

MICHELE MIRAGOLI, PhD (Cremona 19/06/1973)

Nationality and Citizenship: Italian

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PRESENT POSITIONS

Associate Professor of Medical Technology (MED/50) at University of Parma, Italy

Honorary Research Associate at IRGB-CNR and Humanitas Mirasole SPA

WORK EXPERIENCE

01/2012-Now. Associate Researcher in Molecular Cardiac Electrophysiology- P.I. Humanitas Clinical and Research Center

11/2016-11/2019. Tenured-track Assistant Professor – RTDb Applied Medical Technology, MED/50 Department of Medicine and Surgery , University of Parma

03/2016 -11/2016. Group Leader. Department of Clinical and Experimental Medicine, University of Parma

01/2012 – 12/2015. Group Leader – P.I. CERT, University of Parma, 43124,

04/2008-12/2011. Research associate Imperial College London, SW26LY – London (United Kingdom)

02/2003-03/2008. Postdoctoral Researcher Institute of Physiology, University of Bern, Switzerland

EDUCATION AND TRAINING

29/04/2019 ASN Full Professor in Medicine 06/N1 – MED/50 -Applied Scientific Medical Technologies.

14/06/2014ASN Associate Professor in Medicine 06/N1 – MED/50 -Applied Scientific Medical Technologies.

11/03/2003 PhD in Systemic Physiopathology University of Parma (IT),

04/2000 Post-master training for Italian Biological Admit University of Parma (IT), Dept. of Bioscience

03/1999 Master Degree in General Biology University of Parma (IT)

07/1993 Undergraduate School in Electronic and Computer Science Industrial Engineer

HONOUR AND AWARDS

2014: Best Oral Presentation at the 1st NANODAY workshop EXPO2015, Parma, Italy.

2014-now: Honorary Research Associate at National Research Council, IRGB institute CNR

2011-2021: Honorary Research Associate at Imperial College London, National Heart and Lung Institute

2011: Imperial College Rector Awards for the impressive achievements of 2010.

2009: Italian Young Investigator Research Prize, from the Italian Society of Cardiovascular Research.

2008: Winner of the Swiss Cardiovascular Biology Prize, young investigator, Swiss Society of Cardiology

2007: 1st place Best Poster, Gordon Research Conference, Cardiac Arrhythmia Mechanisms, Ventura, (USA).

2004: Asher-Hess Prize, young investigator award, Swiss Physiological Society

2001 Young Research award, from University of Parma

2000 Winner of 12 months scholarship from University of Parma for advanced training period in foreign country

TEACHING AND SUPERVISION

2016-2022: Professor of Applied Medical Technology for the following courses:

Degree of Audioprothetic science techniques, course of Ear Physiology, - 1st, 2nd, 3rd, year

Degree of Environment and Workplace Prevention Techniques, Course of Health Promotion 3rd year

Degree of Biomedical Laboratory Techniques, course of risk mitigation techniques in laboratories 1st year

2019-2022: Supervisor of 2 Postdoctoral fellows, University of Parma, IT Supervisor of 1 Postdoctoral fellow, Humanitas Research Center, Rozzano, IT , Co-supervisor of 2 PhD student, University of Verona, IT

Co-Supervisor of 1 PhD student BHF and BBSRC, Imperial College, London, UK, SuperRvisor of 1 PhD student, University of Parma, IT, Supervisor of 2 MSc students University of Parma, IT

ACADEMIC COMMITTEE

2016- now: Doctorate School Member of Translational Medical Surgical and Science board, University of Parma, Department of Medicine and Surgery, University of Parma

2018-2021: Member of the Research Scientific Board “06” (Medicine), University of Parma

2020-now: Member of the Research Scientific Committee at the Department of Medicine and Surgery, University of Parma

2017-now.: Ph.D. degree Committee ETH Zurich (CH)

2016-now: Ph.D degree committee in Cardiovascular Science University of Verona

GRANTS

ACTIVE:

2022-2025: AVATHEART: YIRG: Organoids on chip for functional HTS of cardiac inherited arrhythmias. Source of funding: University of Parma YIRG. € 600.308. Role: P.I. Panel: LS4_7

2021-2023: PR-4D-EMA: Novel molecular probes for 4D sensing of electromechanical activity in cardiac tissue. Source of funding: University of Parma FIL_INC_A1_TERENZIANI_COFIN Role: Co-P.I. € 70.000

