PERSONAL INFORMATION

Monica Carmosino

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Sex female| *date of birth* 15/07/1971 | *Nationality* Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ Mid-Management Level	☒ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

October 2014 - present Associate Professor in Physiology**;** Department of Sciences, University of Basilicata, Italy.

October 2014 - present Member of the Board of the PhD Program in Sciences; Department of Sciences, University of Basilicata, Italy.

April 2014 - present Scientific coordinator of the University of Basilicata in the 'Italian Network of Italia laminopathies', Italy https://www.igm.cnr.it/laminopatie. Topic of interest: Cardiolaminopathies.

October 2016 - October 2020 Elected Member of the Academic Senate of the University of Basilicata, Italy. Rector's Decree no. 352 of 28th September 2016.

July 2016 - July 2019 Member of the Scientific Committee of the 'Technological Cluster of Bioeconomy' for the Region Basilicata, Italy, https://www.clusterlucanobioeconomia.org. Coordinator for the research activities on the Agrifood strategic trajectory of the Cluster.

October 2015 - October 2016 Member of the 'Presidio di Qualità di Ateno' (PQA) of the University of Basilicata, Italy. Rector's Decree no. 46 of 13th February 2015.

October 2011- October 2014 Assistant Professor in Physiology, Department of Sciences of the University of Basilicata, Italy.

November 2009 - November 2011 Visiting Researcher at 'Department of Cellular and Molecular Physiology' Yale University School of Medicine, New Haven, CT (USA). Research program: 'Cellular and Molecular Studies of Renal Transporters'.

March 2006 - November 2009 Research Assistant Professor at 'Department of Cellular and Molecular Physiology' Yale University School of Medicine, New Haven, CT (USA). Research program: 'Cellular and Molecular Studies of Renal Transporters'.

July 2004 - March 2006 Research fellow 'Division of Nephrology and Hypertension' Vanderbilt University, Nashville, Tennessee (USA). Research program: 'Role of Prostaglandin receptors in the fluid and electrolyte balance in the kidney'.

October 2000 - October 2004 Research Fellow at Department of General and Environmental Physiology at the University of Bari, Italy**.** Research program: 'Role of aquaporins in the physiopathology of GI and kidney'.

EDUCATION AND TRAINING

October 1996 - October1999 PhD in Physiology - PhD program in "Biochemistry and Physiology of Nutrition" held at the Department of General and Environmental Physiology at the University of Bari, Italy. PhD title earned on February 2000.

November 1995 Master's degree in Biological Sciences - Pathophysiological section, University of Bari, Italy.

WORK ACTIVITIES

Awards

2016 - Abilitazione Scientifica Nazionale, Settore Concorsuale 05/D1 (FISIOLOGIA), Full Professor;
2015 - Cover page in the international journal: Biology of the Cell 2015 Jan 28. doi: 10.1111 / boc.201400069.
2012 - Cover page in the international journal: Am J Physiol Cell Physiol. 2012 Oct 15; 303 (8): C862-71. doi: 10.1152 / ajpcell.00338.2011. Epub 2012 Aug 15.
2011- Winner of the call of the Italian Ministry of University and Research (MIUR) program for the stabilization in Italy of Italian scientists working abroad (direct call from abroad).
2000 - Award for young scientist at the International Congress MIP Conference: MOLECULAR BIOLOGY AND PHYSIOLOGY OF WATER AND TRANSPORT SOLUTE held in Gothenburg, Sweden. 1-6 July 2000.

Editorial activity 2009 -2015 Associate Editor of the International Journal 'Biology of the Cell'

Invited presentations (most recent)

2018 -'Electrophysiology of cardiac channelopathies: from the channel biophysics to the pharmacological strategy' - International Summer School SPYWATCH 18-22 June, Bari - IT.

2016 -'Functional characterization of the Lamin A R321X mutant associated with dilated cardiomyopathy with conduction defects'. XV Meeting of the Italian Network of laminopathy, Bologna - IT, Rizzoli Orthopedic Institute.

2016 -'Gender Differences in Organ Physiology'. Meeting 'Think for Women's health', Matera – IT.

2013 -'Cardiomyopathy: clinical phenotype of the cell pathophysiology'. XXIX Congress of Regional Ambulatory Cardiologists Association (ARCA) Puglia, Congress Hall Villa Morisco, Bari - IT.

2011- 'The Na+ transporters in the physio-pathogenesis of hypertension' at the 10 Year Anniversary (2001-2011) Symposium of The Water and Salt Research Center, Faculty of Health Sciences, Aarhus University, Denmark.

