

June 2017

## PERSONAL INFORMATION

Catalucci, Daniele

Date of birth: 30<sup>th</sup>, June 1975

Nationality: Italian

URL for web site: <http://www.humanitas-research.org/signal-transduction-in-cardiac-pathology-team/>  
<http://www.cupidoproject.eu>

## EDUCATION

2004 Ph.D. in Molecular and Cellular biology / University of Rome Tor Vergata, Rome, Italy  
1999 Master Degree in Biological Sciences – summa cum laude / University of Rome, Roma Tre, Rome, Italy

## CURRENT POSITIONS

2010 – Present Tenured Researcher (Level II) at the Institute of Genetic and Biomedical Research (IRGB) - UOS of Milan, National Research Council (CNR), Milan, Italy  
2012 – Present Principal Investigator of the Signal Transduction in Cardiac Pathology group at Humanitas Clinical and Research Center, Rozzano (Milan), Italy

## PREVIOUS POSITIONS

2009 – 2010 Tenured Researcher (Level III) at the Institute of Genetic and Biomedical Research (IRGB) - UOS of Milan, National Research Council (CNR), Milan, Italy  
2007 – 2009 Tenured Researcher (Level III) at the Institute of Biomedical Technology (ITB), (CNR) Segrate, Milan, Italy  
2007 – 2011 Researcher at I.R.C.C.S. Multimedica, Scientific and Technology Pole Milan, Italy  
2003 – 2007 Postdoctoral studies at the University of California San Diego (UCSD), Department of Medicine  
2006 Visiting scientist at Loyola University, Physiology Department, Maywood (IL) in the group of Prof. Donald Bers, PhD  
2000 – 2003 Ph.D. studies at IRBM–Merck MRL Laboratories, Pomezia (Rome), Italy  
1999 – 2000 Research fellow at IRBM–Merck MRL Laboratories, Pomezia (Rome), Italy  
1998 – 1999 Master Degree thesis project at University of Rome, Roma Tre, Rome, Italy

## FELLOWSHIPS, AWARDS

2014 National Habilitation in Applied Medical Technologies and Biotechnologies (sector 06/N1) for Associate Professorship, Ministry of Education, University and Research  
2013 Poster price at the XXI ISHR World Congress - San Diego, California  
2010 Selected by the EUROPEAN COMMISSION'S MARIE CURIE as a testimonial at The Marie Curie conference on "The Key Role of Marie Curie Actions for an Innovative Europe: Fostering excellence, mobility and skills of researchers"  
2009 Awarded by the EUROPEAN COMMISSION'S MARIE CURIE team as one of 75 success stories to be featured in the publication on the Marie Curie Actions  
2008 Poster price at the EUGeneHeart meeting, Paris  
2006 Schulman award for Excellence in Cardiovascular Research, Department of Medicine, Division of Cardiology, University of California San Diego, La Jolla, CA  
2005 – 2007 MARIE CURIE OUTGOING INTERNATIONAL RESEARCH FELLOWSHIPS within the 6th European Framework Programme. *Pumping up the heart.*

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2010 – Current 1 Postdoc / 3 PhD students (Univ. of Milan, Faculty of Medicine, Italy)/ 2 Master Students (Univ. of Milan, Faculty of Medicine; Univ. of Turin, Faculty of Medicine, Italy)

## INSTITUTIONAL AND SCIENTIFIC SOCIETY RESPONSIBILITIES

2017 – Coordinator of the “Molecular and cellular biology of the heart” Study Group from the Italian Society of Cardiology (SIC)  
2017 Delegate of the FAST Healthcare NetworksPlus, Cambridge, UK  
2016 – Member of the institutional Board of IRGB - CNR

