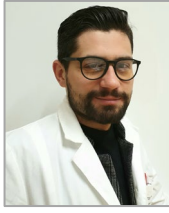


## PERSONAL INFORMATION

Dr. Carmine Rocca, Ph.D.



**Affiliation**  
University of Calabria (UNICAL)  
Department of Biology, E.E.S. (DiBEST),  
Cellular & Molecular Cardiovascular Pathophysiology Lab (Operative Unit of the National Institute of Cardiovascular Research)  
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**ORCID** [https://scholar.google.com/citations?user=F\\_HERdQAAAAJ&hl=it&oi=ao](https://scholar.google.com/citations?user=F_HERdQAAAAJ&hl=it&oi=ao)

Sex: Male | Date of birth: 30/10/1988 | Nationality: Italian

## WORK EXPERIENCE

- 2021-to date **National Scientific Qualification to Associate Professor in Physiology (SSD BIO/09)**
- 2019-to date **Assistant Professor (RTD-a Researcher) in Physiology**, University of Calabria, Cosenza-Italy
- 2018-2019 **Post-Doc Researcher** Cellular & Molecular Cardiovascular Pathophysiology Lab (DiBEST-UNICAL)

## EDUCATION AND TRAINING

- 2018-2021 **Residency in Clinical Pathology and Biochemistry (70/70 cum laude)** UNICAL, IT
- 2014-2017 **Ph.D. in Life Sciences (Section: Cardiovascular Physiology)**, Supervisor Prof. Tommaso Angelone UNICAL, IT
- 2014-2017 **International Ph.D. in Integrative Biology, Health and Environment (Section: Clinical Biology)**, INSERM U1239, Supervisor Dr. Youssef Anouar, University of Rouen Normandy, FR (International co-tutorship Italy-France)
- 2007-2013 **Doctor Degree in Biology (110/110 cum laude)**, at the Faculty of Science, UNICAL, IT

## WORK ACTIVITIES

- Honour and Awards**
- 2022-Daniel T. O'Connor Memorial Early Career Researchers Travel Award** from 21st International Symposium on Chromaffin Cell Biology (ISCCB-21), Hamburg, Germany
- 2021- Best Oral Presentation** from Italian Society for Cardiovascular Research (SIRC) for "The chromogranin A 1-373 fragment exerts strong cardioregulatory effects by engaging neuropilin-1 through minimal changes in the protein sequence"
- 2019- Young Investigator Award-Best Oral Presentation** from Italian Society for Cardiovascular Research (SIRC) for "A new predictive sensor for the doxorubicin-dependent cardiotoxicity"
- 2019-** Selection of the paper Rocca et al., 2018 (PMID:29575758) as **Top Candidates for the Acta Physiological Award** as one of the most cited articles with high physiological significance
- 2019-** Selection of International Patent WO/2019/068682 as **one of the best Italian Patents of 2019** by Italian MIUR-CNR, Milan (IT)
- 2018- Best Oral Presentation from International Society for Heart Research (ISHR)**, Rome (IT) for "SeIT43-52, a new Selenoprotein T-derived peptide, elicits postconditioning-like protection in the rat heart by inhibiting apoptosis, and oxidative and nitrosative stress"

**2017- Young Investigator Award-Best Oral Presentation** from Italian Society for Cardiovascular Research (SIRC) for “First Evidence for the cardiac modulation and cardioprotection activities of the novel hypothalamic peptide Phoenixin-14 in normoweight and obese rats”

**2015- Best Poster Presentation** from Italian Society for Cardiovascular Research (SIRC) for “GPER activation mitigates cardiotoxicity induced by the anticancer doxorubicin”

**Fellowships** **2019- Invited Research Fellow** INSERM U1239, Unit of Neuroendocrine, Endocrine and Germinal Differentiation and Communication, University of Rouen, FR

**2015–2016 and 2017-Visiting PhD Student** INSERM U1239, University of Rouen, FR

**2015- Visiting PhD Student** School of Physiology and Biophysics, University of Pavia, IT

**2017- Visiting PhD Student**, University of Turin, IT

**Reviewing and Editorial activity** **2022-present Associate Editor** for Journal of Translational Medicine, section Cardiovascular, Metabolic and Lipoprotein Translation

**2020-present Guest Editor** for JoVE Methods Collection (section: Cardiology)

**2020-2021 Co-guest Editor** Special issue Oxidative Medicine and Cellular Longevity

**2019-present Associate Editor** for International Journal of Environmental Research and Public Health- Section Topical Advisory Panel Members for 'Health Behavior, Chronic Disease and Health Promotion'

