

## **Curriculum vitae of Dr. Sergio Giannattasio**



Present position: CNR Senior scientist (Primo ricercatore)  
Date of Birth: July 1<sup>st</sup>, 1958  
Education: Degree in Chemistry with honor at University of Bari, Italy in 1982.

### **Positions**

**2001-at present** CNR senior scientist at Istituto di Biomembrane e Bioenergetica (IBBE, formerly *Centro di Studio sui Mitocondri e Metabolismo Energetico*, CSMME)

**1998-2001** CNR research assistant at CSMME

**1990-1998** CNR contract research assistant at CSMME

**1984-1989** CNR contract research assistant at CSMME

**1983** Young research fellow at the Istituto di Chimica Biologica of Bari University

**October 2010** *Visiting senior scientist* at the Department of Biological Sciences, The University of New Orleans, New Orleans, LA, USA

**August 2008** *Visiting senior scientist* at the Department of Biochemistry and Molecular Biology, SUNY Upstate Medical University, Syracuse, NY, USA

**May 2005** *Visiting senior scientist* at the Departamento de Biologia, Universidade do Minho, Braga, Portugal.

**August 2005** *Visiting senior scientist* at the Department of Molecular Biology, University of Texas Southwestern Medical Center at Dallas, Texas, USA.

**2003-2004** *Visiting senior scientist* on leave at the Department of Molecular Biology, University of Texas Southwestern Medical Center at Dallas, Texas, USA

**March-May 1986, May-July 1989, June-July 1996** Guest scientist at the Biochemisches Institut der Universität Zürich, Zurich, Svizzera

**December 1995** Visiting research fellow at the Istituto di Clinica Pediatrica of Turin University.

**February 1991 and March 1993** Visiting research fellow at the Dipartimento di Scienze Biomediche e Oncologia Umana, Turin University

He is member of CNR panel of Project Managing Experts. Since June 2009 he is member of the Scientific Board of CNR - IBBE.

### **Project leader**

**2011-2012** Research Unit CNR-IBBE, APQ Regione Puglia, Networks of Public Research Laboratories, Project "BioNet – PTP, Biodiversity for the exploitation and safety of Apulian typical food productions"

**2005-2008** Interreg III/A programme, *Project* "Trasferimento Innovazione ed Organizzazione nella Ricerca, nella Cultura, nell'Ambiente e nella Sanità" (TIORCAS)

([https://serviziweb.unimol.it/pls/unimol/consultazione.mostra\\_pagina?id\\_pagina=3075](https://serviziweb.unimol.it/pls/unimol/consultazione.mostra_pagina?id_pagina=3075)) Regione Molise-Montenegro, *Activity* "Prevenzione di Malattie Genetiche Ereditarie";  
**1999-2002** FP 4 European Commission Project INCO-Copernicus "Molecular genetic testing in phenylketonuria: a model to assess the quality control system for monogenic disease" (MOLGENT, [www.geneticahumana.it/molgent.htm](http://www.geneticahumana.it/molgent.htm));  
**1999** CNR Bilateral Project between CSMME and Institute for Medical Radiobiology Zurich University – PSI, Villigen (CH) "Mitochondrial biogenesis";  
**1997-1998** CNR Bilateral Project between CSMME and Human Genetics Center, Vilnius University, Vilnius (Lithuania) "Genetic homogeneity and heterogeneity in the molecular basis of phenylketonuria";  
**1993-1999** CNR CSMME research activity # 07 "Nucleus-cytoplasm-mitochondria cross-talk".

### **Research activity**

**1983** Active metabolite transport accross the inner mitochondrial membrane.

**1984-1998** Mitochondrial biogenesis; nuclear-encoded mitochondrial protein transport; structure determinants of mitochondrial aspartate aminotransferase intracellular localization; aspartate aminotransferase structure-function relations; protein engineering of B<sub>6</sub>-dependent protein catalysts.

**1990-2008** Studies on the molecular basis of inherited diseases (phenylketonuria, 21-hydroxylase deficiency, cystic fibrosis, Wilson disease, primary cardiomyopathies)

**1998-at present** Programmed cell death in yeast *Saccharomyces cerevisiae*; mitochondria role in programmed cell death; nucleus-mitochondria cross-talk in *Saccharomyces cerevisiae*; rat cerebellar granule cell apoptosis.

