

## CURRICULUM VITAE ET STUDIORUM

**Prof. Claudia Penna**

### **DATI PERSONALI:**

**Professore di II fascia confermato SSD Bio/09**

**Professore di II fascia dal 29 dicembre 2014**

**Ricercatore Universitario a tempo indeterminato dal 1 ottobre 2006**

*Dipartimento di Scienze Cliniche e Biologiche, Università degli Studi di Torino, Orbassano (TO)*

*Data di nascita: 5/5/67*

*Luogo di nascita: Asti, Italia*

*Stato civile: coniugata. Figli: due*

Iscritta all'Ordine dei Biologi dal 1993.

### **TITOLI DI STUDIO**

Laurea in Scienze Biologiche	Università di Torino	Anno 1991
Specialità Patologia Clinica	Università di Torino	Anno 1995
Dottorato di ricerca in Fisiologia	Università di Torino	Anno 2000

### **RUOLI OCCUPATI**

<b>1991-1995</b>	Specializzando in Patologia Clinica Università di Torino
<b>1995-1999</b>	Dottoranda in Fisiologia Università di Torino
<b>2000-2001</b>	Borsa di studio " <b>Effetto inotropo negativo esercitato dalla bradichinina sul cuore di ratto isolato e perfuso a flusso costante: ruolo del citocromo P-450 di origine endoteliale e dei metaboliti dell'acido arachidonico</b> " Consorzio Ricerche Cardiovascolari, Laboratorio di Fisiologia Dip. Scienze Cliniche Biologiche – Facoltà di Medicina e Chirurgia, Università di Torino, Prof D. Gattullo.
<b>2001-2002</b>	Borsa di studio " <b>Ruolo del substrato metabolico nella regolazione della contrattilità cardiaca</b> " Consorzio Ricerche Cardiovascolari, Laboratorio di Fisiologia Dip. Scienze Cliniche Biologiche – Medicina e Chirurgia, Università di Torino, Prof D. Gattullo.
<b>2002-2003</b>	Borsa di studio " <b>L'azione protettiva dei radicali nitrossilici sul cuore in diverse situazioni metaboliche</b> " Consorzio Ricerche Cardiovascolari, Laboratorio di Fisiologia Dip. Scienze Cliniche Biologiche – Medicina e Chirurgia, Università di Torino, Prof D. Gattullo.
<b>2003- 2006</b>	Ricercatore a contratto Progetto FIRB " <b>Studio delle modalità di differenziamento di cellule staminali verso il fenotipo di cardiomiocita adulto</b> " Dip Neuroscienze – Laboratorio di Fisiologia Cardiovascolare - Medicina e Chirurgia, Università di Torino, Prof. G. Losano.

### **Compiti Istituzionali:**

In precedenza svolti

- Rappresentante dei Ricercatori presso la II° Facoltà di Medicina dell'Università di Torino.
- Componente della Commissione Tecnico Pedagogica.

Ad oggi

- Responsabile di Corso Integrato per CdS Scienze Infermieristiche di Asti e Cuneo.
- Componente Commissione Ricerca del Dipartimento di Scienze Cliniche Biologiche
- Componente della Commissione Consultiva Paritetica per CdS Scienze Infermieristiche di Asti

### ***Componente Editorial Board***

Journal of Cardiovascular Disease and Atherosclerosis,  
<http://www.austinpublishinggroup.com/cardiovascular-diseases/editorialBoard.php>  
Journal of Cardiovascular Disorders.  
<http://austinpublishinggroup.com/cardiovascular-disorders/>  
Frontiers Cellular Biochemistry (REVIEW EDITORS)  
[http://www.frontiersin.org/Cellular\\_Biochemistry/editorialboard](http://www.frontiersin.org/Cellular_Biochemistry/editorialboard)