2021-2023: NANOCORONA: Development of coadjuvant inhalable phytocomplex nanoparticles for Coronavirus-2019 (Covid19) treatment. Source of funding: QBio system Role: P.I. € 50.000

2021-2023: ELEGANT-AF: Electrical signals and Genome data integration through Artificial Intelligence in patients undergoing Atrial Fibrillation Ablation. Source of funding: 5 permille Humanitas. Role: Co-P.I. Panel: LS4_7 € 77.000

2020-2022: FUTURE-NHP: Flexible and User-defined Technologies for Unconstrained neural Recording Experiments in Non-Human Primates. Source of funding: ERC Proof of Concept 2020, Role: Collaborator (20%). Panel: LS5_1 € 150.000

2019-2022: SLEEP@SA: Salute sul Lavoro e Prevenzione delle Obstructive Sleep Apnea: un'epidemia silenziosa Source of funding: BRIC INAIL 2018. Role: WP Leader Panel: LS4_7 € 200.000

2019-2022: ERAPERMED: LVAD-STRAT : Stratification of heart failure patients for cardiac recovery upon cardiac unloading by left ventricular assist device therapy: addressing the molecular, epigenetic, and proteomic changes associated with reverse cardiac remodeling: Role: co-P.I. Humanitas-UNIPR Unit. Source of Funding: H2020 to FRRB Panel: LS4_7 € 500.000

PAST FUNDED:

2016-2020 : CUPIDO: HORIZON 2020 G.A.: 720834. Role: co-P.I.

2016-2018: miRCaP. ERC Proof of Concept miRCaP. Role: collaborator.

2013-2018 Flagship Project Nanomax.: Role: Co-applicant and WG coordinator CNR Italy –

2012-2015 Young Research Grant GR-2009-1530528 Role: P.I. , Source of funding: MOH and INAIL (co-funding).

2014-2017: Young Research Grant GR-2011-02347743. Role: co-investigator Source of Funding: MoH

2014: European Translation Access Project QualityNano. TAP-225 Role: P.I. and coordinator of the subproject Source of Funding: FP7 –Capacities Program

2010-2015 Grant WT-P24460 Role: WG coordinator and co-applicant Source of funding: Wellcome Trust

INVITED LECTURES AND ORAL PRESENTATION (selection)

2019: Invited speaker at Cardiac Mechanoelectric coupling meeting. Freiburg (DE), 4-7 September

2019. Invited speaker at 1 convegno SIRTEPS- Società Italiana per la ricerca Traslazionale e le Professioni Sanitarie. Roma, Università la Sapienza. Stati Generali Della Ricerca, Piacenza, 31/05-01/06, Piacenza, IT.

2018: Invited speaker at BIORIMA 1st conference, Turin , 22-23 March. 2018. INDAM,. Mathematical and numerical models in cardiovascular system. Rome 16-20 April 2018.

2017: Invited speaker at Symposium: Novel tools to investigate cellular physiology at the nanoscale. Ruhr-Universität Bochum. 2017 International Conference on Work Environment and Cardiovascular Diseases. Varese

2015: Invited speaker at Italian Society of Cardiovascular Research, 26-28/11/2015, Imola (IT). 2015 Invited speaker at QualityNano research meeting, 14-18 July 2015, Heraklion (Crete)

2013 Invited speaker at MEC2013 , 6th International Workshop on 'Cardiac Mechano-Electric Interactions and Arrhythmias' ,Oxford. Chairman at Gordon Research Conference, Cardiac Arrhythmia Mechanisms, 17-22 Ventura, California,

2011 Invited Speaker to the American Heart Association, Scientific Session, Orlando 11-16 Nov 2011 USA

2009. Invited speaker at Swiss Cardiovascular Biology Prize at Swiss Society of Cardiology

2007 Session chairman during the international meeting “Connexins in the cardiovascular system”. Bern (CH).

2007 Invited speaker at Novartis Cardio-Vascular biology meeting. Interlaken, Switzerland

2004 Invited speaker at ‘Cardiostim’, XV World Congress in Cardiac Electrophysiology and Cardiac Techniques, Nice, France.