His reaserch activity is documented by:

- 60 articles on international peer-reviewed journals;
- 17 articles on books and non-JCR journals;
- 10 articles on national non-JCR journals
- 110 congress proceedings.

He was nvited speaker in national and international scientific meetings and held seminars in several scientific institutions in Italy and abroad.

He organized theoretical/practical courses on protein engineering, molecular biology techniques, molecular genetics in clinical practice and cooperated in organization of scientific meetings.

### **Ad-hoc peer-reviewer for the following international scientific journals:**

Applied Microbiology and Biotechnology

Apoptosis

Biochimica Biophysica Acta – Molecular Cell Research

Brain Research (Main section)

Cell Biology International

FEBS Letters

FEMS Yeast Research

Frontiers in Oncology

Human Mutation

Journal of Pharmaceutical and Biomedical Analysis

Microbiology

Molecular Genetics and Metabolism  
Plant cell and Environment  
Plos ONE

Dr. Giannattasio is a member of the Editorial board of:

- Research in Cell Biology (Scientific and Academic Publishing)
- Microbial cell (Shared Science Publishers OG)

And Guest Editor of the Special Issue "Yeast Stress, Aging, and Death" in *Oxidative Medicine and Cellular Longevity*.

### **Project reviewer**

**2012**-today Membro del Research Reviewer Board for Research Programmes and Products del MIUR.

**2012**-today Member of "Albo degli Esperti FAR" del MIUR (D.D. 30/Ric./2012);

**2012** Project reviewer per la Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO, Belgio).

**2009** Project reviewer per la National Science Foundation (NSF) (proposal No.0950363, PIN: 081904).

### **Teaching activity**

Contract professor at University of Molise (Campobasso and Termoli) and University of Calabria (Cosenza) where he held courses on Biochemistry, Applied Biochemistry, Genetic Engineering, Recombinant DNA Technology. He is member of the teaching staff of PhD school "Applied Biochemistry and Chemistry", University of Molise. He tutored PhD students and experimental thesis students in undergraduate Biological Sciences School, Faculty of Sciences, University of Bari.

### **Congress organization**

**2013-2016** Co-Chair Meeting "Cell Stress: Survival and Apoptosis" of the "Associazione di Biologia Cellulare e del Differenziamento" (ABCD).

**2013** Chairman of the Parallel Session "Cell Stress: Survival and Apoptosis" in the National ABCD Congress 2013, Ravenna.

**2013-14** Scientific Advisory board of the 10<sup>th</sup> International Meeting on Yeast Apoptosis (IMYAX), 14-18 maggio 2014, Gothenburg, Sweden.

**2012** Congress chair of 9th International Meeting on Yeast Apoptosis, 16-20 settembre 2012, Rome, Italy.

**2000** 5th Baltic Congress of Laboratory Medicine, Session 3. Molecular genetic testing and quality assessment del, Vilnius (Lithuania).

**1996** Scientific secretariat of the Congress "Basi Molecolari in Patologia Umana: Dai geni, al meccanismo, alla terapia", Bari, December 1996

**1994** Scientific secretariat of the Congress "Recenti progressi sulle basi molecolari in patologia umana", Bari, November 1994.

### **Awards**

**2002-03** Research supervisor of the project "Characterization of the Molecular Basis of Phenylketonuria in Italy. Identification of Phenylalanine hydroxylase gene Exon 12 R408W mutation", carried out by three Bari *Liceo Classico "Socrate"* students, winner of 2002 edition of FAST/EU "I Giovani e le Scienze" award, and exhibited at the 2003 *Intel - International Science & Engineering Fair*, Cleveland, Ohio (USA).

**2001** SIBioC-BIO-RAD Prize for studies on “Molecular diagnosis of phenylketonuria: a model to implement a quality control system for monogenic disease”.