### ***Reviewer***

Acta Physiologica  
Basic Research Cardiology  
British Journal Pharmacology  
Cardiovascular Drugs and Therapy  
Current Pharmaceutical Design  
European Journal of Molecular Biology  
Experimental Cell Research  
Experimental Physiology  
Gene  
High Altitude Medicine & Biology  
Journal of Clinical & Experimental Cardiology  
Journal of Nutritional Biochemistry  
Journal of Cardiovascular Medicine  
Molecular Biology Reports  
Neurochemistry International  
PLOS ONE

### ***Reviewer progetti nazionali ed europei***

Norwegian-Estonian Research Cooperation Programme  
Research within Priority Sectors Programme - RO14  
CINECA – PRIN 2009  
CINECA – VQR 2004-2010  
Componente dell'Albo Revisori dell'Università degli Studi di Catania.

## **AREA DI RICERCA**

**Fisiologia cardiovascolare e dei sistemi integrati** con particolare rilievo alle funzioni dell'endotelio, in relazione con la regolazione del circolo coronarico, nonché del metabolismo, la contrattilità e la protezione del miocardio.

I risultati ottenuti hanno dato origine a 79 lavori originali di cui e numerosi abstracts presentati a congressi internazionali e nazionali.

### **ELENCO DELLE PUBBLICAZIONI Dr. C. Penna**

#### **Riviste internazionali:**

#### **2016 – 2009**

1. Quintieri AM, Filice E, Amelio D, Pasqua T, Lupi FR, Scavello F, Cantafio P, Rocca C, Lauria A, Penna C, De Cindio B, Cerra MC, Angelone T. The innovative "Bio-Oil Spread" prevents metabolic disorders and mediates preconditioning-like cardioprotection in rats. **Nutr Metab Cardiovasc Dis.** 2016 Feb 19. pii: S0939-4753(15)30127-7.
2. Gallina C, Capelôa T, Saviozzi S, Accomasso L, Catalano F, Tullio F, Martra G, Penna C, Pagliaro P, Turinetto V, Giachino C. Human mesenchymal stem cells labelled with dye-loaded amorphous silica nanoparticles: long-term biosafety, stemness preservation and traceability in the beating heart. **J Nanobiotechnology** 2015;13:77.
3. Mastrocola R, Collino M, Penna C, Nigro D, Chiazza F, Fracasso V, Tullio F, Alloatti G, Pagliaro P, Aragno M. Maladaptive Modulations of NLRP3 Inflammasome and Cardioprotective Pathways Are Involved in Diet-Induced Exacerbation of Myocardial Ischemia/Reperfusion Injury in Mice. **Oxid Med Cell Longev** 2016;2016:3480637. doi: 10.1155/2016/3480637.
4. Boero M, Pagliaro P, Tullio F, Pellegrino RM, Palmieri A, Ferbo L, Saglio G, De Gobbi M, Penna C, Roetto A. A comparative study of myocardial molecular phenotypes of two tfr2 $\beta$  null mice: role in ischemia/reperfusion. **Biofactors** 2015;41:360-71.
5. Pasqua T, Tota B, Penna C, Corti A, Cerra MC, Loh YP, Angelone T. pGlu-serpinin protects the normotensive and hypertensive heart from ischemic injury. **J Endocrinol** 2015;227:167-78.
6. Lapi D, Vagnani S, Sapio D, Mastantuono T, Boscia F, Pignataro G, Penna C, Pagliaro P and Colantuoni A Effects of bone marrow mesenchymal stem cells (BM-MSCs) on rat pial microvascular remodeling after transient middle cerebral artery occlusion. **Front. Cell. Neurosci** 2015; 9:329.
7. A Crisafulli, D Mancardi, E Marongiu, R Rastaldo, C Penna, P Pagliaro "Preconditioning cardioprotection and exercise performance: a radical point of view" **Sport Sciences for Health** 2015; 11:137-151.

