

CURRICULUM VITAE

Name: Maria Consiglia Trotta

Position: Researcher (RTDA, S.s.d. BIO/14; S. c. 05/G1), Department of Experimental Medicine, Section of Pharmacology – Naples - University of Campania “Luigi Vanvitelli”

Address: Via Costantinopoli, 16 – 80138 – Naples - Italy

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Date of birth: 12th October 1988

Nationality: Italian

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EDUCATION:

- **Bachelor’s Degree in Biological Sciences** (2010), DISTABIF – Caserta – University of Campania “Luigi Vanvitelli”
- **Master’s Degree in Biology** (2013), DISTABIF – Caserta – University of Campania “Luigi Vanvitelli”
- **PhD in Translational Medicine** (2017) – University of Campania “Luigi Vanvitelli”

EXPERIENCE:

- **2020 – present:** Researcher (RTDA, S.s.d. BIO/14; S. c. 05/G1), Department of Experimental Medicine, Section of Pharmacology – Naples - University of Campania “Luigi Vanvitelli”
- **2019:** Research Fellowship (Renewal): “Role of HCAR2 receptor in diabetic retinopathy in a mouse model of experimental diabetes”, Department of Experimental Medicine, Section of Pharmacology – Naples - University of Campania “Luigi Vanvitelli”
- **2018:** Research Fellowship: “Role of HCAR2 receptor in diabetic retinopathy in a mouse model of experimental diabetes”, Department of Experimental Medicine, Section of Pharmacology – Naples - University of Campania “Luigi Vanvitelli”
- **2014:** National Operation Program “Qualification of professional figures for research in Pharmaceutical Industry”, Department of Experimental Medicine, Section of Pharmacology – Naples - University of Campania “Luigi Vanvitelli”

EDUCATIONAL ACTIVITY

A.A 2020-2021

- Farmacologia (canali A e B) - corso di Laurea in Infermieristica A.O. MOSCATI – AVELLINO - Università della Campania “Luigi Vanvitelli”
- Farmacologia – corso di Studio in Igiene Dentale (a.a. 2020 2021) NAPOLI - Università della Campania “Luigi Vanvitelli”
- Farmacologia (Pharmacology) – corso di Laurea in Nursing (Infermieristica in Lingua inglese) NAPOLI - Università della Campania “Luigi Vanvitelli”

GRANTS

- **2013-2014:** National Operation Program “Qualification of professional figures for research in Pharmaceutical Industry”, Department of Experimental Medicine, Section of Pharmacology – Naples - University of Campania “Luigi Vanvitelli”
- **2014-2017:** Research grant in Translational Medicine, MIUR, Italy

COLLABORATIONS

- Prof. Anca Hermenean Department of Life Sciences, Vasile Goldis University, Arad, Romania
- Prof. Raffaele Marfella, Dipartimento di Scienze Mediche e Chirurgiche Avanzate (DAMSS), Università della Campania “Luigi Vanvitelli”
- Prof. Claudio Bucolo, Dipartimento di Scienze Biomediche e Biotecnologiche, Università di Catania
- Prof. Sabatino Maione, Dipartimento di Medicina Sperimentale, Università della Campania “Luigi Vanvitelli”
- Prof. Marilena Galdiero, Dipartimento di Medicina Sperimentale, Università della Campania “Luigi Vanvitelli”
- Prof. Mauro Giordano, Dipartimento di Scienze Mediche e Chirurgiche Avanzate (DAMSS), Università della Campania “Luigi Vanvitelli”
- Prof. Settimio Rossi, Dipartimento Multidisciplinare di Specialità Medico-Chirurgiche e Odontoiatriche, Università della Campania “Luigi Vanvitelli”

SCIENTIFIC ACTIVITY

- Publications: **33**

Total citations: **182**

h index: **8** (fonte Scopus)

Membership

- Italian Pharmacological Society (2014 – present)

Referees:

- Frontiers Pharmacology
- Cell Biology International

Original Scientific Paper on Journals (enclosed in SCI Journal Citation Reports)