- 2012 – 2016 Direction of research project area (Pdgp), Molecular Cardiology - ME.P05.021/ Institute of Genetic and Biomedical Research (IRGB) - UOS of Milan, National Research Council (CNR), Italy
- 2013 – 2016 Direction of research project (Pdgp), Nanoparticles for drug delivery to the heart (miRnano) – PB.P04.005/ Institute of Genetic and Biomedical Research (IRGB) - UOS of Milan, National Research Council (CNR), Italy

#### MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2015 – Present Italian Society of Cardiology (SIC), active position in Workgroup Cellular and Molecular Biology of the Heart
- 2010 – Present International Society for Heart Research (ISHR)
- 2013 – Present European Society of Cardiology (ESC), WG02 - Cellular Biology of the Heart; WG04 - Myocardial Function

#### EDITORIAL ACTIVITIES

*Member of the editorial board* (Reviewer Editor) of *Frontiers in Cardiovascular Medicine - Vascular Medicine*.

*Guest Editor* of *BioMed Research International*, Hindawi Publishing Corporation.

*Manuscript Reviewer*: *British Journal of Pharmacology*, *Journal Current Opinion in Molecular Therapeutics*, *Trends in Molecular Medicine*, *Journal of Cellular Physiology*, *Cardiovascular Research*, *Translational Research*, *PlosOne*, *Vascular Pharmacology*, *Cell Death and Differentiation*, *Cell Death and Disease*, *Scientific Report*.

*Grant Reviewer*: Health Research Board (HRB), Ireland; Medical Research Council (MRC), UK; Programme de Recherche Translationnelle en Santé, France; Ministry of business, innovation & employment (MBIE), New Zealand; German Academic Exchange Service (DAAD), Germany; Italian Ministry of Research (MIUR), Italy.

#### INDUSTRIAL COLLABORATIONS

Sanofi-Aventis (France), Nemera (France), Finceramica (Italy)

#### MAIN FUNDINGS

*Previous*: Ministry of Health - Young Investigator GR-2007-682492, 2009-2013 (Coordinator, 3 units total); Cariplo foundation 2008.2504, 2009-2013 (Coordinator, 3 units total); Ministry of Health – Ricerca Finalizzata RF-SDO-2007-627952, 2008-2012 (Unit); Ministry of Health – Programma strategico RF-PS-2007-2-644709, 2008-2012 (Unit); Ministry of Health – Programma strategico RFPS - 2006 - 2 – 335594, 2007-2010 (Unit); Marie Curie Outgoing International Fellowships - FP6-2002-Mobility-6, 2004-2007; Fondazione Banca Nazionale delle Comunicazioni, 2016.

*Active*: H2020 - NMBP10 2016 (Coordinator, 12 units total; www.cupidoproject.eu); Ministry of Health - Young Investigator GR-2011-02352546, 2015-2018 (Coordinator, 2 units total); Cariplo foundation 2013-1019, 2014-2016 (Coordinator, 3 units total); MIUR flagship Nanomax, 2013-2017 (Coordinator, 3 units total); MIUR-FIRB RBF12I3KA\_003, 2013-2016 (Unit); MIUR flagship Ageing, 2013-2017 (Unit).

*Pending*: Ministry of Health – Ricerca Finalizzata (Unit); EuroNanoMedIII (Unit)