8. P Pagliaro, C Penna "Protection, repair and regeneration of a chybreyk heart" **Curr Drug Targets** 2015;16:778-9
9. Penna C, Granata R, Tocchetti CG, Gallo MP, Alloatti G, Pagliaro P. Endogenous Cardioprotective Agents: Role in Pre and Postconditioning. **Curr Drug Targets**. 2015;16:843-67
10. Tocchetti CG, Molinaro M, Angelone T, Lionetti V, Madonna R, Mangiacapra F, Moccia F, Penna C, Sartiani L, Quaini F, Pagliaro P. Nitroso-Redox Balance and Modulation of Basal Myocardial Function: an Update from the Italian Society of Cardiovascular Research (SIRC). **Curr Drug Targets**. 2015;16:895-903
11. Pagliaro P, Penna C. Redox signalling and cardioprotection: translatability and mechanism. **Br J Pharmacol**. 2015;172:1974-95
12. Penna C, Pasqua T, Amelio D, Perrelli MG, Angotti C, Tullio F, Mahata SK, Tota B, Pagliaro P, Cerra MC, Angelone T. "Catestatin Increases the Expression of Anti-Apoptotic and Pro-angiogenic Factors in the Post-Ischemic Hypertrophied Heart of SHR". **PlosOne** 2014; 9:e102536.
13. Penna C\*, Brancaccio M\*, Tullio F, Rubinetto C, Perrelli M-G, Angotti C, Pagliaro P\*, Tarone G\*. "Overexpression of the Muscle Specific Protein, Melusin, Protects from Cardiac Ischemia/Reperfusion Injury" **Basic Res Cardiol** 2014;109:418. (\*These authors contributed equally to this work)
14. Mognetti B, La Montagna G, Perrelli MG, Marino S, Pagliaro P, Cracco CM, Penna C "Zoledronic acid and leuprorelin acetate, alone or in combination, similarly reduce proliferation and migration of prostate cancer cells in vitro". **International J Medical Biology** 2014; 1: Article ID 235870, 7 pages. doi:10.4303/ijmb/235870
15. Penna C\*, Angotti C, Pagliaro P\* "Protein S-Nitrosylation in Preconditioning and Postconditioning" **Experimental Biology and Medicine** 2014; 239:647-662. (\*corresponding authors)
16. Tullio F, Perrelli M-G, Angotti C, Penna C, Pagliaro P. "Redox Balance and Cardioprotection" **Basic Res Cardiol** 2013;108:392.
17. Penna C\*, Perrelli MG\*, Tullio F, Angotti C, Camporeale A, Poli V, Pagliaro P. "Diazoxide Postconditioning Induces Mitochondrial Protein S-Nitrosylation and a Redox-Sensitive Mitochondrial Phosphorylation/Translocation of RISK Elements: no Role for SAFE". **Basic Res Cardiol** 2013;108:371. (\*These authors contributed equally to this work)
18. Pagliaro P, Gattullo D, Penna C. Nitroglycerine and sodium trioxodinitrate: from the discovery to the preconditioning effect. **J Cardiovasc Med** (Hagerstown). 2013;14:698-704.