2021

D'Onofrio N, Scisciola L, Sardu C, **Trotta MC**, De Feo M, Maiello C, Mascolo P, De Micco F, Turriziani F, Municinò E, Monetti P, Lombardi A, Napolitano MG, Marino FZ, Ronchi A, Grimaldi V, Hermenean A, Rizzo MR, Barbieri M, Franco R, Campobasso CP, Napoli C, Municinò M, Paolisso G, Balestrieri ML, Marfella R. Glycated ACE2 receptor in diabetes: open door for SARS-COV-2 entry in cardiomyocyte. *Cardiovasc Diabetol.* 2021 May 7;20(1):99. doi: 10.1186/s12933-021-01286-7.

Nicola A*, Belardo C*, **Trotta MC***, Paoino S, Boccella S, Gargano F, Pieretti G, Ricciardi F, Marabese I, Luongo L, Galderisi U, D'Amico M, Maione S, Guida F. Vitamin D Deficiency Induces Chronic Pain and Microglial Phenotypic Changes in Mice. *Int. J. Mol. Sci.* 2021, 22, 3604. doi.org/10.3390/ijms22073604

Trotta MC*, Gesualdo C*, Platania CMB, De Robertis D, Giordano M, Simonelli S, D'Amico M, Drago F, Bucolo C, Rossi S. Circulating miRNAs in diabetic retinopathy patients: prognostic markers or pharmacological targets? *Biochemical Pharmacology.* 2021, 186, 114473. doi.org/10.1016/j.bcp.2021.114473

Iannotta M*, Belardo C*, **Trotta MC***, Iannotti FA, Vitale RM, Maisto R, Boccella S, Infantino R, Ricciardi F, Mirto BF, Ferraraccio F, Panarese I, Amodeo P, Tunisi L, Cristino L, D'Amico M, di Marzo V, Luongo L, Maione S, Guida F. N-palmitoyl-D-glucosamine, A Natural Monosaccharide-Based Glycolipid, Inhibits TLR4 and Prevents LPS-Induced Inflammation and Neuropathic Pain in Mice. *Int. J. Mol. Sci.* 2021, 22, 1491. <https://doi.org/10.3390/ijms22031491>.

Sardu C, **Trotta MC**, Santella B, D'Onofrio N, Barbieri M, Rizzo MR, Sasso FC, Scisciola L, Turriziani F, Torella M, Portoghese M, Loreni F, Mureddu S, Lepore MA, Galdiero M, Franci G, Folliero V, Petrillo a, Boatti R, Minicucci F, Mauro C, Calabrò P, De Feo M, Balestrieri ML, Ercolini D, D'Amico M, Paolisso G, Galdiero M, Marfella R. Microbiota thrombus colonization may influence athero-thrombosis in hyperglycemic patients with ST segment elevation myocardialinfarction (STEMI). Marianella study. *Diabetes Res Clin Pract.* 2021 Jan 14;173:108670. doi: 10.1016/j.diabres.2021.108670.

Hermenean A, **Trotta MC**, Gharbia S, Hermenean AG, Peteu VE, Balta C, Cotoraci C, Gesualdo C, Rossi S, Gherghiceanu M, D'Amico M. Changes in Retinal Structure and Ultrastructure in the Aged Mice Correlate With Differences in the Expression of Selected Retinal miRNAs. *Front Pharmacol* 2021, 11, 593514; <https://doi.org/10.3389/fphar.2020.593514>.

2020

Giordano, M., **Trotta, M.C.**, Ciarambino, T., D'Amico, M., Galdiero, M., Schettini, F., Paternosto, D., Salzillo, M., Alfano, R., Andreone, V., Malatino, L.S., Biolo, G., Paolisso, G., Adinolfi, L.E. Circulating MiRNA-195-5p

and -451a in diabetic patients with transient and acute ischemic stroke in the emergency department. *Int J Mol Sci* 2020;21(20):E7615. doi: 10.3390/ijms21207615.

Petrillo, F., **Trotta, M.C.**, Bucolo, C., Hermenean, A., Petrillo, A., Maisto, R., Pieretti, G., Pietropaolo, M., Ferraraccio, F., Gagliano, C., Galdiero, M., D'Amico, M. Resolvin D1 attenuates the inflammatory process in mouse model of LPS-induced keratitis. *JCMM* 2020; 24(21) 12298-12307.

