

PERSONAL INFORMATION

Catalucci, Daniele

Date of birth: 30th, June 1975

Nationality: Italian

URL for web site: <https://www.humanitas-research.org/groups/daniele-catalucci-group/>
<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

2019 – Present Dirigente di Ricerca (Level I) 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

2010 – 2019 Tenured Researcher (Primo Ricercatore, Level II) at the Institute of Genetic and Biomedical Research (IRGB) - UOS of Milan, National Research Council (CNR), Milan, Italy

2009 – 2010 Tenured Researcher (Ricercatore, Level III) at the Institute of Genetic and Biomedical Research (IRGB) - UOS of Milan, National Research Council (CNR), Milan, Italy

2007 – 2009 Tenured Researcher (Ricercatore, 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

2020 Marie Curie MCAA Best Innovator Award 2019

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.*

INSTITUTIONAL AND SCIENTIFIC SOCIETY RESPONSIBILITIES

2020 – Member of the Institutional Board (cdi) of IRGB - CNR.

2017 – Core member 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 – 2020 Member of the Institutional Board (cdi) 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

EDITORIAL ACTIVITIES

Associate Editor: *Frontiers in Cardiovascular Medicine* -

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*, *Pharmaceutical Research*, *J. American Cardiac Cardiology*, *J. Of Diabetes Research* .

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.

FUNDINGS

Previous:

Ministry of Health - Young Investigator GR-2007-682492, 2009-2013 (Coordinator, 3 partners) €494.445;

Cariplio foundation 2008.2504, 2009-2013 (Coordinator, 2 partners) €587.850;

Ministry of Health – Ricerca Finalizzata RF-SDO-2007-627952, 2008-2012 (Unit) €151.800;

Ministry of Health – Programma strategico RF-PS-2007-2-644709, 2008-2012 (Unit) €198.000;

Ministry of Health – Programma strategico RFPS - 2006 - 2 – 335594, 2007-2010 (Unit) €104.514;

Marie Curie Outgoing International Fellowships - FP6-2002-Mobility-6, 2004-2007, €245.652,68;

Cariplio foundation 2013-1019, 2014-2016 (Coordinator, 3 partners) €438.399,20;

Fondazione Banca Nazionale delle Comunicazioni, 2016 (Coordinator) €20.000.

Cariplio foundation 2014-1184, 2016-2019 (Unit) €250.000,00.

Ministry of Health - Young Investigator GR-2011-02352546, 2015-2018 (Coordinator, 2 partners) €360.087,76;

MIUR flagship Nanomax, 2013-2017 (Coordinator, 3 partners) €499.427,60;

MIUR-FIRB RBFR12I3KA_003, 2013-2016 (Unit) €576.000,00;

MIUR flagship Ageing, 2013-2017 (Unit) €202.700,00;

Current:

H2020 - NMBP10 2016, 2017-2021 (Coordinator, 12 partners) €6.094.783,80;

Italian Cystic Fibrosis Research Foundation (FFC), 2018-2020 (Unit Coordinator) Total €50.000,00

EURONANOMED III, 2020-2023, (dedicated nanoparticle/aptamer activity within Coordinating unit, €40.000,00)

Total €1.049.000

FISR 2019 - (Unit Coordinator) €420.000,00 Total €1.349.920

Speaker at national and international congresses

2021 Keystone Symposia on Mitochondria, Metabolism and Heart/Heart Failure - Mechanisms and Therapies. New Mexico, USA. (Invited speaker)

2020 Bayer's Drug Delivery Innovation Conference. (Germany) (Invited speaker)

2020 ESC - European Society of Cardiology. The digital experience (Amsterdam, Netherland) (Invited speaker)

2020 15th Annual Winter Research Meeting on Translational Heart Failure Research, Heart Failure Association, ESC. Les Diablerets, Switzerland

2019 80° Congresso Nazionale della Società Italiana di Cardiologia. Rome, Italy (Invited speaker)

2019 ESC - European Society of Cardiology. Paris, France (Invited speaker)

2019 Nanomed Europe 2019 #NME19. Braga, Portugal (Invited speaker)

2019 Biennial meeting of the ESC Working Groups on Myocardial Function and Cellular Biology of the Heart. Naples, Italy (Invited speaker)

2018 76° Congresso Nazionale della Società Italiana di Cardiologia. Rome, Italy (Invited speaker)

2018 International Conference on Biosensing and Imaging. Florence, Italy (Invited speaker)

2018 International Society of Heart Research – European Section. Amsterdam, the Netherlands (Invited speaker).

- 2018 International Symposium on: Cardiometabolic Risks and Cardiomyopathies. Menarini Foundation. Naples Italy, (Invited speaker)
- 2018 Precompetitive NanoAthero - Workshop - Mutual understanding of projects in Atherosclerosis on international Level between Participants from Europe, USA and Asia. Rome, Italy (Invited speaker)
- 2018 Course on cardiovascular science. University of Coimbra, Portugal. (Invited speaker)
- 2017 International Society of Heart Research – European Section. Hamburg, Germany (Invited speaker).
- 2017 4th World Congress and Expo on Nanotechnology and Materials Science, Barcelona, Spain (Invited speaker)
- 2017 EHRA EUROPACE - CARDIOSTIM, Vienna, Austria (Oral presentation)
- 2017 European Technology Platform on Nanomedicine 2017, Malaga, Spain (Invited speaker)
- 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 national and international congresses