MEMBERSHIP

Board Member of the Italian Society of Cardiovascular Research (SIRC) 2020-2022
Member of Italian Society of Translational Research and Health Professional (SIRTEPS),
Member of BHF, Imperial College London,
Member of Swiss Physiological Society and Swiss Conference University,
Member of ESC Working group in Cardiac Cellular Electrophysiology and working group in Myocardial Function, Working group in Cardiac Imaging

REVIEWERS ACTIVITY (selection):

Panel Grant. ERC (EU) Consolodator Grant Reviewer Activity, BHF (UK), MRC (UK), SNF (CH).

Journals: Nano Letters, Circ. Res., AJP, Cardio. Res., Frontiers, Cell Death and Disease, J Pharmacology, Nanomedicine UK.

PATENTS

WO2016102576A1, CA2971519A1 : Products for the delivery of therapeutic/diagnostic compounds to the heart. Michele Miragoli , Daniele Catalucci, Michele Iafisco, Anna Tampieri

Deposit: Sistema modulare per la gestione microlitrica di gas in pressione per la somministrazione controllata di sostanze in forma gassosa, liquida e polvere. Ruben Foresti, Michele Miragoli, Claudio Macaluso, Stefano Rossi, Stefano Selleri, Paolo Colombo, Daniele Catalucci.

CHAPTER BOOKS

Maricla Galetti, Stefano Rossi, Cristina Caffarra, Amparo Guerrero Gerboles, Michele Miragoli*. Innovation in nanomedicine and engineered nanomaterials for therapeutic purposes. Book: Exposure to Engineered Nanomaterials in the Environment. Elsevier. 2019: 235-262.

Miragoli M*, Cabassi A. Mitochondrial Dynamics in Cardiovascular Medicine, 978-3-319-55329-0, 428413_1_En, (13). Springer Nature. Adv Exp Med Biol. 2017;982:247-264

Michele Miragoli, Michael G V Latronico, Gianluigi Condorelli, Daniele Catalucci. Chapter in the book: Bio-inspired Regenerative Medicine: Materials, Processes and Clinical Applications. Title of the chapter: Micro-RNA in heart hypertrophy and failure: a perspective on the use of new magnetic nanocarriers. Pan Stanford Publishing. In Press 31/12/2015 ISBN 9789814669146 - CAT# N11423

Rohr S and Miragoli M. Cardiac Myofibroblasts and Arrhythmogenesis. In Cardiac Electrophysiology: . From Cell to Bedside, 5th Edition. Zipes and Jalife, Eds., Saunders Philadelphia. 2009. pp 269-278.

PUBLICATIONS AND BIBLIOMETRIC INDICATORS

ORCID: 0000-0002-4058-4368 N of Peer-Reviewed Pub:100 H index:26. Cit: 2762 (WoS) IF Average: 7.65

Lagonegro, P., Rossi, S., Salvarani, N., Lo Muzio, FP, Rozzi G., Modica J, Bigi F., Quaretti M., Salviati G., Pinelli S., Alinovi R., Catalucci D., D'Autilia F., Gazza F., Condorelli G., **Miragoli M***, Synthetic recovery of impulse propagation in myocardial infarction via silicon carbide semiconductive nanowires. Nat Commun 13, 6 (2022). <https://doi.org/10.1038/s41467-021-27637-2> **I.F. 14.91. *Corresponding Author**

Foresti R, Statello R, Delmonte N, Lo Muzio FP, Rozzi G, **Miragoli M**, Sarli L, Ferrari G, Macaluso C, Maggio MG, Pisani F, Costantino C. Bionic for Training: Smart Framework Design for Multisensor Mechatronic Platform Validation. Sensors (Basel) . 2021 Dec 30;22(1):249. doi: 10.3390/s22010249. I.F. 3.57

Modica J, Di Mauro V, Barandalla-Sobrados M, Chavez SEP, Carullo P, Nemska S, Anselmo A, Condorelli G, Iafisco M, **Miragoli M**, Catalucci D. Nano-miR-133a Replacement Therapy Blunts Pressure Overload-Induced Heart Failure. Circulation. 2021 Dec 14;144(24):1973-1976. doi: 10.1161/CIRCULATIONAHA.121.055866. Epub 2021 Dec 13. **I.F. : 23.60**

Lo Muzio FP, Rozzi G, Rossi S, Luciani GB, Foresti R, Cabassi A, Fassina L, **Miragoli M**. Artificial Intelligence Supports Decision Making during Open-Chest Surgery of Rare Congenital Heart Defects. *J Clin Med* . 2021 Nov 16;10(22):5330 doi: 10.3390/jcm10225330. **I.F. 4.33**

