



Prof. Salvatore Passarella

Ordinario di Biochimica presso la Facoltà di Economia
dell'Università degli Studi del Molise

Nato a Bari (8.10.1946), laureato in Chimica presso l'Università degli Studi di Bari (1971). Assistente incaricato di Chimica Biologica presso l'Università degli Studi di Bari (1971-1974). Assistente ordinario di Chimica Biologica presso l'Università degli Studi di Bari (1974-1980). Professore associato di Biochimica Cellulare presso l'Università degli Studi di Bari (1980-1990).

Professore straordinario di Biochimica presso l'Università del Molise (1990-1993). Dal 1993 il Professor Salvatore Passarella è professore ordinario di Biochimica presso l'Università del Molise dove è Coordinatore del corso di dottorato di ricerca in Biochimica e Chimica Applicate. È stato Preside della Facoltà di Agraria (1993-1996). Dal 1995, è Rettore dell'Università del Molise.

Nella Banca dati Medline (<http://www.ncbi.nlm.nih.gov/PubMedOld>) il professor Passarella è presente con 115 lavori. Nella classifica mondiale degli studiosi dei mitocondri <http://www.mitochondrial.net/labs.php> il Prof. Passarella è al 223 posto, primo tra i docenti di Biochimica delle Università italiane under 65.

Pubblicazioni

Elenco delle trenta pubblicazioni più recenti

Valenti D, Vacca RA, de Pinto MC, De Gara L, Marra E, Passarella S.

In the early phase of programmed cell death in Tobacco Bright Yellow 2 cells the mitochondrial adenine nucleotide translocator, adenylate kinase and nucleoside diphosphate kinase are impaired in a reactive oxygen species-dependent manner. *Biochim Biophys Acta*. 2007 Jan;1767(1):66-78.

Guaragnella N, Pereira C, Sousa MJ, Antonacci L, Passarella S, Corte-Real M, Marra E, Giannattasio S.

YCA1 participates in the acetic acid induced yeast programmed cell death also in a manner unrelated to its caspase-like activity. *FEBS Lett*. 2006 Dec 22;580(30):6880-4.

Atlante A, Seccia TM, De Bari L, Marra E, Passarella S.

Mitochondria from the left heart ventricles of both normotensive and spontaneously hypertensive rats oxidize externally added NADH mostly via a novel malate/oxaloacetate shuttle as reconstructed in vitro. *Int J Mol Med*. 2006 Jul;18(1):177-86.

Atlante A, Bobba A, de Bari L, Fontana F, Calissano P, Marra E, Passarella S.
Caspase-dependent alteration of the ADP/ATP translocator triggers the mitochondrial permeability transition which is not required for the low-potassium-dependent apoptosis of cerebellar granule cells. *J Neurochem.* 2006 May;97(4):1166-81.

Vacca RA, Valenti D, Bobba A, Merafina RS, Passarella S, Marra E.
Cytochrome c is released in a reactive oxygen species-dependent manner and is degraded via caspase-like proteases in tobacco Bright-Yellow 2 cells en route to heat shock-induced cell death. *Plant Physiol.* 2006 May;141(1):208-19.

Di Martino C, Pizzuto R, Pallotta ML, De Santis A, Passarella S.
Mitochondrial transport in proline catabolism in plants: the existence of two separate translocators in mitochondria isolated from durum wheat seedlings. *Planta.* 2006 May;223(6):1123-33.

Paventi G, Pastore D, Bobba A, Pizzuto R, Di Pede S, Passarella S.
Plant uncoupling protein in mitochondria from aged-dehydrated slices of Jerusalem artichoke tubers becomes sensitive to superoxide and to hydrogen peroxide without increase in protein level. *Biochimie.* 2006 Feb;88(2):179-88.

de Bari L, Valenti D, Pizzuto R, Paventi G, Atlante A, Passarella S.
Jerusalem artichoke mitochondria can export reducing equivalents in the form of malate as a result of D-lactate uptake and metabolism. *Biochem Biophys Res Commun.* 2005 Oct 7;335(4):1224-30.

