

# Mauro Patrone

## *Curriculum vitae*

### PERSONAL DATA

Born in Genoa on 06/05/1961

Resident in Genoa

### BIO AND EDUCATION

Scientific high school , Military NCO 1982-1983 Alpine troops ; Degree Biological Sciences 1987 Internship and State Exam for the biologist profession 1988; PhD in biochemistry 1992. Expert qualified in cellular technologies CNR 1996. In 2000 winner of a national competition and Professor for scientific area E05A Biochemistry (BIO/10), from October 1, 2000 Associate Professor in biochemistry at the Università del Piemonte Orientale. Scientific activity is mainly addressed in the definition of the relationship structure/ function in enzymatic proteins of different nature ; identification of the early stages of differentiation of neoplastic cells; on the pathophysiological role of specific proteins .

### UNIVERSITY CAREER

2000-	Associate Professor, University del Piemonte Orientale
1993-2000	Contract Researcher National Research Council
1992-2000	Adjunct professor University of Genova
1991-1993	AIRC scholarship University of Genova
1988-1991	PhD in Biochemistry University of Pavia
1987	Farmitalia-Carlo Erba
1987	Degree in Biological Sciences University of Genova

### UNIVERSITY POSITIONS

2015-	President Safety Commission and spaces DISIT
2013	Scorer TECO Test (CINECA-ANVUR)
2012-2014	Member of Parity commission teachers students DISIT
2012-2015	Chairman of the Board in biology courses
2012-2014	Elected member giunta department DiSIT
2010-2011	Vice Director department DiSAV
2007-2011	Elected member giunta department DiSAV
2001-	Teaching Committee Biology

### SCIENTIFIC POSITIONS

2012-	Member Chemistry and Biology PhD DiSIT
2008-	Member Interdisciplinary Center of Innovative Methodologies in Biotechnology
2000-2011	Member Environmental sciences PhD DiSAV
1998-	Member Interuniversity Consortium for Biotechnology
1998-	Member SIB Italian Society of Biochemistry and Molecular Biology
1992-	Member National Institute Biostructures and Biosystems

### MAIN FIELDS OF INTEREST

1. Cytosolic calcium dependent proteolytic system
2. Protein Kinase C (PKC)
3. Protein High Mobility Group Box 1 (HMGB1)
4. Platelet gel
5. Proteomics

### CURRENT ISSUES OF RESEARCH

1. Molecular relationship structure / function in enzymatic proteins of different nature; purification and characterization of the cytosolic calcium dependent proteolytic system components.
2. Early stages identification of the differentiation in neoplastic cells; role of protein kinase C (PKC) in cell differentiation; specific function of PKC isozymes in regulation of the cell cycle processes.
3. Characterization of the role of protein kinase C (PKC) in models used as environmental markers.
4. Role of the protein (HMGB1), a co-nuclear factor involved in the regulation of gene transcription, later shown that is also actively or passively released from the cells then act as a pro-inflammatory cytokine
5. Mechanisms of tissue regeneration in human models induced by platelet growth factors.

## CURRENT FUNDED PROJECTS

PROGRAMME	FUNDED PROJECT
PRIN 2011	TRANSLATIONAL APPARATUS ROLE IN CONTROLLING CELL GROWTH AND CARCINOGENESIS
2016-2018 Local Research UPO	"COMPARATIVE STUDY OF TLR RECEPTORS (TOLL-LIKE RECEPTORS) IN INTERVEBRATI AND VERTEBRATE ORGANISMS"

## TOP FIVE PAPERS

1. High mobility group box 1 protein is released by neural cells upon different stresses and worsens ischemic neurodegeneration in vitro and in vivo.  
Faraco G, Fossati S, Bianchi ME, Patrone M, Pedrazzi M, Sparatore B, Moroni F, Chiarugi A. J Neurochem. 2007 Oct;103(2):590-603. Epub 2007 Jul 31.
2. Selective proinflammatory activation of astrocytes by high-mobility group box 1 protein signaling.  
Pedrazzi M, Patrone M, Passalacqua M, Ranzato E, Colamassaro D, Sparatore B, Pontremoli S, Melloni E. The Journal of Immunology 2007 Dec 15;179(12):8525-32.
3. Introduction of the beta isozyme of protein kinase C accelerates induced differentiation of murine erythroleukemia cells.  
Melloni E, Pontremoli S, Sparatore B, Patrone M, Grossi F, Marks PA, Rifkind RA. Proc Natl Acad Sci U S A. 1990 Jun;87(12):4417-20.
4. Natural Killer (NK)/melanoma cell interaction induces NK-mediated release of chemotactic High Mobility GroupBox-1 (HMGB1) capable of amplifying NK cell recruitment.  
Parodi M, Pedrazzi M, Cantoni C, Averna M, Patrone M, Cavaletto M, Spertino S, Pende D, Balsamo M, Pietra G, Sivori S, Carlomagno S, Mingari MC, Moretta L, Sparatore B<sup>3</sup>, Vitale M. Oncoimmunology. 2015 May 29;4(12):e1052353. eCollection 2015.
5. Platelet lysate stimulates wound repair of HaCaT keratinocytes.  
Ranzato E, Patrone M, Mazzucco L, Burlando B. Br J Dermatol. 2008 Sep;159(3):537-45. doi: 10.1111/j.1365-2133.2008.08699.x. Epub 2008 Jul 4.

## FURTHER INFORMATION

- Co-Founder Caffè Scienza Alessandria, <https://caffescienza.wordpress.com/>
- Member of National Alpine Association (ANA)