**2019-present- Editorial Board Member** of International Journal of Environmental Research and Public Health and Journal of Cardiology and Cardiovascular Research

**2017–present- Review Editor** in Frontiers in Physiology-Molecular and Structural Endocrinology, Cardiovascular Biologics and Regenerative Medicine, Redox Physiology, Vascular Physiology, Cellular Neurophysiology

**2017–present- Reviewer** for ~ n=30 International Peer-Reviewed Journals (including *J Am Heart Assoc*, *Front Cardio Med*, *Front Physiol*, *J Clin Med*, *Oxid Med Cell Longev*, *Antioxidants*, *Aging and Disease*, *PLoSone*...)

**Invited Lectures and Oral presentations** **2021-Invited Speaker** “Physiological interaction between Chromogranin A and Neuropeilin-1: cardiac modulation and protection in pathophysiological conditions” SYMPOSIUM Italian Physiological Society-Italian Society for Cardiovascular Research, remote event.

**2021-Speaker** “The chromogranin A 1-373 fragment exerts strong cardioregulatory effects by engaging neuropeilin-1 through minimal changes in the protein sequence “. XXIII Meeting of the Italian Society for Cardiovascular Research, Imola (Bologna).

**2020-Invited Lecture** “Chromogranin-A as a new predictive sensor and cardioprotective agent in the doxorubicin-dependent cardiotoxicity”. PhD School in “Experimental Medicine and Therapy”, University of Turin.

**2019-Speaker** “A new predictive sensor for the doxorubicin-dependent cardiotoxicity: the paradigm of chromogranin-A”. XXI Meeting of the Italian Society for Cardiovascular Research, Imola (Bologna).

**2019-Invited Speaker** “Methods and pharmaceutical compositions for providing cardioprotection in subjects who experienced a myocardial infarction: SelT 43-52 as cardioprotector”. Innovagorà, “Piazza dei brevetti della ricerca e dell'innovazione tecnologica italiana”, “Ministero dell'istruzione, dell'università e della ricerca (MIUR)”, “Consiglio Nazionale delle Ricerche (CNR)”.

**2018-Speaker** “SelT 43-52, a new Selenoprotein T-derived peptide, elicits postconditioning-like protection in the rat heart by inhibiting apoptosis, and oxidative and nitrosative stress”. 4° SIRC FORUM “New Roads in Cardiovascular Research”, Meeting of the Italian Society for Cardiovascular Research,

Rome.

**2018-Speaker** "The emerging cardiac function of Selenoprotein T-derived peptide SelT43-52: from physiological to pathophysiological implications". 69° Meeting of the Italian Physiological Society, Florence.

**2017-Speaker** "First evidence on the novel hypothalamic peptide Phoenixin-14 as cardiac modulator and cardioprotective in normal and obese rats". XXI Meeting of the Italian Society for Cardiovascular Research, Imola (Bologna).

**2017-Speaker** "Cardiomodulatory and cardioprotective roles of the novel hypothalamic peptide Phoenixin-14 in normal and obese rats". 68° Meeting of the Italian Physiological Society, Pavia.

**Supervision of graduated students**

**2017-present** Tutor and co-tutor for ~ n=60 Students (M.S. and B.S. in Biology, Biotechnology and Pharmacy) and n=2 PhD student, UNICAL

**Teaching activity and Academic Committee**

**2018-present** Assistant Professor in "Physiology" and in "Methods of Physiological Investigation" for Master Degrees in Biology, Health Biotechnology and Pharmacy and PhD Program in Life Science and Technology, UNICAL

**2020-present** Doctorate School Member of Life Sciences and Technology board, University of Calabria, DiBEST, UNICAL

**Financed Grants**

**2021- Progetto di ricerca industriale e sviluppo sperimentale** PNR 2015-2020, PON, Field: Health

**2019-** MIUR Proof of Concept (POC01\_00049) D.D. n. 467 del 02.03.2018, Field: Health

**2018-** CUP J88C17000370006-POR CALABRIA FESR-FSE 2014-2020

**2017- Progetto Galileo** (N. 71/2016 n°G16-2), Italian-French University

**Patents**

**International Patent** Pub. No.: WO/2019/068682, Title: *Selenoprotein T 43-52 as cardioprotector*.

**Membership to Scientific Societies**

Italian Society for Cardiovascular Research (SIRC)

International Society for Heart Research (ISHR)

Italian Physiological Society (SIF)