19. Penna C, Settanni F, Tullio F, Trovato L, Pagliaro P, Alloatti G, Ghigo E, Granata R. GH-releasing hormone induces cardioprotection in isolated male rat heart via activation of RISK and SAFE pathways. **Endocrinology**. 2013;154: 1624-1635.
20. Penna C, Perrelli MG, Tullio F, Angotti C, Pagliaro P. Acidic infusion in early reperfusion affects the activity of antioxidant enzymes in postischemic isolated rat heart. **J Surg Res**. 2013;183:111-8.
21. Perrelli MG, Tullio F, Angotti C, Cerra MC, Angelone T, Tota B, Alloatti G, Penna C\*, Pagliaro P\*. Catestatin reduces myocardial ischaemia/reperfusion injury: involvement of PI3K/Akt, PKCs, mitochondrial K(ATP) channels and ROS signalling. **Pflugers Arch**. 2013;465:1031-1040. (\*corresponding authors)
22. Penna C, Perrelli MG, Karam JP, Angotti C, Muscari C, Montero-Menei CN, Pagliaro P. Pharmacologically active microcarriers influence VEGF-A effects on mesenchymal stem cell survival. **J Cell Mol Med**. 2013;17:192-204.
23. Mognetti B, La Montagna G, Perrelli MG, Pagliaro P, Penna C. Bone marrow mesenchymal stem cells increase motility of prostate cancer cells via production of stromal cell-derived factor-1 $\alpha$ . **J Cell Mol Med**. 2013;17:287-292.
24. Penna C, Perrelli MG, Pagliaro P. Comprehensive Invited Review “Mitochondrial Pathways, Permeability Transition Pore and Redox Signaling in Cardioprotection: Therapeutic Implications” **Antioxidants & Redox Signaling**. 2013;18:556-599.
25. Penna C, Pasqua T, Perrelli MG, Pagliaro P, Cerra MC, Angelone T. “Postconditioning with Glucagon Like Peptide-2 reduces ischaemia/reperfusion injury in isolated rat hearts: role of survival kinases and mitochondrial K<sub>ATP</sub> channels”. **Basic Res Cardiol** 2012;107:272.
26. Penna C, Tullio F, Perrelli MG, Mancardi D, Pagliaro P. “Cardioprotection against ischemia/reperfusion injury and chromogranin A-derived peptides”. **Current Medicinal Chemistry** 2012;19:4074-4085.
27. MG Perrelli, P Pagliaro, Penna C “Ischemia/reperfusion injury and cardioprotective mechanisms: role of mitochondria and reactive oxygen species”. **World J Cardiol** 2011;3:186 -200
28. Penna C, Perrelli MG, Tullio F, Moro F, Parisella ML, Merlino A, Pagliaro P. “Post-ischemic early acidosis in cardiac postconditioning modifies the activity of antioxidant enzymes, reduces nitration and favors protein S-Nitrosylation” **Pflugers Archiv-European Journal of Physiology** 2011;462:219-233
29. Penna C, Bassino E, Alloatti G. “Platelet activating factor (PAF): the good and the bad in the ischemic/reperfused heart” **Experimental Biology and Medicine** 2011;

236:390-401.

30. Penna C, Tullio F, Perrelli MG, Moro F, Abbadessa G, Piccione F, Carriero V, Racca S, Pagliaro P. "Ischemia/reperfusion injury is increased and cardioprotection by postconditioning is lost as cardiac hypertrophy develops in nandrolone treated rats" **Basic Res Cardiol**, 2011;106:409-420.

31. P Pagliaro, Penna C FORUM EDITORIAL Cardiac Postconditioning. **Antioxid Redox Signal** 2011;14:777-779.

32. Pagliaro P, Moro F, Tullio F, Perrelli MG, Penna C. Cardioprotective pathways during reperfusion: focus on redox signaling and other modalities of cell signaling. **Antioxid Redox Signal**. 2011;14:833-50

33. Penna C, Alloatti G, Gallo MP, Cerra MC, Levi R, Tullio F, Bassino E, Dolgetta S, SK Mahata, Tota B, Pagliaro P. "Catestatin improves post-ischemic left ventricular function and decreases ischemia/reperfusion injury in heart" **Cell and Mol Neurobiology** 2010; 30: 1171-1179

34. Penna C, Tullio F, Moro F, Folino A, Merlino A, Pagliaro P. "Effects of a protocol of ischemic postconditioning and/or captopril in hearts of normotensive and hypertensive rats". **Basic Res Cardiol**. 2010;105:181-192.

35. Alloatti G, Arnoletti E, Bassino E, Penna C, Perrelli MG, Ghé C, Muccioli G. "Obestatin affords cardioprotection to the ischemic/reperfused isolated rat heart and inhibits apoptosis in cultures of similarly stressed cardiomyocytes". **Am J Physiol Heart Circ Physiol**. 2010;299:H470-H481.