**2000** SIBioC 2000 Prize for studies on “A survey on molecular biology in clinical laboratories in Apulia Region”

**1997** "Fondazione Gaetano Quagliariello" Award for his studies on the molecular basis of inherited disease

**1994** SIBioC (Italian Society of Clinical Biochemistry and Molecular Biology) '94 Prize for research “Mutation detection by RNA single strand conformation polymorphism (rSSCP)”

**1987** Classed second for the S.I.B. (Italian Society for Biochemistry and Molecular Biology) Medal.

Dr. Giannattasio is a member of the following scientific societies:

Italian Society of Biochemistry and Molecular Biology;

Italian Society of Biophysics and Molecular Biology;

European Cell Death Organization

Italian Environmental Mutagen Society

### **List of publications on JCR journals**

1. Guaragnella N, Palermo V, Galli A, Moro L, Mazzoni C, **Giannattasio S** (2014). The expanding role of yeast in cancer research and diagnosis: insights into the function of the oncosuppressors p53 and BRCA1/2. *FEMS Yeast Res.*, 14, 2-16. (IF **2.462**)
2. Guaragnella N, **Giannattasio S**, Moro L. (2014) Mitochondrial dysfunction in cancer chemoresistance. *Biochem. Pharmacol.* 19, 1330-1341. (IF **4.576**)
3. Ždravlević M., Guaragnella N. and **Giannattasio S**. (2014) Yeast as a tool to study mitochondrial retrograde pathway *en route* to cell stress response *Methods Mol Biol* (in press). (IF -)
4. Guaragnella N, Marra E, Galli A, Moro L, **Giannattasio S**. (2014) Silencing of BRCA2 decreases anoikis and its heterologous expression sensitizes yeast cells to acetic acid-induced programmed cell death. *Apoptosis*. 19, 1330-41 (IF **3.949**)
5. Mazzoni C, **Giannattasio S**, Winderickx J, Ludovico P. (2013) Yeast stress, aging, and death. *Oxid Med Cell Longev.*;2013:684395. (IF **3.393**)
6. Guaragnella N, Palermo V, Burhans WC, Gourlay CW, Ludovico P, Madeo F, **Giannattasio S**, Mazzoni C. (2013) Yeast between life and death: a summary of the Ninth International Meeting on Yeast Apoptosis in Rome, Italy, 17-20 September 2012. *Cell Death Differ.* 20, 1281-1283. (IF **8.371**)
7. **Giannattasio S**, Guaragnella N, Zdravlević M, Marra E. (2013) Molecular mechanisms of *Saccharomyces cerevisiae* stress adaptation and programmed cell death in response to acetic acid. *Front Microbiol.* 2013;4:33. (IF -)
8. Guaragnella N, Ždravlević M, Lattanzio P, Marzulli D, Pracheil T, Liu Z, Passarella S, Marra E, **Giannattasio S** (2013). Yeast growth in raffinose results in resistance to acetic-acid induced programmed cell death mostly due to the activation of the mitochondrial retrograde pathway. *Biochim. Biophys. Acta*, 1833, 2765-2774. (IF **4.808**)
9. **Giannattasio S.**, Guaragnella N., Arbinio A.A., Moro L. (2013) Stress-Related Mitochondrial Components and Mitochondrial Genome as Targets of Anticancer Therapy *Chem. Biol. Drug Des.* 81, 102-112. (IF **2.469**)