#### CITATION INDICES

H index: 29

Citations: 4664

#### PEER-REVIEWED PUBLICATIONS

1. De Pauw A, Andre E, Sekkali B, Bouzin C, Esfahani H, Barbier N, Lorient A, De Smet C, Vanhoutte L, Moniotte S, Gerber B, di Mauro V, Catalucci D, Feron O, Hilfiker-Kleiner D, Balligand JL. *Dnmt3a-mediated inhibition of Wnt in cardiac progenitor cells improves differentiation and remote remodeling after infarction*. **JCI Insight**. 2017 Jun 15;2(12). pii: 91810
2. Di Mauro V, Catalucci D. *The importance of being ncRNAs: from bit players as "junk DNA" to rising stars on the stage of the pharmaceutical industry*. **Ann Transl Med**. 2017 Mar;5(6):147.
3. Kallikourdis M, Martini E, Carullo P, Sardi C, Greco C, Kunderfranco P, Stirparo G, Rusconi R, Ormbostad AM, Faggian G, Pasquale E, Elia L, Rumio C, Catalucci D, Papait R and Condorelli C. *Characterization of the immune response in pressure overload-induced cardiac hypertrophy and therapeutic intervention via T cell costimulation blockade*. **Nature Communication In Press**. IF: 11,3
4. Rusconi F, Ceriotti P, Miragoli M, Carullo P, Salvarani N, Rocchetti M, Di Pasquale E, Rossi S, Tessari M, Caprari S, Cazade M, Kunderfranco P, Chemin J, BangML, Polticelli F, Zaza A, Faggian G, Condorelli G,