36. Penna C, Mognetti B, Tullio F, Gattullo D, Mancardi D, Moro F, Pagliaro P, Alloatti G. "Pre- and post-ischaemic activation of kinases in the preconditioning-like cardioprotective effect of the platelet activating factor" **Acta Physiological Scand** 2009, 197:175-185.

37. Penna C#, MG Perrelli\*, S Raimondo, F Tullio, A Merlino, F Moro, S Geuna, D Mancardi, P Pagliaro. "Postconditioning induces an anti-Apoptotic effect and preserves mitochondrial integrity in isolated rat hearts" **Biochim Biophys Acta-Bioenergetics** 2009,1787:794-801. (\*Uguale contributo;#Corresponding author)

38. Penna C, Mancardi D, Rastaldo R, Pagliaro P. "Cardioprotection: a radical view - Free radicals in pre- and post-conditioning" **Biochim Biophys Acta-Bioenergetics** 2009,1787:781-793

39. Mancardi D, Penna C, Merlino A, Del Soldato P, Wink DA, Pagliaro P. "Physiological and pharmacological features of the novel gasotransmitter: Hydrogen Sulfide" **Biochim Biophys Acta-Bioenergetics** 2009,1787:864-872

40. Penna C, Tullio F, Merlino A, Moro F, Raimondo S, Rastaldo R, Perrelli MG, Mancardi D, Pagliaro P. "Postconditioning cardioprotection against infarct size and post-ischemic systolic dysfunction is influenced by gender." **Basic Res Cardiol.** 2009;104:390-402
41. Mancardi D, Tullio F, Crisafulli A, Rastaldo R, Folino A, Penna C, Pagliaro P. "Omega 3 has a beneficial effect on ischemia/reperfusion injury, but cannot reverse the effect of stressful forced exercise" **Nutr Metab Cardiovasc Dis.** 2009;19:20-26.

#### **2008-1994**

42. Penna C, Abbadessa G, Mancardi D, Tullio F, Piccione F, Spaccamiglio A, Racca S, Pagliaro P. "Synergistic effects against post-ischemic cardiac dysfunction by sub-chronic nandrolone pretreatment and postconditioning: a role for  $\beta_2$ -adrenoreceptors" **J Physiol Pharmacol** 2008, 59: 645–659
43. Pasquinelli G, Orrico C, Foroni L, Bonafè F, Carboni M, Guarnieri C, Raimondo S, Penna C, Geuna S, Pagliaro P, Freyrie A, Stella A, Caldarera CM, Muscari C. "Mesenchymal stem cell interaction with a non-woven hyaluronan-based scaffold suitable for tissue repair." **J Anat.** 2008; 213:520-530.
44. Penna C, Mancardi D, Tullio F, Pagliaro P. "Intermittent adenosine at the beginning of reperfusion does not trigger cardioprotection". **J Surg Res.** 2009;153:231-238.
45. Penna C, Mancardi D, Raimondo S, Geuna S, Pagliaro P "The paradigm of postconditioning to protect the heart" **J Cell Mol Med.** 2008;12:435-458.
46. Penna C, Mancardi D, Tullio F, Pagliaro P "Postconditioning and intermittent bradykinin induced cardioprotection require cyclooxygenase activation and prostacyclin release during reperfusion" **Basic Res Cardiol**, 2008; 103:368-377
47. Penna C, Mognetti B, Tullio F, Gattullo D, Mancardi D, Pagliaro P, Alloatti G. "The platelet activating factor triggers preconditioning-like cardioprotective effect via mitochondrial  $K_{ATP}$  channels and redox-sensible signaling" **J Physiol Pharmacol.** 2008;59:47-54.
48. Pagliaro P, Mancardi D, Penna C. "Nitric Oxide Synthase Function in Exercise" **Current Enzyme Inhibition**, 2008;4:37-45.
49. Penna C\*, Raimondo S \*, Ronchi G, Rastaldo R, Mancardi D, Cappello S, Losano G, Geuna S, Pagliaro P. "Early homing of adult mesenchymal stem cells in normal and infarcted isolated beating hearts" **J Cell Mol Med** 2008;12:507-521. (\*Uguale contributo).
50. Penna C, Mancardi D, Rastaldo R, Losano G, Pagliaro P. "Intermittent activation of bradykinin  $B_2$  receptors and mitochondrial  $K_{ATP}$  channels trigger cardiac postconditioning