10. Guaragnella N, Zdravlević M, Antonacci L, Passarella S, Marra E, **Giannattasio S.** (2012) The role of mitochondria in yeast programmed cell death. *Front. Oncol.* 2, 70. (IF -)
11. Antonacci L., Guaragnella N., Zdravlević M., Passarella S., Marra E. and **Giannattasio S.** (2012) The N-acetylcysteine-insensitive acetic acid-induced yeast programmed cell death occurs without macroautophagy *Curr. Pharm. Biotechnol.* 13, 2705-2711. (IF 2.690)
12. Zdravlević M. Guaragnella N., Antonacci L., Marra E. and **Giannattasio S.** (2012) Yeast as a tool to study signalling pathways in mitochondrial stress response and cytoprotection. *ScientificWorldJournal*, 2012, doi:10.1100/2012/912147.
13. Guaragnella N, Passarella S, Marra E, **Giannattasio S.** (2011) Cytochrome c Trp65Ser substitution results in inhibition of acetic acid-induced programmed cell death in *Saccharomyces cerevisiae*. *Mitochondrion*, doi:10.1016/j.mito.2011.08.007
14. Guaragnella N., Antonacci L., Passarella S., Marra E. and Giannattasio S. (2011) Achievements and perspectives in yeast acetic acid-induced programmed cell death pathways. *Biochem. Soc. Trans.* 39, 1538-43 Review
15. Guaragnella N, Passarella S, Marra E, **Giannattasio S.** (2010) Knock-out of metacaspase and/or cytochrome c results in the activation of a ROS-independent acetic acid-induced programmed cell death pathway in yeast. *FEBS Lett.* 584:3655-60.
16. Guaragnella N., Bobba A., Passarella S., Marra E. and **Giannattasio S.** (2010) Yeast acetic acid-induced programmed cell death can occur without cytochrome c release which requires metacaspase YCA1. *FEBS Lett.* 584, 224-228.
17. R.A. Vacca, **S. Giannattasio**, G. Capitani, E. Marra and P. Christen. (2008) Molecular Evolution of B<sub>6</sub> Enzymes: Binding of Pyridoxal-5'-phosphate and Lys41Arg Substitution Turn Ribonuclease A into a Model B<sub>6</sub> Protoenzyme. *BMC Biochemistry* 9, 17.
18. Kucejova B, Li L, Wang X, **Giannattasio S**, Chen XJ. (2008) Pleiotropic effects of the yeast Sal1 and Aac2 carriers on mitochondrial function via an activity distinct from adenine nucleotide transport. *Mol Genet Genomics* 280, 25-39.
19. **Giannattasio S.**, Atlante A., Antonacci L., Guaragnella N., Lattanzio P., Passarella S., Marra E. (2008) Cytochrome c is released from coupled mitochondria of yeast *en route* to acetic acid-induced programmed cell death and can work as an electron donor and a ROS scavenger. *FEBS Lett.* 582, 1519-1525.
20. Valenti D., Vacca R.A., Guaragnella N., Passarella S., Marra E., **Giannattasio S.** (2008) A transient proteasome activation is needed for acetic acid-induced programmed cell death to occur in *Saccharomyces cerevisiae*. *FEMS Yeast Res.* 8, 400-404.
21. Guaragnella N., Antonacci L., **Giannattasio S.**, Marra E., Passarella S. (2008) Catalase T and Cu,Zn-superoxide dismutase in the acetic acid-induced programmed cell death in *Saccharomyces cerevisiae*. *FEBS Lett.* 582, 210-214.
22. N. Guaragnella, L. Antonacci, S. Passarella, E. Marra, **S. Giannattasio** (2007) Hydrogen peroxide and superoxide anion production during acetic acid-induced yeast programmed cell death. *Folia Microbiol.* 52, 237-240.
23. N. Guaragnella, C. Pereira, M. J. Sousa, L. Antonacci, S. Passarella, M. Cortes-Real, E. Marra and **S. Giannattasio** (2006) YCA1 participates in the acetic acid