Achille Anselmo, Derk Frank, Laura Papa, Chiara Viviani Anselmi, Elisa Di Pasquale, Marta Mazzola, Cristina Panico, Francesca Clemente, Cristiana Soldani, Christina Pagiatakis, Rabea Hinkel, Ruth Thalmann, Reiner Kozlik-Feldmann, **Michele Miragoli**, Pierluigi Carullo, Marco Vacchiano, Antonio Chaves-Sanjuan, Nadia Santo, Maria Angela Losi, Matteo Carlo Ferrari, Annibale Alessandro Puca, Vincent Christiansen, Hatim Seoudy, Sandra Freitag-Wolf, Norbert Frey, Astrid Dempfle, Mark Mercola, Giovanni Esposito, Carlo Briguori, Christian Kupatt, Gianluigi Condorelli. Myocardial hypoxic stress mediates functional cardiac extracellular vesicle release. *European Heart Journal*, 2021; ehab247, <https://doi.org/10.1093/eurheartj/ehab247>. **I.F.: 29.98**

Rossi S, Buccarello A, Caffarra Malvezzi C, Pinelli S, Alinovi R, Guerrero Gerboles A, Rozzi G, Leonardi F, Bollati V, De Palma G, Lagonegro P, Rossi F, Lottici PP, Poli D, Statello R, Macchi E, **Miragoli M***. Exposure to nanoparticles derived from diesel particulate filter equipped engine increases vulnerability to arrhythmia in rat hearts. *Environ Pollut*. 2021 Apr 20;284:117163. **I.F.: 8.01**. ***Corresponding Author**

Lionetti V, Bollini S, Coppini R, Gerbino A, Ghigo A, Iaccarino G, Madonna R, Mangiacapra F, **Miragoli M**, Moccia F, Munaron L, Pagliaro P, Parenti A, Pasqua T, Penna C, Quaini F, Rocca C, Samaja M, Sartiani L, Soda T, Tocchetti CG, Angelone T. Understanding the heart-brain axis response in COVID-19 patients: A suggestive perspective for therapeutic development. *Pharmacol Res* . 2021 Mar 26;168:105581. **I.F.: 7.65**

Foresti R, Ghezzi B, Vettori M, Bergonzi L, Attolino S, Rossi S, Tarabella G, Vurro D, von Zeppelin D, Iannotta S, Zappettini A, Macaluso GM, **Miragoli M**, Maggio MG, Costantino C, Selleri S, Macaluso C. 3D Printed Masks for Powders and Viruses Safety Protection Using Food Grade Polymers: Empirical Tests. *Polymers (Basel)*. 2021 Feb 18;13(4):617. **I.F.: 4.32**

Medvedev RY, Sanchez-Alonso JL, Mansfield CA, Judina A, Francis AJ, Pagiatakis C, Trayanova N, Glukhov AV, **Miragoli M**, Faggian G, Gorelik J. Local hyperactivation of L-type Ca²⁺ channels increases spontaneous Ca²⁺ release activity and cellular hypertrophy in right ventricular myocytes from heart failure rats. *Sci. Rep*. 2021 Mar 1;11(1):4840. **I.F.: 4.37**

Rozzi G, Lo Muzio FP, Fassina L, Rossi S, Statello R, Sandrini C, Laricchiuta M, Faggian G, **Miragoli M**, Luciani GB. Right ventricular functional recovery depends on timing of pulmonary valve replacement in tetralogy of Fallot: a video kinematic study. *Eur J Cardiothorac Surg*. 2021 Feb 6;ezab026. **I.F. 4.19**
***Corresponding Author**

Medvedev R, Sanchez-Alonso JL, Alvarez-Laviada A, Rossi S, Dries E, Schorn T, Abdul-Salam VB, Trayanova N, Wojciak-Stothard B, **Miragoli M**, Faggian G, Gorelik J. Nanoscale Study of Calcium Handling Remodeling in Right Ventricular Cardiomyocytes Following Pulmonary Hypertension. *Hypertension*. 2021 Feb;77(2):605-616. Epub 2020 Dec 28. **I.F. 10.19**