Grants

- PON 2014-2020 funding; Innovative and Industrial PhD programs: 'Functional characterization of Lamin A/C mutants involved in hereditary-familial cardiomyopathies for the development of personalized diagnostic and therapeutic approaches' identification code # DOT208JXBA, Role: Principal investigator.
- PO-FESR Basilicata 2014-2020 funding; Projects of interregional and transnational cooperation entitled 'MEdicinal PLAnts in a SUstainable Supply chain- Acronimo: ME.PLA.SU.S.' code # 12AF.2021/D.00509. Role: head of Unibas unit.
- PON 2014-20 funding: Projects of Industrial research and experimental development; Specialization area: Health; code# ARS01_01081; Role: lead investigator of the OR 3.1.2 'Implementation of a kidney-specific delivery system of new natural or synthetic molecules for the control of chronic kidney diseases (CKDs)'.
- PON 2014-20 funding**:** Projects of Industrial research and experimental development; Specialization area: Agrifood. Code# ARS01_01224. Role: lead investigator of the OR 3.2.3: 'Study of the hypoglycemic, cardioprotective and diuretic activities of the extracts to be used for the production of functional foods'.
- PO-FESR 2007-14 Basilicata innovation funding; 'Expression of NKCC2 and AQP2 and related phosphorylated forms active in the urine of patients with insulin resistance as biomarkers of renal function and predictive biomarkers of cardiovascular complications in diabetes mellitus such as arterial hypertension and diabetic nephropathy'- code# J41H12000070001; Role: Principal Investigator.

Patents

2018 - International patent n#US10,149,837B2 'Selective agonists of Beta-adrenergic type 3 rceptors BAR3 and use thereof', co-inventor;
2018 - Academic Spin-off Bioactiplants, ATECO code 72.19.09 (research and experimental development in the field of natural sciences and engineering), co-founder;
2012- United States patent n# US8,318,771, Method of treatment of nephrogenic diabetes insipidus, co-inventor

ADDITIONAL INFORMATION

Publications

total number of publications in peer-review journals: **68**
total Impact Factor: **341,7**; average IF/paper: **5,1**
total number of citations **1594**
H index **26**

- Roberta De Zio, et al and Monica Carmosino - Role of nuclear Lamin A/C in the regulation of Nav1.5 channel and microtubules: lesson from the pathogenic Lamin A/C variant Q517X- Frontiers in Cell and Developmental Biology 2022, accepted;
- Andrea Gerbino et al. and Monica Carmosino - Pro-inflammatory cytokines as emerging molecular determinants in cardiolaminopathies - J Cell Mol Med. 2021; 25:10902-10915;
- Andrea Gerbino et al. and Monica Carmosino - Role of PKC in the Regulation of the Human Kidney Chloride Channel ClC-Ka - Scientific Reports, 2020 Jun 24;10(1):10268.
- Roberta De Zio et al. and Monica Carmosino - Functional study of a KCNH2 mutant: novel insights on the pathogenesis of the LQT2 syndrome - Journal of Cellular and Molecular Medicine, 2019, 10.1111/jcmm.14521
- Andrea Gerbino et al. and Monica Carmosino - Role of Lamin A/C Gene Mutations in the Signaling Defects Leading to Cardiomyopathies - Front Physiol., 2018, 9:1356. doi: 10.3389/fphys.2018.01356
- Andrea Gerbino, et al and Monica Carmosino - Functional characterization of a novel truncating mutation in Lamin A/C gene in a family with a severe cardiomyopathy with conduction defects - Cellular Physiology and Biochemistry, 2017, 44(4):1559-1577.
- Monica Carmosino et al. - The expression of Lamin A mutant R321X leads to endoplasmic reticulum stress with aberrant Ca2+ handling - Journal of Cellular and Molecular Medicine, 2016, 20(11):2194-2207, 10.1111/jcmm.12926.
- Cinzia Forleo*, Monica Carmosino* et al. - Clinical and functional characterization of a novel mutation in lamin a/c gene in a multigenerational family with arrhythmogenic cardiac laminopathy. PLoS One 2015 Apr 2;10(4):e0121723. doi: 10.1371/journal.pone.0121723. eCollection 2015.
- Monica Carmosino et al.- Na+/K+-ATPase β1-subunit is recruited in Na-K-2Cl co-transporter isoform 2 multiprotein complexes in rat kidneys: possible role in blood pressure regulation. J Hypertens 2014 Sep;32(9):1842-53. doi: 10.1097/HJH.0000000000000258

Potenza, 16/06/22

Signature