- induced yeast programmed cell death also in a manner unrelated to its caspase-like activity. *FEBS Lett.* 580, 6880-6884.
24. **S. Giannattasio**, A. Bobba, V. Jurgelevičius, R.A. Vacca, P. Lattanzio, R.S. Merafina, A. Utkus, V. Kučinskas and E. Marra (2006) Molecular basis of cystic fibrosis in Lithuania. Incomplete CFTR mutation detection by PCR-based screening protocols. *Genet. Test.* 10, 169-173.
  25. **S. Giannattasio**, Z. Liu, J. Thornton, R. A. Butow (2005) Retrograde respinse to mitochondrial dysfunction is separable from TOR1/2 regulation of retrograde gene expression. *J. Biol. Chem.* 280, 42528-42535.
  26. **S. Giannattasio**, N. Guaragnella, M. Corte-Real, S. Passarella, E. Marra (2005) Acid stress adaptation protects *Saccharomyces cerevisiae* from acetic acid-induced programmed cell death. *Gene*, 354, 93-98.
  27. A. Atlante, **S. Giannattasio**, A. Bobba, S. Gagliardi, V. Petragallo, P. Calissano, E. Marra, S. Passarella (2005) An increase in the ATP levels occurs in cerebellar granule cells en route to apoptosis in which ATP derives from both oxidative phosphorylation and aerobic glycolysis. *Biochim. Biophys. Acta*, 1708, 50-62.
  28. Bobba A, Marra E, Fathallah DM, **S. Giannattasio**. Related (2003) Non-radioactive detection of five common microsatellite markers for ATP7B gene in Wilson disease patients. *Mol Cell Probes*.17, 271-274.
  29. N. Pronina, **S. Giannattasio**, P. Lattanzio, R. Lugovska, P. Vevere, A. Kornejeva (2003) The molecular basis of phenylketonuria in Latvia. *Hum. Mutat.* 21, 398-399
  30. J. Kasnauskiene, **S. Giannattasio**, P. Lattanzio, L. Cimbalištie, V. Kučinskas (2003) The molecular basis of phenylketonuria in Lithuania. *Hum. Mutat.* 21, 398.
  31. **S. Giannattasio**, S. Gagliardi, M. Samaja and E. Marra (2003) Simultaneous determination of purine nucleotides, their metabolites and  $\beta$ -nicotinamide adenine dinucleotide in cerebellar granule cells by ion-pair high performance liquid chromatography. *Brain Res. Brain Res. Protocol* 10, 168-174.
  32. **S. Giannattasio**, I. Dianzani, P. Lattanzio, M. Spada, V. Romano, F. Calì, G. Andria, A. Ponzone, E. Marra and A. Piazza (2001) Genetic heterogeneity in five Italian regions: Analysis of PAH mutations and minihaplotypes. *Hum. Hered.* 52, 154-159.
  33. A. Atlante, P. Calissano, A. Bobba, **S. Giannattasio**, E. Marra and S. Passarella (2001) Glutamate neurotoxicity, oxidative stress and mitochondria. *FEBS Lett.* 497, 1-5.
  34. A. Bobba, E. Marra, P. Lattanzio, A. Iolascon and **S. Giannattasio** (2000) Characterization of the cyp21 gene 5' flanking region in patients affected by 21-OH deficiency. *Hum. Mutat.* 15, 481.
  35. A. Bobba, A. Atlante, **S. Giannattasio**, G. Sgaramella, P. Calissano and E. Marra (1999) Early release and subsequent caspase-mediated degradation of cytochrome c in apoptotic cerebellar granule cells. *FEBS Lett.* 457, 126-130.
  36. A. Bobba, A. Iolascon, F. Monno, S. Di Maio, E. Marra and **S. Giannattasio** (1999) 21-hydroxylase deficiency in Italy: a distinct distribution pattern of CYP21 mutations in a sample from Southern Italy. *J. Med. Genet.* 36, 648-650.
  37. A. Azzariti, R. A. Vacca, **S. Giannattasio**, R. S. Merafina, E. Marra and S. Doonan (1998) Kinetic properties and thermal stabilities of mutant forms of mitochondrial aspartate aminotransferase. *Biochim. Biophys. Acta* 1386, 29-38.

