

Curriculum vitae

Donatella Stilli

Personal Information

First name/Surname: Donatella Stilli

Place and date of birth: Roma (Italy), November 28, 1952

Education and Training

1974: Master degree in " Biological Sciences", Physiology Institute, University of Parma, Italy;
Mark: 110/110 cum laude.

Academic Position

- since 2001: Associate Professor of Physiology, Dept. of Chemistry, Life Sciences and Environmental Sustainability, University of Parma, Italy
- 1980-2000: University Researcher, Department of Evolutionary and Functional Biology, Physiology Section, University of Parma;
- 1975-79: Research Assistant, Institute of General Physiology, University of Parma

Academic Responsibilities at the University of Parma

- Since 2017: Coordinator of the Department Quality Assurance Committee for Education and Research;
- Since 2013: member of the PhD Committee of the PhD Program in "Molecular Medicine";
- 2011-2016: Chairman of the Master degree in "Biology and Biomedical Applications" (LM6-Biological Sciences);
- 2000-2012: member of the PhD Committee in "Systemic Physiopathology";
- 2007-2013: member of the Scientific Committee for the Research Area 05 (Biological Sciences);
- 1997-2000: Responsible of the "Socrates-Erasmus" project.

Responsibilities In Research Projects

- Responsible for local research funds from University of Parma: FIL 2004 (code FIL0794215); FIL 2014, 2015, 2016
- Responsible of Research Unit in PRIN 2003; Protocol 2003063244_003
- Scientific coordinator of the Project: "Anti-arrhythmic characterization of CHF1024 in the hypertrophic heart", in cooperation with Chiesi Farmaceutici S.p.A. (2004-2005)

Participant as Associate Investigator of Research Grants

- Research Program(PRIN 1997) Protocol 9705224541_010-Area 05 (24 months)
- Research Program(PRIN 1999). Protocol 9906217877_007- Area 06 (24 months)
- Research Program(PRIN 2000). Protocol MM06155542_003-Area 06 (24 months)
- Research Program(PRIN 2001). Protocol 2001068248_009-Area 06 (24 months)
- Research Program(PRIN 2005). Protocollo 2005062944_003-Area 06 (24 months)
- Research Program(PRIN 2007). Protocollo 2007AL2YNC_005-Area 05 (24 months).
- Reserach Project "PARIDE" 1999-2000 for the Intra-University Scientific Research of Excellence
- Research Program FIL 2005(EX 60%)
- Research Program FIL 2006 (EX 60%)
- FIRB/MIUR 2001

Research Topics

Cardiac electrophysiology, cardiomyocyte mechanics and calcium dynamics; Cardioprotective role and mechanisms of action of natural or synthetic chemical species, in experimental models of diabetic cardiomyopathy; Morpho-functional remodelling and regenerative processes of ventricular myocardium, in diabetic cardiomyopathy and myocardial infarction.

Affiliations

- Member of the "Italian Society of Physiology" (SIF);
- Member of the "Italian Society of Cardiovascular Research" (SIRC)
- Member of the European Society for the Study of Diabetes (EASD)

International Collaborations

- Prof. Alan Crozier, Department of Nutrition, University of California, 3143 Meyer Hall One Shields Avenue, Davis, CA 95616-5270, USA
- Prof. Giulio Gabbiani, Department of Pathology and Immunology, University of Geneva, Switzerland
- Dr Adrian van Oosterom, Department of Cardiology, University Hospital Nijmegen, Nijmegen, The Netherlands.
- J. Koolhaas, Institute for Behavioral and Cognitive Neurosciences, Department of Animal Physiology, University of Groningen, The Netherlands
- Robert L. Lux, Cardiovascular Research and Training Institute, University of Utah, Salt Lake City, Utah, USA

Professional Activities (Member of Committees, Session Organizer and Chairman, Invited Lectures)