through a redox signaling”. **Cardiovasc Res** 2007; 75:168-177.

51. Penna C, Abbadessa G, Mancardi D, Spaccamiglio A, Racca S, Pagliaro P “Nandrolone pre-treatment enhances cardiac  $\beta_2$ -adrenoceptor expression and reverses heart contractile down-regulation in the post-stress period of acute-stressed rats” **J Steroid biochemistry & molecular biology** 2007;107:106-113

52. Cappello S, Angelone T, Tota B, Pagliaro P, Penna C, Rastaldo R, Corti A, Losano G, Cerra MC “Chromogranin A-derived vasostatin-1 mimics preconditioning via an adenosine/nitric oxide signalling mechanism” **Am J Physiol Heart Circ Physiol.** 2007;293:H719-727.

53. Rastaldo R, Pagliaro P, Cappello S, Penna C, Mancardi D, Westerhof N, Losano G. “Nitric oxide and cardiac function” **Life Sci.** 2007; 81:779-793.

54. Gallo MP, Ramella R, Alloatti G, Penna C, Pagliaro P, Marcantoni A, Bonafe F, Losano G, Levi R. Limited plasticity of mesenchymal stem cells cocultured with adult cardiomyocytes. **J Cell Biochem.** 2007;100:86-99

55. Penna C, Rastaldo R, Mancardi D, Cappello S, Pagliaro P, Westerhof N, Losano G. “Effect of endothelins on the cardiovascular system. **J. Cardiovasc Med** (Hagerstown). 2006;7:645-652

56. Penna C, Rastaldo R, Mancardi D, Raimondo S, Cappello S, Gattullo D, Losano G, Pagliaro P. Post-conditioning induced cardioprotection requires signaling through a redox-sensitive mechanism, mitochondrial ATP-sensitive  $K^+$  channel and protein kinase C activation. **Basic Res Cardiol.** 2006;101:180-189. *Commentary To Accompany by JM Downey and MV Cohen, University of South Alabama, Mobile, AL, USA. “A really radical observation A comment on Penna et al. in Basic Res Cardiol (2006)101:180 –189” Basic Res Cardiol.* 2006;101:190-1

57. Raimondo S\*, Penna C\*, Pagliaro P, Geuna S. Morphological characterization of GFP-stably-transfected adult mesenchymal bone marrow stem cells. **J. of Anatomy** 2006 208:3-12 (\*Uguale contributo)

58. Penna C, Cappello S, Mancardi D, Raimondo S, Rastaldo R, Gattullo D, Losano G, Pagliaro P. “Post-Conditioning reduces infarct size in the isolated rat heart: role of nitric oxide/cGMP pathway. **Basic Res Cardiol** 2006;101:168-179.