38. Spada, M., Dianzani, I., Bonetti, G., Biondi, A., Leone, L, **S. Giannattasio** and Ponzone, A. (1998) Phenylalanine and tyrosine metabolism in PKU heterozygotes: influence of different PAH mutations. *J. Inherit. Metab. Dis.* 21, 236-239.
39. Guzzetta, V., Bonapace, G., Dianzani, I., Parenti, G., Lecora, M., **S. Giannattasio**, Concolino, D., Strisciuglio, P., Sebastio, G., Andria, G. (1997) Phenylketonuria in Italy: distinct distribution pattern of three mutations of the phenylalanine hydroxylase gene. *J. Inherit. Metab. Dis.* 20, 619-624.
40. Vacca, R. A., **S. Giannattasio**, Graber R., Sandmeier E., Marra E. and Christen P. (1997). Active-site Arg→Lys substitutions alter reaction and substrate specificity of aspartate aminotransferase. *J. Biol. Chem.* 272, 21932-21937.
41. F. Cali, F., Dianzani, I., Desviat, L. R., Perez, B., Ugarte. M., Ozguc, M., Shiloh, Y., **S. Giannattasio**, Carducci, C., Bosco, P., De Leo, G., Piazza, A. and Romano, V. (1997). The STR 252 - IVS10nt546 - VNTR 7 phenylalanine hydroxylase minihaplotype in five Mediterranean samples. *Hum. Genet.* 100, 350-355.
42. **S. Giannattasio**, P. Lattanzio, V. Jurgelevicius, L. Cimbalištie, E. Marra and V. Kucinskis (1997). Phenylketonuria mutations and the linked haplotypes in the Lithuanian population: origin of the most common R408W mutation. *Hum. Hered.* 47, 155-160
43. A. Bobba, A. Iolascon, **S. Giannattasio**, M. Albrizio, A. Sinisi, F. Prisco, F. Schettini and E. Marra (1997). Characterization of CAH alleles with non radioactive DNA-single strand conformation polymorphism analysis of CYP21 gene. *J. Med. Genet.* 34, 223-228.
44. **S. Giannattasio**, P. Lattanzio, A. Bobba and E. Marra (1997). Detection of microsatellites by ethidium bromide staining. The analysis of the STR system in the human phenylalanine hydroxylase gene. *Mol. Cell. Probes* 11, 81-83.
45. A. Azzariti, **S. Giannattasio**, S. Doonan, R.S. Merafina, E. Marra, E. Quagliariello (1995). Use of protease sensitivity to probe the conformations of newly-synthesised mutant forms of mitochondrial aspartate aminotransferase. *Biochem. Biophys. Res. Commun.* 215, 800-807.
46. A. Bobba, **S. Giannattasio**, A. Pucci, R. Lippolis, C. Camaschella and E. Marra (1995). Characterization of mitochondrial DNA in primary cardiomyopathies. *Clin. Chim. Acta* 243, 181-189.
47. I. Dianzani, **S. Giannattasio**, L. de Sanctis, C. Alliaudi, P. Lattanzio, C. Dionisi Vici, A. Burlina, M. Burrioni, G. Sebastio, F. Carnevale, V. Guzzetta, E. Marra, C. Camaschella, A. Ponzone (1995). Characterization of phenylketonuria alleles in the Italian population. *Eur. J. Hum. Genet.* 3, 294-302.
48. E. Marra, A. Azzariti, **S. Giannattasio**, S. Doonan, and E. Quagliariello (1995). Cumulative effects of mutations in newly-synthesised mitochondrial aspartate aminotransferase on uptake into mitochondria. *Biochem. Biophys. Res. Commun.* 214, 511-517.
49. **S. Giannattasio**, L. Bisceglia, P. Lattanzio, A. Grifa, I. Dianzani, P. Gasparini, E. Marra (1995). Molecular screening of genetic defects with RNA-SSCP analysis: the PKU and cystinuria model. *Mol. Cell. Probes* 9, 201-205.

50. A. Bobba, R. Lippolis, **S. Giannattasio**, C. Camaschella and E. Marra (1995). An efficient method for PCR analysis of mitochondrial DNA from paraffin-embedded archival heart tissue. *PCR Methods and Applications* 4, 309-310
51. I. Dianzani, P. M. Knappskog, L. de Sanctis, **S. Giannattasio**, E. Riva, A. Ponzzone, J. Apold, C. Camaschella (1995). A novel missense mutation in the phenylalanine hydroxylase gene leading to complete loss of enzymatic activity. *Hum. Mutat.* 6, 247-249.
52. I. Dianzani, **S. Giannattasio**, L. de Sanctis, E. Marra, A. Ponzzone, C. Camaschella, A. Piazza (1994). Genetic history of phenylketonuria mutations in Italy. *Am J. Hum. Genet.* 55, 851-853.
53. **S. Giannattasio**, A. Azzariti, E. Marra and E. Quagliariello (1994). The N-terminal region of mature mitochondrial aspartate aminotransferase can direct cytosolic dihydrofolate reductase into mitochondria in vitro. *Biochem. Biophys. Res. Commun.* 201, 1059-1065.
54. P. Pan, R. Jaussi, H. Gehring, **S. Giannattasio**, and P. Christen (1994). Shift in pH-Rate profile and enhanced discrimination between dicarboxylic and aromatic substrates in mitochondrial aspartate aminotransferase Y70H. *Biochemistry* 33, 2757-2760.
55. **S. Giannattasio**, E. Marra, R. A. Vacca, G. Iannace, and E. Quagliariello (1992). Import of mutant forms of mitochondrial aspartate aminotransferase into isolated mitochondria. *Arch. Biochem. Biophys.* 298, 532-537.
56. **S. Giannattasio**, E. Marra, M.F. Abruzzese, M. Greco and E. Quagliariello (1991). The in vitro-synthesized precursor and mature mitochondrial aspartate aminotransferase share the same import pathway in isolated mitochondria. *Arch. Biochem. Biophys.* 290, 528-534.
57. M. Barile, **S. Giannattasio**, E. Marra, S. Passarella, P. Pucci, G. Sannia and E. Quagliariello (1990). Certain N-terminal peptides inhibit uptake of mature aspartate aminotransferase by isolated mitochondria. *Biochem. Biophys. Res. Commun.* 170, 609-615.
58. R. Jaussi, R. Behra, **S. Giannattasio**, T. Flura and P. Christen (1987). Expression of cDNAs encoding the precursor and the mature form of chicken mitochondrial aspartate aminotransferase in E. coli. *J. Biol. Chem.* 262, 12434-12437.
59. A. Atlante, S. Passarella, **S. Giannattasio** and E. Quagliariello (1985). Fumarate permeation in rat liver mitochondria: fumarate/malate and fumarate/phosphate translocators. *Biochem. Biophys. Res. Commun.* 132, 8-18.
60. R. Curci, **S. Giannattasio**, O. Sciacovelli and L. Troisi (1984). Mechanism of peroxidic oxygen transfer to organic substrates. Oxidation of organic sulphides by chromium (VI) oxide diperoxide. *TETRAHEDRON* 40, 2763-2771.