- MD, **Catalucci D.** *Peptidomimetic Targeting of Cav $\beta$ 2 Overcomes Dysregulation of the L-Type Calcium Channel Density and Recovers Cardiac Function.* **Circulation** 2016 Aug 16;134(7):534-46. doi: 10.1161/CIRCULATIONAHA.116.021347. Epub 2016 Aug 2. IF: 17
5. Høydal M, Stølen T, Kettlewell S, Maier L, Brown J, Sowa T, **Catalucci D**, Condorelli G, Kemi O, Smith G, Wisløff U. Exercise training reverses myocardial dysfunction induced by CaMKII $\delta$ C overexpression by restoring Ca<sup>2+</sup>-homeostasis. **Journal of Applied Physiology**, jap. 00188. 2016. IF: 3,004
  6. Di Mauro V, Iafisco M, Salvarani N, Vacchiano M, Carullo P, Ramírez-Rodríguez G, Patrício T, Tampieri A, Michele Miragoli M, **Catalucci D.** *Bio-Inspired Negatively-Charged Calcium Phosphate Nanocarriers for Cardiac Delivery of MicroRNAs.* **Nanomedicine.** 2016 11 (8), 891-906 IF: 4,889
  7. Zenaro E, Pietronigro E, Della Bianca V, Piacentino G, Marongiu L, Budui S, Turano E, Rossi B, Angiari S, Dusi S, Montresor A, Carlucci T, Nani S, **Catalucci D**, Berton G, Bonetti B, Constantin G. *Neutrophils induce Alzheimer's disease-like pathology and cognitive decline via a mechanism dependent on LFA-1 integrin.* **Nature Medicine.** 2015 Aug;21(8):880-6. doi: 10.1038/nm.3913. Epub 2015 Jul 27. IF:28.054.
  8. Castaldi A, Zaglia T, Di Mauro V, Carullo P, Viggiani G, Borile G, Di Stefano B, Schiattarella GG, Gualazzi MG, Elia L, Stirparo GG, Colorito ML, Pironti G, Kunderfranco P, Esposito G, Bang ML, Mongillo M, Condorelli G, **Catalucci D.** *MicroRNA-133 Modulates the  $\beta$ 1-Adrenergic Receptor Transduction Cascade.* **Circ Res.** 2014 Jul 7;115(2):273-83. doi: 10.1161/CIRCRESAHA.115.303252. Epub 2014 May 7. IF:11.86.
  9. Zaglia T, Milan G, Ruhs A, Franzoso, Bertaggia E, Pianca N, Carpi A, Carullo P, Pesce P, Sacerdoti D, Sarais C, **Catalucci D**, Krueger M, Mongillo M, Sandri M. *Inhibition of the ubiquitin ligase Atrogin-1/MAFbx impairs CHMP2B turnover blocks autophagy flux and causes cardiomyopathy.* **JCI.** 2014 Jun 2;124(6): 2410-24. doi: 10.1172/JCI166339. Epub 2014 May 1. IF:12.81.
  10. Høydal M, Stølen T, Johnsen A, Alvez M, **Catalucci D**, Condorelli G, Koch L, Britton S, Smith G, Wisløff U. *Reduced aerobic capacity causes leaky ryanodine receptors that trigger arrhythmia in a rat strain artificially selected and bred for low aerobic running capacity.* **Acta Physiol (Oxf).** 2014 Jan 20. doi: 10.1111/apha.12238. IF:4.38
  11. Curcio A, Torella D, Iaconetti C, Pasceri E, Sabatino J, Sorrentino S, Giampa' S, Micieli M, Polimeni A, Henning B, Leone A, **Catalucci D**, Ellison G, Condorelli G, Indolfi C. *MicroRNA-1 Downregulation Increases Connexin 43 Displacement and Induces Ventricular Tachyarrhythmias in Rodent Hypertrophic Hearts.* **Plos One** 2013 Jul 26;8(7):e70158. IF:3.73.
  12. Yildirim SS, Akman D, **Catalucci D**, Turan B. *Relationship Between Downregulation of miRNAs and Increase of Oxidative Stress in the Development of Diabetic Cardiac Dysfunction: Junctin as a Target Protein of miR-1.* **Cell Biochem Biophys.** 2013 May 31. IF:1.91.
  13. **Catalucci D**, Condorelli G. *HEXIM1: a new player in myocardial hypertrophy?* **Cardiovasc Res.** 2013 Jul 1;99(1):1-3. doi: 10.1093/cvr/cvt134. Epub 2013 May 29. IF:5.94.
  14. Tritsch E, Mallat Y, Lefebvre F, Diguët N, Escoubet B, Blanc J, De Windt L, **Catalucci D**, Vandecasteele G, Li Z, Mericskay M. *An SRF/miR-1 axis regulates NCX1 and Annexin A5 protein levels in the normal and failing heart.* **Cardiovasc Res.** 2013 Feb 22. IF:5.94..
  15. Wei C, Kim IK, Kumar S, Jayasinghe S, Hong N, **Catalucci D**, Castoldi G, Jones WK, Gupta S. *NF- $\kappa$ B mediated miR-26a regulation in cardiac fibrosis.* **J Cell Physiol.** 2012 Dec 18. doi: 10.1002/jcp.24296. IF: 4.22.
  16. Drawne F, Wachten D, Molkenkin J, Maillet M, Aronsen J, Swift F, Sjaastad I, Liu N, **Catalucci D**, Mikoshiba K, Hisatsune C, Okkenhaug H, Andrews S, Bootman M, Roderick L. *Mutual antagonism between IP3R2 and miRNA-133a regulates calcium signals and cardiac hypertrophy.* **J. Cell. Biol** 2012. IF: 10.82.
  17. Varrone F, Gargano B, Carullo P, Di Silvestre D, De Palma A, Grasso L, Di Somma C, Mauri P, Benazzi L, Franzone A, Sacconi G, Bang ML, Esposito G, Colao A, Condorelli G, **Catalucci D.** *The serum level of FABP3 is an indirect biomarker of miR-1.* **JACC** 2012. (Vol. 60, No. 23). IF:14.09.
  18. Scimia MC, Hurtado C, Ray S, Metzler S, Wei K, Wang J, Woods CE, Purcell N, **Catalucci D**, Akasaka T, Bueno O, Vlasuk G, Kaliman P, Bodmer R, Smith L, Ashley E, Mercola M, Brown J, Ruiz-Lozano P. *APJ acts as a dual receptor in cardiac hypertrophy.* **Nature.** 2012 Aug 16; 488(7411):394-8. IF:38.60.
  19. Llagostera, E., Scimia M.C., **Catalucci D.**, Parrizas M., Ruiz-Lozano P., Kaliman P. *Altered  $\beta$ -adrenergic response in mice lacking myotonic dystrophy protein kinase (DMPK).* **Muscle & Nerve.** 2012 vol. 45 (1) pp. 128-30. IF:2.31.
  20. Torella D, Iaconetti C., **Catalucci D.**, Ellison G.M., Leone A., Waring C.D., Bochicchio A., Vicinanza C., Aquila I., Curcio A., Condorelli G., Indolfi C. *MicroRNA-133 controls vascular smooth muscle cell phenotypic switch in vitro and vascular remodeling in vivo.* **Circulation Research** 2011 Sep 30;109(8): 880-93. IF:11.86.