- Session Chairman and Organizer of "Cardiovascular Physiopathology", in the XVIII National Congress of the Italian Society of Cardiovascular Research (SIRC), Imola (Bologna), October 21-22, 2011
- Invited lecture on " Cardiac stem cell disease in diabetic cardiomyopathy: perspectives for preventing ventricular dysfunction", Department of Pathology and Immunology, University of Geneva, CMU, Switzerland, May 20, 2010.
- Invited lecture on "Positive structural and electrical remodelling of the regenerated heart via mobilization of cardiac progenitor cells, in a rat model of chronic myocardial infarction" Workshop: Promises and Pitfalls of Stem Cell Research: An Update. PhD Program in " Medicina e Terapia Sperimentale-University of Torino & BRITISH COUNCIL British-Italian Partnership Programme for Young Researchers, November 5th 2009.
- Session Chairman and Organizer of "Cardiac electrophysiology/function modulation", in the XVI National Congress of the Italian Society of Cardiovascular Research (SIRC), Imola (Bologna), October 29-31, 2009.
- Invited speaker and organizer of the Satellite Symposium SIF-SIRC "Myocardial regeneration in degenerative cardiomyopathies", National Congress of the Italian Physiological Society (SIF) (www.sif2008cagliari)
- Invited speaker and organizer of the Symposium SIC-SIRC on "The diabetic heart: mechanisms underlying cardiac damage", National Congress of the Italian Society of Cardiology (13-16 dicembre 2008, Roma) (<http://file.tuttocongressi.it/sic2008/result.asp>)
- 2008-present: Member of the Executive Committee of the "Società Italiana di ricerche Cardiovascolari" – Italian Society of Cardiovascular Research (SIRC) (<http://www.sirc-cardio.it/>)

Scientific Production

Author of 62 articles on international journals and books.

Bibliometric Parameters:

Scopus update July 22, 2019: H-index=22

Google Scholar update July 22, 2019: H-index=25;

(<https://scholar.google.it/citations?hl=it&user=twp8j0kAAAAJ>)

Selected Publications (last 15 years)

1. Rossi S, Savi M, Mazzola M, Pinelli S, Alinovi R, Gennaccaro L, Pagliaro A, Meraviglia V, Galetti M, Lozano-Garcia O, Rossini A, Frati C, Falco A, Quaini F, Bocchi L, **Stilli D**, Lucas S, Goldoni M, Macchi E, Mutti A, Miragoli M. Subchronic exposure to titanium dioxide nanoparticles modifies cardiac structure and performance in spontaneously hypertensive rats. *Part Fibre Toxicol*. 2019 Jun 24;16(1):25. doi: 10.1186/s12989-019-0311-7.