Petrillo, F, Folliero V, Santella B, Franci G, Foglia F, **Trotta MC**, Della Rocca MT, Avitabile T, Gagliano C, Galdiero M. Prevalence and Antibiotic Resistance Patterns of Ocular Bacterial Strains Isolated from Pediatric Patients in University Hospital of Campania "Luigi Vanvitelli," Naples, Italy. *International Journal of Microbiology*, 2020, 2020, 8847812. DOI: 10.1155/2020/8847812.

Lazzara F*, **Trotta MC***, Platania CBM*, D'Amico M, Petrillo F, Galdiero M, Gesualdo C, Rossi S, Drago F, Bucolo C. Stabilization of HIF-1 α in Human Retinal Endothelial Cells Modulates Expression of miRNAs and Proangiogenic Growth Factors. *Front Pharmacol.* 2020 Jul 17;11:1063. doi: 10.3389/fphar.2020.01063.

Maisto R, **Trotta MC**, Petrillo F, Izzo S, Cuomo G, Alfano R, Hermenean A, Barcia JM, Galdiero M, Platania CBM, Bucolo C, D'Amico M. Resolvin D1 Modulates the Intracellular VEGF-Related miRNAs of Retinal Photoreceptors Challenged With High Glucose. *Front Pharmacol.* 2020 Mar 6;11:235. doi: 10.3389/fphar.2020.00235.

Sardu C, Santulli G, Guerra G, **Trotta MC**, Santamaria M, Sacra C, Testa N, Ducceschi V, Gatta G, Amico M, Sasso FC, Paolisso G, Marfella R. Modulation of SERCA in Patients with Persistent Atrial Fibrillation Treated by Epicardial Thoracoscopic Ablation: The CAMAF Study. *J Clin Med.* 2020 Feb 17;9(2). pii: E544. doi: 10.3390/jcm9020544.

Trotta MC, Pieretti G, Petrillo F, Alessio N, Hermenean A, Maisto R, D'Amico M. Resolvin D1 reduces mitochondrial damage to photoreceptors of primary retinal cells exposed to high glucose. 2020 May;235(5):4256-4267. doi: 10.1002/jcp.29303. Epub 2019 Oct 14.

2019

Trotta MC, Ferraro B, Messina A, Panarese I, Gulotta E, Nicoletti GF, D'Amico M, Pieretti G. Telmisartan cardioprotects from the ischaemic/hypoxic damage through a miR-1-dependent pathway. *J Cell Mol Med.* 2019 Oct;23(10):6635-6645. doi: 10.1111/jcmm.14534.

Ferraro B, Donniacuo M, Sodano L, Ferraraccio F, Maisto R, Gulotta E, Pieretti G, D'Amico M, **Trotta MC**, Rinaldi B. Addition of the Aldose Reductase Inhibitor Benzofuroxane Derivative BF-5m to Prolonged and Moderate Exercise Training Enhanced Protection of the Rat Heart From Type-1 Diabetes. *Front Pharmacol.* 2019 Apr 16;10:392. doi:10.3389/fphar.2019.00392.

Platania CBM, Maisto R, **Trotta MC**, D'Amico M, Rossi S, Gesualdo C, D'Amico G, Balta C, Herman H, Hermenean A, Ferraraccio F, Panarese I, Drago F, Bucolo C. Retinal and circulating miRNA expression patterns in diabetic retinopathy: An in silico and in vivo approach. *Br J Pharmacol.* 2019 Jul;176(13):2179-2194. doi: 10.1111/bph.14665.

Giordano M, Ciarambino T, D'Amico M, **Trotta MC**, Di Sette AM, Marfella R, Malatino L, Paolisso G, Adinolfi LE. Circulating MiRNA-195-5p and -451a in Transient and Acute Ischemic Stroke Patients in an Emergency Department. *J Clin Med.* 2019 Jan 22;8(2). pii: E130. doi: 10.3390/jcm8020130.