21. Castoldi G., di Gioia C.R., Bombardi C., **Catalucci D.**, Corradi B., Gualazzi M.G., Leopizzi M., Mancini M., Zerbini G., Condorelli G., Stella A. *MiR-133a regulates collagen 1A1: potential role of miR-133a in myocardial fibrosis in angiotensin II dependent hypertension.* **J Cell Physiol.** 2011 Jul 18. IF:3.87.
22. Comunian, C., Rusconi, R., De Palma, A., Brunetti, P., **Catalucci, D.** Mauri., PL. *A comparative MudPIT analysis identifies different expression profiles in heart compartments.* **Proteomics** 2011 vol. 11 (11) pp. 2320-8. IF:4.50.
23. Zhang, D.H., Latronico, M.V.G., Zhang, J.L., Contu, R., Rizzi, R., **Catalucci, D.**, Peterson, K.L., Brown, J.H., Sonenberg, N., Chen, J, and Condorelli G.: *mTORC-1 regulates cardiac function and myocyte survival through 4E-BP-1 inhibition.* **J Clin Invest.** 2010 Jul 19. pii: 43008. doi: 10.1172/JCI43008. IF:14.15.
24. Gaustad, S.E., Brubakk, A.O., Hoydal, M.A., **Catalucci, D.**, Condorelli, G., Dujic, Z., Marinovic, J., Ljubkovic M., Mollerlokken, A., Wisloff, U. *Immersion prior to dry simulated dive reduces cardiomyocyte function and increases mortality after decompression.* **J Appl Physiol.** 2010 Jul 15. IF:4.23.
25. Elia L, Contu R, Quintavalle M, Varrone F, Chimenti C, Russo M.A., Cimino V, De Marinis L, Frustaci A, **Catalucci D**, Condorelli G. *Reciprocal regulation of microRNA-1 and IGF-1 in cardiac and skeletal muscle in physiological and pathological conditions.* **Circulation** 2009, Dec 8;120(23):2377–85. Epub 2009 Nov 23. IF:14.82.
26. Elia L, Quintavalle M, Zhang J, Contu R, Cossu L, Latronico M, Peterson K, Indolfi C, **Catalucci D**, Chen J, Courtneidge S, Condorelli G *The knockout of miR-143 and -145 regulate smooth muscle cell maintenance and vascular homeostasis.* **Cell Death Differ.** 2009 Dec;16(12):1590–8. Epub 2009 Oct 9. IF:8.24.
27. **Catalucci D**, Latronico M, Ceci M, Rusconi F, Young H, Gallo P, Santonastasi M, Bellacosa A, Brown J, Condorelli G. *Akt increases sarcoplasmic reticulum Ca<sup>2+</sup> cycling by direct phosphorylation of phospholamban at thr17.* **J Biol Chem.** 2009 Oct 9;284(41):28180-7. Epub 2009 Aug 19. IF:5.33.
28. Bye A, Hoydal MA, **Catalucci D**, Langaas M, Kemi OJ, Beisvag V, Koch LG, Britton SL, Ellingsen O, Wisloff U. *Gene expression profiling of skeletal muscle in exercise-trained and sedentary rats with inborn high and low VO<sub>2</sub>max.* **Physiol Genomics.** 2008 Sep 9. IF:2.81.
29. Stølen TO, Høydal MA, Kemi OJ, **Catalucci D**, Ceci M, Aasum E, Larsen T, Rolim N, Condorelli G, Smith GL, Wisløff U. *Interval training normalizes cardiomyocyte function, diastolic Ca<sup>2+</sup> control, and SR Ca<sup>2+</sup> release synchronicity in a mouse model of diabetic cardiomyopathy.* **Circulation Research.** 2009 Sep 11;105(6):527-36. Epub 2009 Aug 13. IF:11.86.
30. Latronico MV, **Catalucci D**, Condorelli G. *MicroRNA and cardiac pathologies.* **Physiol Genomics.** 2008 Aug 15;34(3):239-42. Epub 2008 Jun 10. IF: 2.81.
31. **Catalucci D**, Gallo P, Condorelli G. *MicroRNAs in cardiovascular biology and heart disease.* **Circ Cardiovasc Genet.** 2009 Aug;2(4):402-8. IF: 6.73.
32. Bye A, Sørhaug S, Ceci M, Høydal MA, Stølen T, Heinrich G, Tjønnha AE, Najjar SM, Nilsen OG, **Catalucci D**, Grimaldi S, Contu R, Steinshamn S, Condorelli G, Smith GL, Ellingsen Ø, Waldum H, Wisløff U. *Carbon monoxide levels experienced by heavy smokers impairs cardiac function, aerobic capacity and induces pathological cardiac hypertrophy.* **Inhal Toxicol.** 2008 May;20(7):635-46. IF: 1.89.
33. **Catalucci D**, Zhang DH, DeSantiago J, Aimond F, Guillaume B, Chemin J, Bonci D, Picht E, Rusconi F, Dalton N, Alessi DR, Peterson KL, Richard S, Bers DM, Brown JH, Condorelli G. *Akt regulates L-Type Calcium Channel activity by modulating Cav1 protein stability.* **J. Cell. Biol.** 2009 Mar 23;184(6):923-33. IF: 9.57.
34. Latronico MV, Elia L, Condorelli G, **Catalucci D.** *Heart failure: targeting transcriptional and post-transcriptional control mechanisms of hypertrophy for treatment.* **Int J Biochem Cell Biol.** 2008;40(9): 1643-8. Epub 2008 Mar 18. Review. IF: 4.89.
35. Thum T\*, **Catalucci D\***, Bauersachs J. *MicroRNAs: novel regulators in cardiac development and disease.* **Cardiovasc Res.** 2008 Sep 1;79(4):562-70. IF: 5.94.
36. Condorelli G, **Catalucci D.** *Human stem cells for heart failure treatment ready for prime time?* **J Am Coll Cardiol.** 2007 Nov 6;50(19):1894-5. Epub 2007 Oct 23. IF:14.09.
37. Carè A\*, **Catalucci D\***, Felicetti F, Bonci D, Addario A, Gallo P, Bang ML, Segnalini P, Gu Y, Dalton ND, Elia L, Latronico MV, Høydal M, Autore C, Russo MA, Dorn GW 2nd, Ellingsen O, Ruiz-Lozano P, Peterson KL, Croce CM, Peschle C, Condorelli. *MicroRNA-133 controls cardiac hypertrophy.* **Nat Med.** 2007 May;13(5):613-8. IF: 27.14.
38. Latronico MV, **Catalucci D**, Condorelli G. *The Emerging Role of microRNAs in Cardiovascular Biology.* **Circulation Research.** 2007 Nov 101 1225-1236. IF: 11.86.
39. **Catalucci D.** Bang ML, Condorelli G. *Deciphering the β<sub>2</sub>-adrenergic response in human embryonic stem cell-derived cardiac myocytes; closer to clinical use?* **British Journal of Pharmacology** 2008 doi: 10.1038/sj.bjp.0707633. IF: 5.07.