2. Bocchi L, Motta BM, Savi M, Vilella R, Meraviglia V, Rizzi F, Galati S, Buschini A, Lazzaretti M, Pramstaller PP, Rossini A*, **Stilli D***. The Histone Deacetylase Inhibitor Suberoylanilide Hydroxamic Acid (SAHA) Restores Cardiomyocyte Contractility in a Rat Model of Early Diabetes. *Int J Mol Sci*. 2019 Apr 16;20(8). pii: E1873. doi: 10.3390/ijms20081873. *corresponding authors.
3. Bocchi L, Savi M, Naponelli V, Vilella R, Sgarbi G, Baracca A, Solaini G, Bettuzzi S, Rizzi F*, **Stilli D***. Long-Term Oral Administration of Theophenon-E Improves Cardiomyocyte Mechanics and Calcium Dynamics by Affecting Phospholamban Phosphorylation and ATP Production. *Cell Physiol Biochem*. 2018;47(3):1230-1243. doi: 10.1159/000490219. *corresponding authors.
4. Savi M, Bocchi L, Bresciani L, Falco A, Quaini F, Mena P, Brighenti F, Crozier A, **Stilli D***, Del Rio D*. Trimethylamine-N-Oxide (TMAO)-Induced Impairment of Cardiomyocyte Function and the Protective Role of Urolithin B-Glucuronide. *Molecules*. 2018 Mar 1;23(3). pii: E549. doi: 10.3390/molecules23030549. *corresponding authors.
5. Meraviglia V, Bocchi L, Sacchetto R, Florio MC, Motta BM, Corti C, Weichenberger CX, Savi M, D'Elia Y, Rosato-Siri MD, Suffredini S, Piubelli C, Pompilio G, Pramstaller PP, Domingues FS, **Stilli D***, Rossini A*. HDAC Inhibition Improves the Sarcoendoplasmic Reticulum Ca²⁺-ATPase Activity in Cardiac Myocytes. *Int J Mol Sci*. 2018 Jan 31;19(2). pii: E419. doi: 10.3390/ijms19020419. *corresponding authors.
6. Savi M, Bocchi L, Mena P, Dall'Asta M, Crozier A, Brighenti F, **Stilli D***, Del Rio D*. In vivo administration of urolithin A and B prevents the occurrence of cardiac dysfunction in streptozotocin-induced diabetic rats. *Cardiovasc Diabetol*. 2017;16:80. doi: 10.1186/s12933-017-0561-3. *corresponding authors
7. 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;8(11). doi:10.3390/nu8110729. *corresponding authors.
8. 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. Antiarrhythmic effect of growth factor-supplemented cardiac progenitor cells in chronic infarcted heart. *Am J Physiol Heart Circ Physiol*. 2016;310:H1622-H648. doi:0.1152/ajpheart.00035.2015.
9. Sala R, Mena P, Savi M, Brighenti F, Crozier A, Miragoli M, **Stilli D***, Del Rio D*. Urolithins at physiological concentrations affect the levels of pro-inflammatory cytokines and growth factor in cultured cardiac cells in hyperglucidic conditions *J Functional Food* 2015;15:97-105. doi: 10.1016/j.jff.2015.03.0192. *corresponding authors
10. Savi M, Bocchi L, Fiumana E, Karam JP, Frati C, Bonafé F, Cavalli S, Morselli PG, Guarnieri C, Calderera CM, Muscari C, Montero-Menei CN, Stilli D, Quaini F, Musso E. Enhanced engraftment and repairing ability of human adipose-derived stem cells, conveyed