**Major collaborations**

Dr. Y. Anouar, INSERM U1239, University of Rouen, FR

Prof. A. Corti, IRCCS "San Raffaele" Institute, Milan, IT

Prof. S. Mahata, Dept. of Medicine, University of California, USA

Prof. P. Pagliaro, Dept. of Clinical and Biological Sciences, University of Turin, IT

Dr. M.H. Betz-Boutigue, INSERM U1121 "Louis Pasteur" Strasburg, FR

**ADDITIONAL INFORMATION**

**Publications and Bibliometric Indicators**

Scopus Author ID: 56785690600

Web of Science Researcher ID: AAN-1969-2020

Publications in peer-review journals: n=32 (n=16 as first author, n=5 as co-corresponding author)

Total Impact Factor (IF): **185**

IF Average: **5.8**

Total citations (Scopus): **502**

Total citations (Google Scholar): **649**

H index Scopus: **13**

[https://scholar.google.com/citations?user=F\\_HERdQAAAAJ&hl=it&oi=ao](https://scholar.google.com/citations?user=F_HERdQAAAAJ&hl=it&oi=ao)

H index Google Scholar: **15** and i10-index: **19**

**Most relevant publications**

- **C Rocca#**, A De Bartolo; MC Granieri; V Rago; D Amelio; F Falbo; R Malivindi; R Mazza; MC Cerra; L Boukhar; B Lefranc; J Leprince; Y Anouar; T Angelone#. The antioxidant Selenoprotein T mimetic, PSELT, induces preconditioning-like myocardial protection by relieving endoplasmic-reticulum stress. *Antioxidants*, 2022, 11(3), 571. IF. 6.313, Q1 # co-corresponding authors

- **Rocca C**, De Francesco EM, Pasqua T, Granieri MC, De Bartolo A, Gallo Cantafio ME, Muoi MG, Gentile M, Neri A, Angelone T, Viglietto, G, Amodio, N. Mitochondrial Determinants of Anti-Cancer Drug-Induced Cardiotoxicity. *Biomedicines*, 2022, 10(3), 520 **IF. 6.081, Q1**
- Pasqua T\*, **Rocca C**#, Giglio A, Angelone T#. Cardiometabolism as an Interlocking Puzzle between the Healthy and Diseased Heart: New Frontiers in Therapeutic Applications *J Clin Med*. 2021 Feb 12;10(4):721. doi: 10.3390/jcm10040721. \* equally contributed; # co-corresponding authors **IF. 4.242, Q1**
- 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 Jun;168:105581. doi:10.1016/j.phrs.2021.105581. **IF. 7.658, Q1**
- **Rocca C**, De Bartolo A, Grande F, Rizzuti B, Pasqua T, Giordano F, Granieri MC, Occhiuzzi MA, Garofalo A, Amodio N, Cerra MC, Schneider F, Panno ML, Metz-Boutigue MH, Angelone T. Cateslytin abrogates lipopolysaccharide-induced cardiomyocyte injury by reducing inflammation and oxidative stress through toll like receptor 4 interaction. *Int Immunopharmacol*. 2021 May;94:107487. doi: 10.1016/j.intimp.2021.107487. **IF. 4.932, Q1**
- **Rocca C**, Grande F, Granieri MC, Colombo B, De Bartolo A, Giordano F, Rago V, Amodio N, Tota B, Cerra MC, Rizzuti B, Corti A, Angelone T, Pasqua T. The chromogranin A<sub>1-373</sub> fragment reveals how a single change in the protein sequence exerts strong cardioregulatory effects by engaging neuropeptide-1. *Acta Physiol (Oxf)*. 2021 Apr;231(4):e13570. doi: 10.1111/apha.13570. **IF. 6.311, Q1**
- Palma G, Pasqua T, Silvestri G, **Rocca C**, Gualtieri P, Barbieri A, De Bartolo A, De Lorenzo A, Angelone T, Avolio E, Botti G. PI3K $\delta$  Inhibition as a Potential Therapeutic Target in COVID-19. *Front Immunol*. 2020 Aug 21;11:2094. doi: 10.3389/fimmu.2020.02094. **IF. 7.561, Q1**
- 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 Aug;42(4):1021-1049. doi: 10.1007/s11357-020-00198-w. **IF. 7.713, Q1**
- Angelone T#, **Rocca C**#, Pasqua T. Nesfatin-1 in cardiovascular orchestration: From bench to bedside. *Pharmacol Res*. 2020 Jun;156:104766. doi: 10.1016/j.phrs.2020.104766. # co-corresponding authors **IF. 7.658, Q1**
- **Rocca C**, Pasqua T, Cerra MC, Angelone T. Cardiac Damage in Anthracyclines Therapy: Focus on Oxidative Stress and Inflammation. *Antioxid Redox Signal*. 2020 May 20;32(15):1081-1097. doi: 10.1089/ars.2020.8016. **IF. 8.401, Q1**
- **Rocca C**#, Pasqua T, Boukhzar L, Anouar Y, Angelone T#. Progress in the emerging role of selenoproteins in cardiovascular disease: focus on endoplasmic reticulum-resident selenoproteins. *Cell Mol Life Sci*. 2019 Oct;76(20):3969-3985. doi: 10.1007/s00018-019-03195-1. # co-corresponding authors **IF. 9.261, Q1**
- Nettore IC\*, **Rocca C**\*, Mancino G, Albano L, Amelio D, Grande F, Puoci F, Pasqua T, Desiderio S, Mazza R, Terracciano D, Colao A, Bèguinot F, Russo GL, Dentice M, Macchia PE, Sinicropi MS, Angelone T, Ungaro P. Quercetin and its derivative Q2 modulate chromatin dynamics in adipogenesis and Q2 prevents obesity and metabolic disorders in rats. *J Nutr Biochem*. 2019 Jul;69:151-162. doi: 10.1016/j.jnutbio.2019.03.019. \* equally contributed **IF. 6.084, Q1**
- **Rocca C**, Scavello F, Colombo B, Gasparri AM, Dallatomasina A, Granieri MC, Amelio D, Pasqua T, Cerra MC, Tota B, Corti A, Angelone T. Physiological levels of chromogranin A prevent doxorubicin-induced cardiotoxicity without impairing its anticancer activity. *FASEB J*. 2019 Jun;33(6):7734-7747. doi: 10.1096/fj.201802707R. Epub 2019 Apr 11. **IF. 5.192, Q1**
- **Rocca C**, Boukhzar L, Granieri MC, Alsharif I, Mazza R, Lefranc B, Tota B, Leprince J, Cerra MC, Anouar Y, Angelone T. A selenoprotein T-derived peptide protects the heart against ischaemia/reperfusion injury through inhibition of apoptosis and oxidative stress. *Acta Physiol (Oxf)*. 2018 Aug;223(4):e13067. doi: 10.1111/apha.13067. **IF. 6.311, Q1**
- **Rocca C**, Femminò S, Aquila G, Granieri MC, De Francesco EM, Pasqua T, Rigracciolo DC, Fortini F, Cerra MC, Maggolini M, Pagliaro P, Rizzo P, Angelone T, Penna C. Notch1 mediates preconditioning protection induced by GPER in normotensive and hypertensive female rat hearts. *Front Physiol*. 2018 May 15;9:521. doi: 10.3389/fphys.2018.00521. **IF. 4.566, Q1**