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40. Llagostera E\*, **Catalucci D\***, Marti L, Liesa M, Camps M, et al. *Role of Myotonic Dystrophy Protein Kinase (DMPK) in Glucose Homeostasis and Muscle Insulin Action*. **PLoS ONE**. 2007 Nov 7;2(11):e1134. IF: 4.35.
41. **Catalucci D**, Latronico MV, Condorelli G. *MicroRNAs and the Control of Gene Expression: Importance for Heart Development and Pathophysiology*. **Ann N Y Acad Sci**. 2008 vol. 1123 pp. 20-9. IF: 4.38.
42. **Catalucci D**, Latronico MV, Ellingsen O, Condorelli G. *Physiological myocardial hypertrophy: how and why?* **Front. Biosci**. 2008 Jan 1;13:312-24. IF: 3.29.
43. Ceci M, Gallo P, Santonastasi M, Grimaldi S, Latronico MV, Pitisci A, Missol-Kolka E, Scimia MC, **Catalucci D**, Hilfiker-Kleiner D, Condorelli G. *Cardiac-specific overexpression of E40K active Akt prevents pressure overload-induced heart failure in mice by increasing angiogenesis and reducing apoptosis*. **Cell Death Differ**. 2007 May;14(5):1060-2. IF: 8.25.
44. **Catalucci D**, Condorelli G. *Effects of Akt on cardiac myocytes: location counts*. **Circulation Research**. 2006 Aug 18;99(4):339-41. IF: 11.86.
45. Kondo RP, Dederko DA, Teutsch C, Chrast J, **Catalucci D**, et al. *Comparison of contraction and calcium handling between right and left ventricular myocytes from adult mouse heart: a role for repolarization waveform*. **J Physiol**. 2006 Feb 15;571(Pt 1):131-46. Epub 2005 Dec 15. IF: 4.38.
46. **Catalucci D**, Sporeno E, Cirillo A, Ciliberto G, Nicosia A, Colloca S. *An adenovirus type 5 (Ad5) amplicon-based packaging cell line for production of high-capacity helper-independent deltaE1-E2-E3-E4 Ad5 vectors*. **J Virol**. 2005 May;79(10):6400-9. IF: 5.08.
47. Kaliman P, **Catalucci D**, Lam JT, Kondo R, Gutiérrez JC, et al. *Myotonic dystrophy protein kinase phosphorylates phospholamban and regulates calcium uptake in cardiomyocyte sarcoplasmic reticulum*. **J Biol Chem**. 2005 Mar 4;280(9):8016-21. Epub 2004 Dec 13. IF: 5.85.
48. Bonaccorsi di Patti MC, Pascarella S, **Catalucci D**, Calabrese L. *Homology modeling of the multicopper oxidase FET3 gives new insights in the mechanism of iron transport in yeast*. **Protein Eng**. 1999 12:895-7. IF: 3.21.
49. Ascenzi P, Bolognesi M, **Catalucci D**, Pascarella S, Ruoppolo M, Rizzi M. *Leech antihemostatic proteins share the T-knot scaffold, a disulfide-reinforced structural motif*. **Biol. Chem**. 1998 379, 1387-1389. IF: 3.60.