by pharmacologically active microcarriers continuously releasing HGF and IGF-1, in healing myocardial infarction in rats. *J Biomed Mater Res A*. 2015 Sep;103(9):3012-25. doi: 10.1002/jbm.a.35442.

11. Bresciani L, Calani L, Bocchi L, Delucchi F, Savi M, Ray S, Brighenti F, **Stilli D***, Del Rio D*. Bioaccumulation of resveratrol metabolites in myocardial tissue is dose-time dependent and related to cardiac hemodynamics in diabetic rats. *Nutr Metab Cardiovasc Dis*. 2014;24:408-415. doi: 10.1016/j.numecd.2013.09.008. *corresponding authors
12. Savi M, Rossi S, Bocchi L, Gennaccaro L, Cacciani F, Perotti A, Amidani D, Alinovi R, Goldoni M, Aliatis I, Lottici P, Bersani D, Campanini M, Pinelli S, Petyx M, Frati C, Gervasi A, Urbanek K, Quaini F, Buschini A, **Stilli D**, Rivetti C, Macchi E, Mutti A, Miragoli M, Zaniboni M. Titanium dioxide nanoparticles promote arrhythmias via a direct interaction with rat cardiac tissue. *Part Fibre Toxicol*. 2014; 11:63. doi: 10.1186/s12989-014-0063-3.
13. Delucchi F, Berni R, Frati C, Cavalli S, Graiani G, Sala R, Chaponnier C, Gabbiani G, Calani L, Del Rio D, Bocchi L, Lagrasta C, Quaini F, **Stilli D***. Resveratrol treatment reduces cardiac progenitor cell dysfunction and prevents morpho-functional ventricular remodeling in type-1 diabetic rats. *PLoS One*. 2012;7(6):e39836. doi:10.1371/journal.pone.0039836. *corresponding author
14. Frati C, Savi M, Graiani G, Lagrasta C, Cavalli S, Prezioso L, Rossetti P, Mangiaracina C, Ferraro F, Madeddu D, Musso E, **Stilli D**, Rossini A, Falco A, Angelis AD, Rossi F, Urbanek K, Leri A, Kajstura J, Anversa P, Quaini E, Quaini F. Resident cardiac stem cells. *Curr Pharm Des*. 2011; 17:3252-7.
15. Bocchi L, Savi M, Graiani G, Rossi S, Agnetti A, Stillitano F, Lagrasta C, Baruffi S, Berni R, Frati C, Vassalle M, Squarcia U, Cerbai E, Macchi E, **Stilli D**, Quaini F, Musso E. Growth factor-induced mobilization of cardiac progenitor cells reduces the risk of arrhythmias, in a rat model of chronic myocardial infarction. *PLoS One*. 2011; 6:e17750.
16. Colussi C, Rosati J, Straino S, Spallotta F, Berni R, **Stilli D**, Rossi S, Musso E, Macchi E, Mai A, Sbardella G, Castellano S, Chimenti C, Frustaci A, Nebbioso A, Altucci L, Capogrossi MC, Gaetano C. Nε-lysine acetylation determines dissociation from GAP junctions and lateralization of connexin 43 in normal and dystrophic heart. *Proc Natl Acad Sci U S A*. 2011; 108:2795-800.
17. Prezioso L, Tanzi S, Galaverna F, Frati C, Testa B, Savi M, Graiani G, Lagrasta C, Cavalli S, Galati S, Madeddu D, Lodi Rizzini E, Ferraro F, Musso E, **Stilli D**, Urbanek K, Piegari E, De Angelis A, Maseri A, Rossi F, Quaini E, Quaini F. Cancer treatment-induced cardiotoxicity: a cardiac stem cell disease? *Cardiovasc Hematol Agents Med Chem*. 2010; 8:55-75.
18. Colussi C, Berni R, Rosati J, Straino S, Vitale S, Spallotta F, Baruffi S, Bocchi L, Delucchi F, Rossi S, Savi M, Rotili D, Quaini F, Macchi E, **Stilli D**, Musso E, Mai A, Gaetano C, Capogrossi MC. The histone deacetylase inhibitor suberoylanilide hydroxamic acid reduces cardiac arrhythmias in dystrophic mice. *Cardiovasc Res* 2010; 87:73-82.
19. Berni R, Savi M, Bocchi L, Delucchi F, Musso E, Chaponnier C, Gabbiani G, Clement S, **Stilli D***. Modulation of actin isoform expression before the transition from experimental compensated pressure-overload cardiac hypertrophy to decompensation. *Am J Physiol* 2009; 296: H1625-H1632. * corresponding author
20. **Stilli D**, Lagrasta C, Berni R, Bocchi L, Savi M, Delucchi F, Graiani G, Monica M, Maestri R, Baruffi S, Rossi S, Macchi E, Musso E, Quaini F. Preservation of ventricular

performance at early stages of diabetic cardiomyopathy involves changes in myocyte size, number and intercellular coupling. *Basic Res Cardiol* 2007; 102:488-499.

21. Berni R, Cacciani F, Zaniboni M, Savi M, Bocchi L, Lapucci S, Razzetti R, Pastore F, Musso E, **Stilli D***. Effects of the alpha2-adrenergic/DA2-dopaminergic agonist CHF-1024 in preventing ventricular arrhythmogenesis and myocyte electrical remodeling, in a rat model of pressure-overload cardiac hypertrophy. *J Cardiovasc Pharmacol*. 2006; 47:295-302. *corresponding author
22. **Stilli D**, Bocchi L, Berni R, Zaniboni M, Cacciani F, Chaponnier C, Musso E, Gabbiani G, Clement S. Correlation of alpha-skeletal actin expression, ventricular fibrosis and heart function with the degree of pressure overload cardiac hypertrophy in rats. *Exp Physiol*. 2006; 91:571-580.
23. Costoli T, Sgoifo A, **Stilli D**, Flugge G, Adriani W, Laviola G, Fuchs E, Pedrazzini T, Musso E. Behavioural, neural and cardiovascular adaptations in mice lacking the NPY Y1 receptor. *Neuroscience and Biobehavioral Rev* 2005; 29:113-123.