- **Rocca C**, Scavello F, Granieri MC, Pasqua T, Amodio N, Imbrogno S, Gattuso A, Mazza R, Cerra MC, Angelone T. Phoenixin-14: detection and novel physiological implications in cardiac modulation and cardioprotection. *Cell Mol Life Sci*. 2018 Feb;75(4):743-756. doi: 10.1007/s00018-017-2661-3. **IF 9.261, Q1**
- Penna C, Tullio F, Femminò S, **Rocca C**, Angelone T, Cerra MC, Gallo MP, Gesmundo I, Fanciulli A, Brizzi MF, Pagliaro P, Alloatti G, Granata R. Obestatin regulates cardiovascular function and promotes cardioprotection through the nitric oxide pathway. *J Cell Mol Med*. 2017 Dec;21(12):3670-3678. doi: 10.1111/jcmm.13277. **IF. 5.310, Q1**
- De Francesco EM, **Rocca C**, Scavello F, Amelio D, Pasqua T, Rigracciolo DC, Scarpelli A, Avino S, Cirillo F, Amodio N, Cerra MC, Maggiolini M, Angelone T. Protective Role of GPER Agonist G-1 on Cardiotoxicity Induced by Doxorubicin. *J Cell Physiol*. 2017 Jul;232(7):1640-1649. doi: 10.1002/jcp.25585. **IF. 6.384, Q1**

The full papers Rocca et al., 2018 *Acta Physiol (Oxf)* and Rocca et al., 2020 *Acta Physiol (Oxf)*, were awarded for Editorials from Prof. Hawkins, 2018 and Dr. Goetze et al., 2021, respectively.

Rende (CS), 24/05/2022,

Carmine Rocca