CITATION INDICES

H index: 34 (Google Scholar); 31 (Scopus)

Citations: 7130 (Google Scholar); 5114 (Scopus)

PEER-REVIEWED PUBLICATIONS

1. Rouchota M, Adamiano A, Iafisco M, Fragofeorgi E, Pilatis G, Doumont, Boutry S, Catalucci D, Zacharioudaki A, Kagadis G. *Optimization of in vivo studies by combining planar dynamic and tomographic imaging: workflow evaluation on a superparamagnetic nanoparticles system*. **Molecular Imaging**. *In press*
2. Di Mauro V, Ceriotti P, Lodola F, Salvarani N, Modica J, Bang ML, Mazzanti A, Napolitano C, Priori SG., Daniele Catalucci D. *Peptide-based targeting of the L-type Calcium Channel corrects the loss-of-function phenotype of two novel mutations of the cacnal gene associated with Brugada syndrome*. **Frontiers in Physiology**. 2021 Jan 8;11:616819. doi: 10.3389/fphys.2020.616819. eCollection 2020
3. Degli Esposti L., Dotti A., Adamiano A., Fabbi C., Quarta E., Colombo P, Catalucci D, De Luca C., Iafisco M. *Calcium phosphate nanoparticle precipitation by a continuous flow process: A design of an experiment approach*. **Crystals** **2020**, 10(10), 953 <https://doi.org/10.3390/cryst10100953>
4. Forte M., Schirone L., Ameri P, Basso C, Catalucci D, Modica J., Chimenti C., Crotti L., Frati G., Schiattarella G., Torella D., Perrino C., Indolfi C., Sciarretta G. *The role of mitochondrial dynamics in cardiovascular diseases*. **British Journal of Pharmacology** 2020 doi: 10.1111/bph.15068

5. Ameri P, Schiattarella GG, Crotti L, Torchio M, Bertero E, Rodolico D, Forte M, Di Mauro V, Paolillo R, Chimenti C, Torella D, Catalucci D, Sciarretta S, Basso C, Indolfi C, Perrino C. *Novel Basic Science Insights to Improve the Management of Heart Failure: Review of the Working Group on Cellular and Molecular Biology of the Heart of the Italian Society of Cardiology*. **Int J Mol Sci**. 2020 Feb 11;21(4):1192. doi: 10.3390/ijms21041192.
6. Velino C, Carella F, Adamiano A, Bugli F, Sanguinetti M, Vitali A, Catalucci D, Iafisco F. *Nanomedicine approaches for the pulmonary treatment of cystic fibrosis*. **Frontiers in Bioengineering and Biotechnology**. 2019 Dec 17;7:406. doi: 10.3389/fbioe.2019.00406. eCollection 2019.
7. Prondzynski M, Lemoine MD, Zech AT, Horváth A, Di Mauro V, Koivumäki JT, Kresin N, Busch J, Krause T, Krämer E, Schlossarek S, Spohn M, Friedrich FW, Münch J, Laufer SD, Redwood C, Volk AE, Hansen A, Mearini G, Catalucci D, Meyer C, Christ T, Patten M, Eschenhagen T, Carrier L. *Disease modeling of an α -actinin 2 mutation guides clinical therapy in hypertrophic cardiomyopathy*. **EMBO Mol.Med** 2019 Nov 3:e11115. doi: 10.15252/emmm.201911115. Impact Factor: 10.624
8. Iafisco M, Alogna A, Miragoli M, Catalucci D. *Cardiovascular nanomedicine: the route ahead*. **Nanomedicine** 2019 Aug 28. doi: 10.2217/nnm-2019-0228. Impact Factor: 4.3
9. Di Mauro V., Crasto S., Colombo F.S., Catalucci D. *Wnt signalling mediates miR-133a nuclear re-localization for the transcriptional control of Dnmt3b in cardiac cells*. **Scientific Report** 2019 Jun 27;9(1):9320. Impact Factor:
10. Fiocchi S, Chiamarello E, Bonato E, Tognola G, Catalucci D, Parazzini M, Ravazzani P. *Computational simulation of electromagnetic fields on human targets for magnetic targeting applications*. Proceedings of the annual international conference of the **IEEE Engineering in Medicine and Biology Society** (Online). Conf 2019 Jul;2019:5674-5677.
11. Bækkerud FH, Salerno S, Ceriotti P, Morland C, Storm-Mathisen J, Bergersen LH, Høydal MA, Catalucci D*, Stølen TO. *High Intensity Interval Training Ameliorates Mitochondrial Dysfunction in the Left Ventricle of Mice with Type 2 Diabetes*. **Cardiovasc Toxicol**.
12. Di Mauro V, Barandalla-Sobrados M, Catalucci D. *The noncoding-RNA landscape in cardiovascular health and disease*. **Noncoding RNA Res**. 2018 Feb 9;3(1):12-19. doi: 10.1016/j.ncrna.2018.02.001.
13. Marrella A, Iafisco M, Adamiano A, Rossi S, Aiello M, Barandalla-Sobrados M, Carullo P, Miragoli M, Tampieri A, Scaglione S, Catalucci D. *A combined low-frequency electromagnetic and fluidic stimulation for a controlled drug release from superparamagnetic calcium phosphate nanoparticles: potential application for cardiovascular diseases*. **J R Soc Interface**. 2018 Jul;15(144).
14. Joris V, Gomez EL, Menchi L, Lobysheva I, Di Mauro V, Esfahani H, Condorelli G, Balligand JL, Catalucci D, Dessy C. *MicroRNA-199a-3p and MicroRNA-199a-5p Take Part to a Redundant Network of Regulation of the NOS (NO Synthase)/NO Pathway in the Endothelium*. **Arterioscler Thromb Vasc Biol**. 2018
15. Romanelli A, Affinito A, Avitabile C, Catuogno S, Ceriotti P, Iaboni M, Modica J, Condorelli G, Catalucci D. *An anti-PDGFR β aptamer for selective delivery of small therapeutic peptide to cardiac cells*. **PlosOne**. 2018 Mar 7;13(3):e0193392
16. Miragoli M, Ceriotti P, Iafisco M, Vacchiano M, Salvarani N, Alogna A, Carullo P, Ramirez-Rodríguez G, Patrício T, Degli Esposti L, Rossi F, Ravanetti F, Pinelli S, Alinovi R, Erreni M, Rossi S, Condorelli G, Post H, Tampieri A, Catalucci D. *Inhalation of peptide-loaded nanoparticles improves heart failure*. **Science Translational Medicine** 2018 Jan 17;10(424).
17. Zaglia T, Ceriotti P, Campo A, Borile G, Armani A, Carullo P, Prando V, Coppini R, Vida V, Stølen T, Wisløff U, Cerbai E, Stellin G, Faggian G, De Stefani D, Sandri M, Rizzuto R, Di Lisa F, Pozzan T, Catalucci D[#], Marco Mongillo[#]. *The content of mitochondrial calcium uniporter (MCU) in cardiomyocytes is dynamically regulated by miR-1 in physiologic and pathologic cardiac hypertrophy*. **PNAS** 2017 Oct 24;114(43)
18. 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
19. 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.
20. 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** 2017 Mar 6;8:14680. IF: 11,3