Trotta MC, Maisto R, Guida F, Boccella S, Luongo L, Balta C, D'Amico G, Herman H, Hermenean A, Bucolo C, D'Amico M. The activation of retinal HCA2 receptors by systemic beta-hydroxybutyrate inhibits diabetic retinal damage through reduction of endoplasmic reticulum stress and the NLRP3 inflammasome. *PLoS One.* 2019 Jan 18;14(1):e0211005.

2018

Trotta MC, Maisto R, Alessio N, Hermenean A, D'Amico M, Di Filippo C. The Melanocortin MC5R as a New Target for Treatment of High Glucose-Induced Hypertrophy of the Cardiac H9c2 Cells. *Front Physiol.* 2018 Oct 26;9:1475.

Trotta MC, Maisto R, Perrotta N, D'Amico M, Di Filippo C. Pharmacological Modulation of Long Cardiac QT Interval in Ex Vivo and in Vitro Experimental Models. *Ann Rev Resear.* 2018; 2(1): 555580.

Maisto R, **Trotta MC**, Settimio R, Gesualdo C, Siniscalco D, Ferraraccio F, Barcia JM, Simonelli F, Di Filippo C, D'Amico M. Intravitreal Injections of Melanocortin Receptor 1, 5 Agonists Prevents Neovascularization in a VEGF165 Mouse Model of Retinopathy. *J Clin Res Med* 2018, 1(2):1-7.

Siniscalco D, **Trotta MC**, Brigida AL, Maisto R, Luongo M, Ferraraccio F, D'Amico M, Di Filippo C. Intraperitoneal Administration of Oxygen/Ozone to Rats Reduces the Pancreatic Damage Induced by Streptozotocin. *Biology* 2018, 7, 10.

2017

Trotta MC, Salerno M, Brigida AL, Monda V, Messina A, Fiore C, Avola R, Bernadini R, Sessa F, Marsala G, Zanghi GN, Messina G, D'Amico M, Di Filippo C. Inhibition of aldose-reductase-2 by a benzofuroxane derivative bf-5m increases the expression of kcne1, kcnq1 in high glucose cultured H9c2 cardiac cells and sudden cardiac death. *Oncotarget.* 2017 Dec 14;9(25):17257-17269.

Rossi S, Gesualdo C, Maisto R, **Trotta MC**, Di Carluccio N, Brigida A, Di Iorio V, Testa F, Simonelli F, D'Amico M, Di Filippo C. High Levels of Serum Ubiquitin and Proteasome in a Case of HLA-B27 Uveitis. *Int J Mol Sci.* 2017 Feb 26;18(3). pii: E505. doi: 10.3390/ijms18030505.

Di Filippo C, **Trotta MC**, Maisto R, Gaudino G, Accardo M, Ferraraccio F, Berrino I, Rossi F, D'Amico M. Beneficial Effect of Ursodeoxycholic Acid on High Glucose-Induced Long QT Interval Arrhythmia in Isolated Rat Heart. *Diabetes Obes Int J* 2016, 1(6): 000136.

Maisto R, Gesualdo C, **Trotta MC**, Grieco P, Testa F, Simonelli F, Barcia JM, D'Amico M, Di Filippo C, Rossi S. Melanocortin receptor agonists MCR1-5 protect photoreceptors from high-glucose damage and restore antioxidant enzymes in primary retinal cell culture. *J Cell Mol Med.* 2017 May;21(5):968-974. doi: 10.1111/jcmm.13036. Epub 2016 Dec 20.

2016

Rossi S, Maisto R, Gesualdo C, **Trotta MC**, Ferraraccio F, Kaneva MK, Getting SJ, Surace E, Testa F, Simonelli F, Grieco P, Merlino F, Perretti M, D'Amico M, Di Filippo C. Activation of Melanocortin Receptors MC 1 and MC 5 Attenuates Retinal Damage in Experimental Diabetic Retinopathy. *Mediators Inflamm.* 2016;2016:7368389. doi: 10.1155/2016/7368389. Epub 2016 Jan 12.