Passarella S, Atlante A, Valenti D, de Bari L.
The role of mitochondrial transport in energy metabolism. *Mitochondrion.* 2003 Apr;2(5):319-43.

Atlante A, Giannattasio S, Bobba A, Gagliardi S, Petragallo V, Calissano P, Marra E, Passarella S.
An increase in the ATP levels occurs in cerebellar granule cells en route to apoptosis in which ATP derives from both oxidative phosphorylation and anaerobic glycolysis. *Biochim Biophys Acta.* 2005 Jun 1;1708(1):50-62. Epub 2005 Feb 7.

Atlante A, de Bari L, Valenti D, Pizzuto R, Paventi G, Passarella S.
Transport and metabolism of D-lactate in Jerusalem artichoke mitochondria. *Biochim Biophys Acta.* 2005 Jun 1;1708(1):13-22. Epub 2005 Mar 31.

Giannattasio S, Guaragnella N, Corte-Real M, Passarella S, Marra E.
Acid stress adaptation protects *Saccharomyces cerevisiae* from acetic acid-induced programmed cell death. *Gene.* 2005 Jul 18;354:93-8.

Iaffaldano N, Meluzzi A, Manchisi A, Passarella S.
Improvement of stored turkey semen quality as a result of He-Ne laser irradiation. *Anim Reprod Sci.* 2005 Feb;85(3-4):317-25.

Bobba A, Atlante A, de Bari L, Passarella S, Marra E.

Apoptosis and cytochrome c release in cerebellar granule cells. *In Vivo*. 2004 May-Jun;18(3):335-44. Review.

Vacca RA, de Pinto MC, Valenti D, Passarella S, Marra E, De Gara L.
Production of reactive oxygen species, alteration of cytosolic ascorbate peroxidase, and impairment of mitochondrial metabolism are early events in heat shock-induced programmed cell death in tobacco Bright-Yellow 2 cells. *Plant Physiol*. 2004 Mar;134(3):1100-12.

De Bari L, Atlante A, Valenti D, Passarella S.
Partial reconstruction of in vitro gluconeogenesis arising from mitochondrial L-lactate uptake/metabolism and oxaloacetate export via novel L-lactate translocators. *Biochem J*. 2004 May 15;380(Pt 1):231-42.

Pallotta ML, Valenti D, Iacovino M, Passarella S.
Two separate pathways for D-lactate oxidation by *Saccharomyces cerevisiae* mitochondria which differ in energy production and carrier involvement. *Biochim Biophys Acta*. 2004 Feb 15;1608(2-3):104-13.

Pastore D, Di Pede S, Passarella S.
Isolated durum wheat and potato cell mitochondria oxidize externally added NADH mostly via the malate/oxaloacetate shuttle with a rate that depends on the carrier-mediated transport. *Plant Physiol*. 2003 Dec;133(4):2029-39. Epub 2003 Dec 11.

Bafunno V, Giancaspero TA, Brizio C, Bufano D, Passarella S, Boles E, Barile M.
Riboflavin uptake and FAD synthesis in *Saccharomyces cerevisiae* mitochondria: involvement of the Flx1p carrier in FAD export. *J Biol Chem*. 2004 Jan 2;279(1):95-102. Epub 2003 Oct 10.

Atlante A, de Bari L, Bobba A, Marra E, Calissano P, Passarella S.
Cytochrome c, released from cerebellar granule cells undergoing apoptosis or excitotoxic death, can generate protonmotive force and drive ATP synthesis in isolated mitochondria. *J Neurochem*. 2003 Aug;86(3):591-604.

Atlante A, Bobba A, Calissano P, Passarella S, Marra E.
The apoptosis/necrosis transition in cerebellar granule cells depends on the mutual relationship of the antioxidant and the proteolytic systems which regulate ROS production and cytochrome c release en route to death. *J Neurochem*. 2003 Mar;84(5):960-71.