59. Penna C, Mancardi D, Gattullo D, Pagliaro P. “Myocardial protection from ischemic preconditioning is not blocked by chronic inhibition of carnitine palmitoyl-transferase “I. **Life Sci.** 2005;77:2004-2017

60. Pagliaro P, Penna C “Rethinking the renin-angiotensin system and its role in cardiovascular regulation”. **Cardiovascular Drugs and Therapy** 2005;19:77-87



61. Penna C, Alloatti G, Cappello S, Gattullo D, Berta G, Mognetti B, Losano G, Pagliaro P. "Platelet-activating factor induces cardioprotection in the isolated rat heart akin to ischemic preconditioning: role of PI3K and PKC activation". **Am J Physiol Heart Circ Physiol** 2005;288:H2512-2520
62. Penna C, Gattullo D, Pagliaro P. "The redox siblings nitroxyl (HNO) and nitric oxide (NO) in cardioprotection". **Drug Design Reviews-Online**, 2004;1:273-285.
63. Pagliaro P, Penna C\*, Rastaldo R, Mancardi D, Crisafulli A, Losano G, Gattullo D. "Endothelial cytochrome P450 contributes to the acetylcholine-induced cardiodepression in isolated rat hearts". **Acta Physiol Scand**. 2004;182:11-20. \*Corresponding author
64. Penna C, Pagliaro P, Rastaldo R, Di Pancrazio F, Lippe G, Gattullo D, Mancardi D, Samaja M, Losano G, Mavelli I. "F0F1 ATP synthase activity is differently modulated by coronary reactive hyperemia before and after ischemic preconditioning in the goat". **Am J Physiol Heart Circ Physiol** 2004;287:H2192-2200.
65. Penna C, Pagliaro P, Cappello S, Mancardi D, Rastaldo R., Gattullo D., Losano G. "Coronary vasculature in ischaemic preconditioning". **Recent Research Developments in Life Sciences** 2003;1;13-26.
66. Alloatti G, Levi R, Malan D, Del Sorbo L, Bosco O, Barberis L, Marcantoni A, Bedendi I, Penna C, Azzolino O, Altruda F, Wymann M, Hirsch E, Montrucchio G. "Phosphoinositide 3-kinase gamma-deficient hearts are protected from the PAF-dependent depression of cardiac contractility". **Cardiovasc Res** 2003;60: 242-249. *Commentary To Accompany by Gödecke A, Institut für Herz- und Kreislaufphysiologie, Heinrich-Heine-Universität, Universitätsstr.1, 40225 Düsseldorf, Germany. "PAF, PIP(3) and NO: emerging role in reperfusion injury."* *Cardiovasc Res*. 2003;60:215-6.
67. Pagliaro P, Mancardi D, Rastaldo R, Penna C, Gattullo D, Miranda KM, Feelisch M, Wink DA, Kass DA, Paolocci N. "Nitroxyl affords thiol-sensitive myocardial protective effects akin to early preconditioning". **Free Radic Biol Med**. 2003;34:33-43.
68. Pagliaro P, Chiribiri A, Gattullo D, Penna C, Rastaldo R, Recchia FA. "Fatty acids are important for the Frank-Starling mechanism and Gregg effect but not for catecholamine response in isolated rat hearts". **Acta Physiol Scand**. 2002;176:167-176.
69. Pagliaro P, Chiribiri A, Rastaldo R, Mancardi D, Penna C, Gattullo D, Losano G. "Ischemic preconditioning changes the pattern of coronary reactive hyperaemia regardless of mitochondrial ATP-sensitive K<sup>+</sup> channel blockade". **Life Sci**. 2002;71:2299-2309.