Di Filippo C, Ferraro B, Maisto R, **Trotta MC**, Di Carluccio N, Sartini S, La Motta C, Ferraraccio F, Rossi F, D'Amico M. Effects of the New Aldose Reductase Inhibitor Benzofuroxane Derivative BF-5m on High Glucose Induced Prolongation of Cardiac QT Interval and Increase of Coronary Perfusion Pressure. *J Diabetes Res.* 2016;2016:5281267. doi: 10.1155/2016/5281267. Epub 2015 Dec 29.

2015

Di Filippo C, **Trotta MC**, Maisto R, Siniscalco D, Luongo M, Mascolo L, Alfano R, Accardo M, Rossi C, Ferraraccio F, D'Amico M. Daily Oxygen/O₃ Treatment Reduces Muscular Fatigue and Improves Cardiac Performance in Rats Subjected to Prolonged High Intensity Physical Exercise. *Oxid Med Cell Longev.* 2015;2015:190640. doi: 10.1155/2015/190640. Epub 2015 Jul 21.

Rossi S, Di Filippo C, Gesualdo C, Testa F, **Trotta MC**, Maisto R, Ferraro B, Ferraraccio F, Accardo M, Simonelli F, D'Amico M. Interplay between Intravitreal RvD1 and Local Endogenous Sirtuin-1 in the Protection from Endotoxin-Induced Uveitis in Rats. *Mediators Inflamm.* 2015;2015:126408. doi: 10.1155/2015/126408. Epub 2015 Jun 9.

Rossi S, Di Filippo C, Gesualdo C, Potenza N, Russo A, **Trotta MC**, Zippo MV, Maisto R, Ferraraccio F, Simonelli F, D'Amico M. Protection from endotoxic uveitis by intravitreal Resolvin D1: involvement of lymphocytes, miRNAs, ubiquitin-proteasome, and M1/M2 macrophages. *Mediators Inflamm.* 2015;2015:149381. doi: 10.1155/2015/149381. Epub 2015 Jan 15.

2014

Di Filippo C, Zippo MV, Maisto R, **Trotta MC**, Siniscalco D, Ferraro B, Ferraraccio F, La Motta C, Sartini S, Cosconati S, Novellino E, Gesualdo C, Simonelli F, Rossi S, D'Amico M. Inhibition of ocular aldose reductase by a new benzofuroxane derivative ameliorates rat endotoxic uveitis. *Mediators Inflamm.* 2014;2014:857958. doi: 10.1155/2014/857958. Epub 2014 Nov 11.

Mosca N, Castiello F, Coppola N, **Trotta MC**, Sagnelli C, Pisaturo M, Sagnelli E, Russo A, Potenza N. Functional interplay between hepatitis B virus X protein and human miR-125a in HBV infection. *Biochem Biophys Res Commun.* 2014 Jun 20;449(1):141-5. doi: 10.1016/j.bbrc.2014.05.009. Epub 2014 May 10

* Share first authorship

ABSTRACTS

2021

Stabilization of HIF-1a in human retinal endothelial cells modulates expression of miRNAs and proangiogenic growth factors. Lazzara F, **Trotta MC**, Platania CBM, D'Amico M, Petrillo F, Galdiero M, Gesualdo C, Rossi S, Drago F, Bucolo C. 40° Congresso Nazionale SIF, Digital edition, 9-13 marzo 2021.

2019

Melanocortin Receptor 5 (MC5R) cardio-protection in High Glucose-Induced H9c2 Hypertrophy. **Trotta MC**, R. Maisto, N. Alessio, A. Hermenenan, M. D'Amico. 39° Congresso Nazionale SIF, Firenze 20-23 novembre 2019.

2018

Intravitreal Injections of Melanocortin Receptor 1, 5 Agonists Prevents Neovascularization in a VEGF165 Mouse Model of Retinopathy. **Trotta MC**, Maisto R, Rossi S, Gesualdo C, Siniscalco D, Ferraraccio F, Barcia JM, Simonelli F, Di Filippo C, D'Amico M. XXI SIF SEMINAR - PhD Students, Fellows, Post Doc and Specialist Trainees. Bresso, September 19-22, 2018.