21. 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, Bang ML, Polticelli F, Zaza A, Faggian G, Condorelli G, MD, Catalucci D. *Peptidomimetic Targeting of Cav β 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
22. 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 δ C overexpression by restoring Ca²⁺-homeostasis. **Journal of Applied Physiology**, jap. 00188. 2016. IF: 3,004
23. Di Mauro V, Iafisco M, Salvarani N, Vacchiano M, Carullo P, Ramírez-Rodríguez G, Patricio 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
24. 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.
25. 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 β 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.
26. 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.
27. 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
28. 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.
29. 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.
30. 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.
31. Tritesch 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..
32. Wei C, Kim IK, Kumar S, Jayasinghe S, Hong N, Catalucci D, Castoldi G, Jones WK, Gupta S. *NF- κ B mediated miR-26a regulation in cardiac fibrosis*. **J Cell Physiol**. 2012 Dec 18. doi: 10.1002/jcp.24296. IF:4.22.
33. 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.
34. Varrone F, Gargano B, Carullo P, Di Silvestre D, De Palma A, Grasso L, Di Somma C, Mauri P, Benazzi L, Franzone A, Saccani Jotti 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.
35. 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.
36. Llagostera, E., Scimia M.C., Catalucci D., Parrizas M., Ruiz-Lozano P., Kaliman P. *Altered β -adrenergic response in mice lacking myotonic dystrophy protein kinase (DMPK)*. **Muscle & Nerve**. 2012 vol. 45 (1) pp. 128-30. IF:2.31.
37. 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.

38. 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.
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. Catalucci D, Latronico M, Ceci M, Rusconi F, Young H, Gallo P, Santonastasi M, Bellacosa A, Brown J, Condorelli G. *Akt increases sarcoplasmic reticulum Ca²⁺ 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.
45. 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 VO₂max.* **Physiol Genomics.** 2008 Sep 9. IF:2.81.
46. 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 Ca²⁺ control, and SR Ca²⁺ 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.
47. 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.
48. 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.
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Patents

Granted

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Applications

- 2020 102020000021292. Italy *Composizione in forma di polvere a base di microparticelle incorporanti nanoparticelle per la veicolazione di composti terapeutici/diagnostici*. Inventors: Catalucci D., Iafisco M., Colombo P., Quarta E.
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