70. Rastaldo R, Penna C, Pagliaro P. "Comparison between the effects of pentobarbital or ketamine/nitrous oxide anesthesia on metabolic and endothelial components of coronary reactive hyperemia". **Life Sci.** 2001; 69:729-738.
71. Rastaldo R, Paolocci N, Chiribiri A, Penna C, Gattullo D, Pagliaro P. "Cytochrome P-450 metabolite of arachidonic acid mediates bradykinin-induced negative inotropic effect". **Am J Physiol Heart Circ Physiol.** 2001; 280:H2823-2832.
72. Alloatti G, Penna C, Mariano F, Camussi G. "Role of NO and PAF in the impairment of skeletal muscle contractility induced by TNF- $\alpha$ ". **Am J Physiol Regul Integr Comp Physiol.** 2000;279; R2156-2163.
73. Alloatti G, Penna C, DeMartino A, Montrucchio G, Camussi G. "Role of nitric oxide and platelet-activating factor in cardiac alterations induced by tumour necrosis factor  $\alpha$  in the guinea pig heart". **Cardiovasc. Res.** 1999; 41;611-619
74. Pagliaro P, Penna C, Gattullo D. "The effects of ischemic preconditioning on resting coronary flow and reactive hyperemia: involvement of A<sub>1</sub> adenosine receptors". **Life Sci.** 1999; 64: 1071-1078.
75. Gallo MP, Ghigo D, Bosia A, Alloatti G, Costamagna C, Penna C, Levi RC. "Modulation of guinea pig cardiac L-type calcium current by nitric oxide synthase inhibitors". **J. Physiol** 1998, 506; 639-651.
76. Alloatti G, Penna C, Gallo MP, Levi RC, Bombardelli E, Appendino G. "Differential effects of Paclitaxel and derivatives on guinea pig isolated heart and papillary muscle". **J Pharmacol and Exp Ther** 1998, 284; 561-567.
77. Alloatti G, Penna C, Levi RC, Gallo MP, Appendino G, Fenoglio I. "Effects of yew alkaloids and related compounds on guinea-pig isolated perfused heart and isolated papillary muscle". **Life Sciences** 1996, 58; 845-851.
78. Alloatti G, Gallo MP, Penna C, Levi RC. "Properties of cardiac cells from dystrophic mouse". **J Mol Cell Cardiol.** 1995,27; 1775-1779
79. Levi R, Alloatti G, Penna C, Gallo MP. "Guanylate cyclase mediated inhibition of cardiac calcium current by carbachol and sodium nitroprusside". **Pflügers Arch.** 1994, 426; 419-426.

### ***Lavori under review***

- B Pergolizzi, V Carriero, G Abbadessa, C Penna, P Berchiolla, S De Francia, E Bracco, S Racca "Sub-chronic nandrolone administration reduces cardiac oxidative markers during restraint stress: identification of involved proteins using a mass

**Riviste a carattere nazionale:**

1. Alloatti G, Penna C. “Effetti del veleno di vipera (*Bitis gabonica* e *Bitis nasicornis*) sull’attività elettrica e contrattile del cuore di cavia”. **Giornale dell’Accademia di Medicina di Torino** - Anno CLV,1992; 354-364.
2. Losano G, Gattullo D, Merletti A, Pagliaro P, Penna C. “Il controllo endoteliale del circolo coronario”. **Cardiologia**. 1998; 43: 17-24.
3. Giors M, Lacaria A, Lerda S, Manassero F, Martini W, Panero B, Penna C “Coronary reactive hyperaemia after nitric oxide inhibition in the anaesthetized goat”. **Boll Soc Ital Biol Sper** 1997, 73; 39-46.
4. Losano G, Penna C, Cappello S, Pagliaro P “Azione dell’apelinina e del recettore APJ sulla contrattilità miocardica e sul tono vasomotore” **Italian Heart Journal**, 2005, 6: 272 – 278.
5. Rastaldo R, Penna C, Cappello S, Mancardi D, Pagliaro P, Losano G. Ischemic postconditioning: an effective strategy of myocardial protection? **Giornale Italiano di Cardiologia** 2006;7:464-73.

**Capitoli di libro**

1. **Capitolo** ISBN 1-60021-379-0 New Research on Signal Transduction Autori Vari. Nova Science Publishers (pag 260) 2007 Capitolo: “Postconditioning the Heart” Pag 231-250, Autori: Pagliaro P, Penna C.
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### **Abstracts**

Oltre ai lavori sopra riportati la sottoscritta è autrice di **numerosi abstracts** presentati in congressi nazionali ed internazionali.