Catanzaro)

Dissection of the dual role of neuroinflammatory mediators in brain ischemia

9.45-10.10 *Bonanno G. (Genova)*

Excessive and precocious glutamate release in a mouse model of amyotrophic lateral sclerosis

10.10-10.35 Mollace V (Catanzaro)

The role of astrocytes in normal and pathological neural plasticity

10.35-11.00 *Coffee break*

DISCOVERY OF NOVEL NEUROTHERAPEUTICS

Chairpersons: G. Bagetta (Cosenza) & G. Melino (Rome)

11.00-11.25 Cuomo V. & Gaetani S. (Rome)

Endocannabinoids: from discovery to the development of novel therapies

11.25-11.45 *Di Chiara G. (Cagliari)*

Role of dopamine in the reward system and addiction

11.45-12.10 Moroni F. (Florence)

Novel nuclear targets to reduce ischemic injury

12.10-12.35 Spano PF (Brescia)

Novel targets for neuroprotection

12.35-13.00 *Cattabeni F (Milan)*

Rational basis for therapeutic intervention in Alzheimer's disease

13.00-13.30 General Discussion