Pharmacological modulation of cardiac qt interval prolongation through alr2 selective inhibition. **M.C. Trotta**, Maisto R., D'Amico M., Di Filippo C. 1st Meeting in Translational Pharmacology. Santiago de Compostela, June 19-22, 2018.

2017

Intravitreal Injections of Melanocortin Receptor 1, 5 Agonists Prevents Neovascularization in a VEGF165 Mouse Model of Retinopathy. Gesualdo C, Maisto R, Rossi S, **Trotta MC**, Siniscalco D, Ferraraccio F, Barcia JM, Simonelli F, Di Filippo C, D'Amico M. 2017 ARVO Global Connections in Vision Research, Baltimore May 7-11, 2017.

Pharmacological modulation of cardiac qt interval prolongation through alr2 selective inhibition. **M.C. Trotta**, Maisto R., D'Amico M., Di Filippo C. 1st Meeting in Translational Pharmacology. 38°Congresso SIF-Rimini 25-28/10/17.

2016

Long-term cyclosporine treatment regulates plasma mirnas and mediators involved in the innate immune response of kidney transplanted patients. **Trotta M.C.**, Di Filippo C., Cerreto G., Formato P., Covato G., Di Carluccio N., Maisto R., D'Amico M. Convegno monotematico SIF: Il ruolo della Farmacologia Clinica in Italia: prospettive future nell'ambito del SSN, Napoli 15-16 dicembre 2016.

High levels of serum proteasome following human autoimmune uveitis. Gesualdo C., Maisto R., Ferraro B., **Trotta M.C.**, Rossi S., Simonelli F., D'Amico M. Convegno monotematico SIF: Il ruolo della Farmacologia Clinica in Italia: prospettive future nell'ambito del SSN, Napoli 15-16 dicembre 2016.

Effects of the aldose-reductase inhibitor 5(6)-(Benzo[D]thiazol-2-ylmethoxy) benzofuroxane on long cardiac QT interval induced by perfusion of isolated heart with a high glucose concentration. **Trotta M.C.**, Ferraro B., Di Carluccio N., La Motta C., Rossi F., Di Filippo C., D'Amico M. 19° Seminario SIF Dottorandi, Assegnisti di ricerca, Postdottorandi e Specializzandi, Rimini 20-22 settembre 2016.

2015

Effects of the aldose-reductase inhibitor 5(6)-(Benzo[D]thiazol-2-ylmethoxy) benzofuroxane on long cardiac QT interval induced by perfusion of isolated heart with a high glucose concentration. **Trotta M.C.**, Ferraro B., Di Carluccio N., La Motta C., Rossi F., Di Filippo C., D'Amico M. 37° Congresso Nazionale SIF, Napoli 27-30 ottobre 2015.

Inhibition of ocular Aldose Reductase by a new benzofuroxane derivative (BF-5m) ameliorates rat endotoxic uveitis. Gesualdo C., Rossi S., Maisto R, **Trotta M.C.**, La Motta C., Simonelli F., D'Amico M., Di Filippo C. 37° Congresso Nazionale SIF, Napoli 27-30 ottobre 2015.

2013

Role of hsa-miR-125a-5p in HBV infection and liver disease progression. Mosca N. Castiello F., **Trotta M.C.**, Caputo A., Magliano O., Potenza N., Russo A. GSA 2013, DISTABIF - Second University of Naples - Caserta, Italy.

Meetings with personal contributions

October 2015	37° Congresso Nazionale SIF, 2015
September 2016	19° Seminario SIF Dottorandi, Assegnisti di ricerca, Postdottorandi e Specializzandi, 2016
Dicember 2016	Convegno monotematico SIF: Il ruolo della Farmacologia Clinica in Italia: prospettive future nell'ambito del SSN, 2016
October 2017	38°Congresso Nazionale SIF, 2017
Novemer 2017	2017 ARVO Global Connections in Vision Research
June 2018	1st Meeting in Translational Pharmacology, 2018
November 2019	39°Congresso Nazionale SIF, 2019

March 2021

40° Congresso Nazionale SIF, Digital edition, 2021