\* Equally contributed

#### Research monographs

- Miragoli M, Latronico M.V.G., Condorelli G, **Catalucci D**. *Heart Failure and microRNA-based Therapy: a Perspective on the Use of Nanocarriers*. Bio-inspired Regenerative Medicine: Materials, Processes and Clinical Applications. **Pan Stanford Publishing Pte Ltd**
- **Catalucci D**, Latronico M.V.G., Condorelli G. *Biomarkers in Disease: Methods, Discoveries and Application*. *FABP3 as a Biomarker of Heart Pathology*. **Springer**
- **Catalucci D**, Latronico M.V.G., Condorelli G. *MicroRNAs and the control of heart pathophysiology*. RNA Technologies in Cardiovascular Medicine and Research. Status and Challenges. **Springer-Verlag Heidelberg**.
- Iafisco M, **Catalucci D**. *Nano-apatites with designed chemistry and crystallinity for bone regeneration and nanomedical applications*. Bio-inspired Regenerative Medicine: Materials, Processes and Clinical Applications. **Pan Stanford Publishing Pte Ltd**
- **Catalucci D**, Latronico MV, Condorelli G. *MicroRNAs and the control of heart pathophysiology*. RNA Technologies in Cardiovascular Medicine and Research. Status and Challenges. **Springer-Verlag Heidelberg**.