Ferrari, L.; Borghi, F.; Iodice, S.; Catelan, D.; Rossi, S.; Giusti, I.; Grisotto, L.; Rovelli, S.; Spinazzè, A.; Alinovi, R.; Pinelli, S.; Cantone, L.; Dioni, L.; Ischia, B.; Rota, I.; Mariani, J.; Rota, F.; Hoxha, M.; Stoppa, G.; Monticelli, D.; Cavallo, D.; Bergamaschi, E.; Vicenzi, M.; Persico, N.; Biggeri, A.; Cattaneo, A.; Dolo, V.; **Miragoli, M***; Mozzoni, P.; Bollati, V. INSIDE Project: Individual Air Pollution Exposure, Extracellular Vesicles Signaling and Hypertensive Disorder Development in Pregnancy. *Int. J. Environ. Res. Public Health* 2020, 17, 9046. ***last co-author**

Moccia F, Gerbino A, Lionetti V, **Miragoli M**, Munaron LM, Pagliaro P, Pasqua T, Penna C, Rocca C, Samaja M, Angelone T. COVID-19-associated Cardiovascular Morbidity in Older Adults: A Position Paper From the Italian Society of Cardiovascular Researches. *Geroscience*. 2020 May 20;1-29. doi: 10.1007/s11357-020-00198-w. **I.F.: 6.44**

Giada Cattelan, Amparo Guerrero Gerbolés, Ruben Foresti, Peter P. Pramstaller, Alessandra Rossini, **Michele Miragoli**, Cristina Caffarra Malvezzi. Alginate formulations: current developments in the race for hydrogel-based cardiac regeneration. *Front Bioeng Biotechnol.* 2020 May 8;8:414. doi: 10.3389/fbioe.2020.00414. **I.F.:** **5.12**

Ruben Foresti, Stefano Rossi, Silvana Pinelli, Rossella Alinovi, Corrado Sciancalepore, Nicola Delmonte, stefano selleri, Cristina Caffarra, Edoardo Raposio, Guido Macaluso, Claudio Macaluso, Antonio Freyrie, **Michele Miragoli**, and Paolo Perini. In-vivo vascular application via ultra-fast bioprinting for future 5D personalised nanomedicine. *Scientific Report. Sci Rep.* 2020 Feb 21;10(1):3205. doi: 10.1038/s41598-020-60196-y. **I.F. :** **4.12**

Foresti, R. Rossi, S., Pinelli, S., Alinovi, R., Barozzi, M., Sciancalepore, C, Galetti, M., Caffarra, C., Lagonegro, P., Scavia, G., Mattarozzi, M., Careri, M., Macaluso, C., **Miragoli, M.**, Selleri, S.. Highly-defined bioprinting of long-term vascularized scaffolds with Bio-Trap: Complex geometry functionalization and process parameters with computer aided tissue engineering. *Materialia*, Volume 9, March 2020, Article number 100560

Iafisco M, Alogna A, **Miragoli M**, Catalucci D. Cardiovascular nanomedicine: the route ahead. *Nanomedicine (Lond).* 2019 Aug 28. doi: 10.2217/nmm-2019-0228. **I.F. 4.71**

Miragoli M, Goldoni M, Demola P, Paterlini A, Li Calzi M, Gioia MI, Visioli F, Rossi S, Pela G. Left ventricular geometry correlates with early repolarization pattern in adolescent athletes. *Scand J Med Sci Sports.* 2019 Jul 14. **I.F.:** **3.63**

Francisca Schultz, Pamela Swiatlowska, Anita Alvarez-Laviada, Jose L. Sanchez-Alonso, Qianqian Song, Antoine A. F. de Vries, Daniël A. Pijnappels, Emily Ongstad, Vania Braga, Emilia Entcheva, Robert G. Gourdie, **Michele Miragoli*** & Julia Gorelik. Cardiomyocyte–myofibroblast contact dynamism is modulated by connexin-43. *The FASEB journal.* 2019 Jul 5:fj201802740RR . **I.F. 5.59 *Corresponding author**