### **Book chapters and non-JCR journal articles**

1. E. Marra, **S. Giannattasio**, M. Greco and E. Quagliariello (1987). Nucleo-cytoplasmic-mitochondrial interaction: the import of mAAT into mitochondria. In E. Quagliariello, G. Bernardi and A. Ullmann (eds.) "From enzyme adaptation to natural philosophy: heritage from J. Monod" Elsevier, Amsterdam, pp. 115-126.
2. S. Passarella, E. Marra, A. Atlante, M. Barile, **S. Giannattasio** and E. Quagliariello (1988). Traffic across the mitochondrial membranes in mitochondrial



- biogenesis and turnover. In: F. Palmieri and E. Quagliariello eds. "Molecular Basis of Biomembrane Transport", Elsevier, Amsterdam, p. 185-194.
3. E. Marra, **S. Giannattasio** and E. Quagliariello (1989). In vitro synthesis and import of mitochondrial proteins. In: J.M. Tager, A. Azzi, S. Papa and F. Guerrieri eds. "Organelles in Eukaryotic Cells", Plenum, New York, p. 219-228.
  4. **S. Giannattasio**, E. Marra, M.F. Abruzzese, R.A. Vacca, M. Greco and E. Quagliariello (1990). Which protein domains are involved in mAspAT import into mitochondria?. In: E. Quagliariello, F. Palmieri, S. Papa and C. Saccone eds. "Structure, Function and Biogenesis of Energy Transfer Systems", Elsevier, Amsterdam, p. 285-288.
  5. E. Marra, **S. Giannattasio**, M.F. Abruzzese, R.A. Vacca, M. Greco and E. Quagliariello (1992). Molecular interactions between mitochondrial aspartate aminotransferase and mitochondrial membrane in the import process. In E. Quagliariello and F. Palmieri eds. "Molecular Mechanisms of Transport", Elsevier, Amsterdam, p. 241-248.
  6. M. Greco, R. A. Vacca, **S. Giannattasio**, E. Marra, E. Perlino and E. Quagliariello (1992). Effect of He-Ne laser irradiation on DNA replication and transcription and protein synthesis. In G. Galletti, L. Bolognani, G. Ussia eds. "Laser Application in Medicine and Surgery", Monduzzi Editore, Bologna, pp. 269-273.
  7. **S. Giannattasio**, A. Azzariti, R. A. Vacca, P. Lattanzio, R. S. Merafina and E. Marra (1994). Mitochondrial protein import: role of certain domains of mitochondrial aspartate aminotransferase. In: G. Marino, G. Sannia and F. Bossa eds. "Biochemistry of Vitamin B<sub>6</sub> and PQQ", Birkhäuser Verlag, Basel/Switzerland, pp. 81-85.
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