#### Patents

- 2014 PCT/EP2015/051376 *Mimetic peptides and their use in the treatment of conditions having altered L-type calcium channel density*. Inventors: **Catalucci D.**, Condorelli G.
- 2014 PCT/EP2015/080991. *Products for the delivery of therapeutic/diagnostic compounds to the heart*, Inventors: **Catalucci D.**, Iafisco M., Tampieri A., Miragoli M
- 2005 WO2006048215 A1. Patent application: *Adenoviral amplicon and producer cells for the production of replication-defective adenoviral vectors, methods of preparation and use thereof*. Inventors: **Catalucci D.**, Colloca S.

#### Speaker at International and National Congresses

- 2017 78° Congresso Nazionale della Società Italiana di Cardiologia. Rome, Italy (Invited speaker)
- 2017 International Conference On Nanomedicine And Nanobiotechnology – ICONAN 2017, Barcelona - Spain
- 2017 34th Annual Meeting of the European Section of the ISHR, Hamburg - Germany
- 2017 EHRA EUROPACE - CARDIOSTIM 2017, Vienna - Austria
- 2015 XX Congresso Nazionale SIRC - Società Italiana di Ricerche Cardiovascolari, Imola - Italy

- 2015 European Society of Cardiology, Myocardial Function & Cellular Biology Meeting, Varenna – Italy
- 2014 Basic Science Meeting - Autumn Meeting and Annual Meeting of the Working Group Rhythmology, Düsseldorf, Germany (Invited speaker)
- 2014 75° Congresso Nazionale della Società Italiana di Cardiologia. Rome, Italy (Invited speaker)
- 2013 The 5th Seminar on Exercise in Medicine, Trondheim, Norway (Invited speaker)
- 2013 RNA day, Rome. Italy (Invited speaker)
- 2012 73° Congresso Nazionale della Società Italiana di Cardiologia. Rome, Italy (Invited speaker)
- 2012 Workshop GRRC “non-coding RNAs”. Muntelier, Switzerland (Invited speaker)
- 2011 11th Annual Meeting of the Safety Pharmacology Society. Innsbruck, Austria (Invited speaker)
- 2011 Advanced workshop on new approaches in cardiovascular disorders: From genes & molecules to clinical applications. Ankara, Turkey (Invited speaker)
- 2010 The Key Role of Marie Curie Actions for an Innovative Europe: Fostering excellence, mobility and skills of researchers, Brussels, Belgium (Invited speaker)
- 2010 Heart Failure Winter Meeting. Les Diableres, Switzerland
- 2010 British Toxicology Society (BTS) Autumn Congress. Robinson College, University of Cambridge, UK (Invited speaker)
- 2010 The 74th Annual Scientific Meeting of the Japanese Circulation Society (JCS2010), Kyoto, Japan
- 2009 Workshop “MicroRNAs in the cardiovascular system”. Frankfurt, Germany
- 2008 Workshop "Emerging roles of microRNAs in development and diseases”. Baeza (Jaen), Spain
- 2008 3rd Microsymposium on Small RNAs. “MicroRNAs: novel regulators in cardiac development and disease”. Vienna, Austria (Invited speaker)
- 2007 Translational Approaches to Cardiovascular Research. Capri, Italy. Selected speaker
- 2007 Regulation of Transport Phenomena in Biological Systems with emphasis on the cardiac system. Antalya, Turkey
- Chairman at several at International and National Congresses