S. Rossi; M. Savi; M. Mazzola, Ph.D.; S. Pinelli, Ph.D.; R. Alinovi; L. Gennaccaro; A. Pagliaro; V. Meraviglia; M. Galetti; O. Lozano-Garcia; A. Rossini; C. Frati; A. Falco; F. Quaini; L. Bocchi; D. Stilli; S. Lucas; M. Goldoni; E. Macchi; A. Mutti; **M. Miragoli***. Subchronic exposure to titanium dioxide nanoparticles modifies cardiac structure and performance in spontaneously hypertensive rats. *Particle and Fibre Toxicology.* 2019 Jun 24;16(1):25. **I.F. 8.57 *Corresponding author**

Lo Muzio FP, Rozzi G, Rossi S, Gerbolés AG, Fassina L, Pelà G, Luciani GB, **Miragoli M.*** In-situ optical assessment of rat epicardial kinematic parameters reveals frequency-dependent mechanic heterogeneity related to gender. *Prog Biophys Mol Biol.* 2019 May 21. pii: S0079-6107(19)30054-9. **I.F. 3.42 *Corresponding author**

Nicolò Salvarani , Silvia Crasto , **Michele Miragoli** , Alessandro Bertero , Marianna Paulis , Paolo Kunderfranco , Simone Serio , Alberto Forni , Carla Lucarelli , Matteo Dal Ferro , Veronica Larcher , Gianfranco Sinagra , Paolo Vezzoni , Charles Murry , Giuseppe Faggian , Elisa Di Pasquale. The K219T-Lamin mutation induces conduction defects through epigenetic inhibition of SCN5A in human cardiac laminopathy, *Nature Communication*, 2019 May 22;10(1):2267. **I.F. : 12.35**

Rozzi G., Lo Muzio F.P. , Sandrini C., Rossi S., Fassina L., Faggian, G., **Miragoli M.***, Luciani GB*. Real-time video kinematic evaluation of the in-situ beating right ventricle after pulmonary valve replacement in tetralogy of Fallot patients: a pilot study. *Interactive Cardiovascular and Thoracic Surgery*, 2019 Jun 9.

Simona Iodice, Mirjam Hoxha, Luca Ferrari, Ilma Floriana Carbone, Cecilia Anceschi, **Michele Miragoli**, Angela C. Pesatori, Nicola Persico and Valentina Bollati
Particulate air pollution, blood mitochondrial DNA copy number and telomere length in mothers in the first trimester of pregnancy: effects on fetal growth. *Oxidative Medicine and Cellular Longevity. Oxid Med Cell Longev.* 2018 Nov 5;2018:5162905. doi: 10.1155/2018/5162905. eCollection 2018. **I.F. 4.96**

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). pii: 20180236. doi: 10.1098/rsif.2018.0236. **I.F.:** 3.35

M. Miragoli*, P.Ceriotti, M.Iafisco, M.Vacchiano, N.Salvarani, A.Alogna,P.Carullo, G.B. Ramirez-Rodríguez, T.Patricio, L. Degli Esposti, F. Rossi, F. Ravanetti, S.Pinelli, R.Alinovi, M.Erreni, S. Rossi, G.Condorelli, H.Post, A.Tampieri, & D.Catalucci*. Inhalation of peptide-loaded nanoparticles improves heart failure. *Science Translational Medicine*, Jan 17;10(424). pii: eaan6205. **I.F.:** 16.79 ***Corresponding author**

Pietroiusti A, Bergamaschi E, Campagna M, Campagnolo L, De Palma G, Iavicoli S, Leso V, Magrini A, **Miragoli M**, Pedata P, Palombi L, Iavicoli I. The unrecognized occupational relevance of the interaction between engineered nanomaterials and the gastro-intestinal tract: a consensus paper from a multidisciplinary working group. *Part Fibre Toxicol*. 2017 Nov 25;14(1):47. **I.F.:** 8.57

Gesmundo I*, **Miragoli M***, Carullo P, Trovato L, Larcher V, Di Pasquale E, Brancaccio M, Mazzola M, Villanova T, Sorge M, Taliano M, Gallo MP, Alloatti G, Penna C, Hare JM, Ghigo E, Schally AV, Condorelli G, Granata R. Growth hormone-releasing hormone attenuates cardiac hypertrophy and improves heart function in pressure overload-induced heart failure. *Proc Natl Acad Sci U S A*. 2017 Nov 7;114(45):12033-12038. . **I.F.:** 9.66 ***Sharing first author**

Roberto Papait, Simone Serio, Christina Pagiatakis, Francesca Rusconi, Pierluigi Carullo, Marta Mazzola, Nicolò Salvarani, **Michele Miragoli**, and Gianluigi Condorelli, Histone methyltransferase G9a is required for cardiomyocyte homeostasis and hypertrophy. *Circulation*. 2017 Sep 26;136(13):1233-1246 **I.F.:** 19.3

Cabassi A, **Miragoli M**. Altered Mitochondrial Metabolism and Mechanosensation in the Failing Heart: Focus on Intracellular Calcium Signaling. *Int J Mol Sci*. 2017 Jul 10;18(7). pii: E1487. doi: 10.3390/ijms18071487 **I.F.:** 4.3 **Corresponding Author**

Salvarani N, Maguy A, De Simone SA, **Miragoli M**, Jousset F, Rohr S. TGF- β 1 (Transforming Growth Factor- β 1) Plays a Pivotal Role in Cardiac Myofibroblast Arrhythmogenicity. *Circ Arrhythm Electrophysiol*. 2017 May;10(5):e004567 **I.F.:** 5.58

Lorenzo Fassina, Giacomo Rozzi, Stefano Rossi, Simone Scacchi, Maricla Galetti, Francesco Paolo Lo Muzio, Fabrizio del Bianco, Piero Colli Franzone, Giuseppe Petrilli, Giuseppe Faggian, **Michele Miragoli**. Cardiac kinematic parameters computed from video of in situ beating heart. *Sci. Rep*. 2017 Apr 11;7:46143. **I.F.:** 5.22 **Corresponding Author**

Stefano Rossi, Andrea Buccarello, Philip Ershler, Robert Lux, Sergio Callegari, Domenico Corradi, Luca Carnevali, Andrea Sgoifo, **Michele Miragoli**, Ezio Musso, and Emilio Macchi. Effect of anisotropy on ventricular vulnerability to unidirectional block and reentry by single premature stimulation during normal sinus rhythm in rat heart. *Am J Physiol Heart Circ Physiol*. 2017 Mar 1;312(3):H584-H607 . **I.F.:** 3.83

Savi M, Bocchi L, Sala R, Frati C, Lagrasta C, Madeddu D, Falco A, Pollino S, Bresciani L, **Miragoli M**, Zaniboni M, Quaini F, Del Rio D, Stilli D. Parenchymal and Stromal Cells Contribute to Pro-Inflammatory Myocardial Environment at Early Stages of Diabetes: Protective Role of Resveratrol. *Nutrients*. 2016 Nov 16;8(11). pii: E729. **I.F.:** 3.55

F. Rusconi; P. Ceriotti; **M. Miragoli**, PG Carullo; N Salvarani, M. Rocchetti, E. Di Pasquale, S. Rossi, M. Tessari, S. Caprari, M. Cazade, P. Kunderfranco, J. Chemin, Marie-Louise Bang, F. Polticelli, A. Zaza, G. Faggian, G. Condorelli, D. Catalucci. 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 **I.F.:** 19.3

Savi M, Bocchi L, Rossi S, Frati C, Graiani G, Lagrasta C, **Miragoli M**, Di Pasquale E, Stirparo GG, Mastrototaro G, Urbanek K, De Angelis A, Macchi E, Stilli D, Quaini F, Musso E. Anti-arrhythmic effect of growth factors supplemented cardiac progenitor cells in chronic infarcted heart. *Am J Physiol Heart Circ Physiol*. 2016 Jun 1;310(11):H1622-48. **I.F.:** 3.83

Mauro VD, Iafisco M, Salvarani N, Vacchiano M, Carullo P, Ramírez-Rodríguez GB, Patricio T, Tampieri A, **Miragoli M**, Catalucci D. Bioinspired negatively charged calcium phosphate nanocarriers for cardiac delivery of MicroRNAs. *Nanomedicine (Lond)*. 2016 Mar 16. 2016 Apr;11(8):891-906. **I.F.:** 5.82 ***Corresponding Author**

Schultz F, Hasan A, Alvarez-Laviada A, **Miragoli M**, Bhogal N, Wells S, Poulet C, Chambers J, Williamson C, Gorelik J. The Protective Effect of Ursodeoxycholic Acid in an in vitro model of the Human Fetal Heart occurs via Targeting Cardiac Fibroblasts.. *Prog Biophys Mol Biol*. 2016 Jan;120(1-3):149-63. **I.F.:** 3.28

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Michele Miragoli